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@article{ ISI:000452955800007,
Author = {Rossato, Fabricia Gladys F. S. and Susaeta, Andres and Adams, Damian C.
and Hidalgo, Ieda Geriberto and de Araujo, Thais Duekc and de Queiroz,
Adriana},
Title = {{Comparison of revealed comparative advantage indexes with application to
trade tendencies of cellulose production from planted forests in Brazil,
Canada, China, Sweden, Finland and the United States}},
Journal = {{FOREST POLICY AND ECONOMICS}},
Year = {{2018}},
Volume = {{97}},
Pages = {{59-66}},
Month = {{DEC}},
Abstract = {{The pulp industry is an important sector of the global economy and a
positive contributor to the trade balance in pulp producing countries.
The main objective of this study was to analyze the competitiveness in
the production of wood pulp in the United States, Brazil, Canada,
Sweden, Finland, and China. We employed two indexes - the revealed
comparative advantage (RCA) index and the revealed symmetric comparative
advantage (RSCA) index - to ascertain the underlying comparative
advantages between countries. Further, we used the trade balance index
(TBI) to assess wood pulp's impacts on trade balance. Results showed
that under the RCA index, all countries but China have comparative
advantages. The RSCA indicated that the highest comparative advantages
belong to Finland, Canada, and Sweden. Trade balance, assessed via the
TBI index, found positive trade balances for Brazil, Finland, Canada,
Sweden, and the USA. China has the greatest comparative disadvantage. We
concluded that the wood pulp industry has a strong positive influence on
the export economies of Brazil, Finland, Canada and Sweden; and in the
USA it has a moderate positive influence.}},
Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Rossato, FGFS (Reprint Author), Univ Florida, Sch Forest Resources \&
Conservat, 315 Newins Ziegler Hall, Gainesville, FL 32610 USA.
Rossato, Fabricia Gladys F. S.; Susaeta, Andres; Adams, Damian C., Univ Florida,
Sch Forest Resources \& Conservat, 315 Newins Ziegler Hall, Gainesville, FL 32610 USA.
Hidalgo, Ieda Geriberto, Univ Estadual Campinas, UNICAMP, FT, Rua Paschoal Marmo
1888, BR-13484332 Limeira, SP, Brazil.
de Araujo, Thais Duekc; de Queiroz, Adriana, Univ Fed Mato Grosso do Sul, R UFMS,
40 Vila Olinda, BR-79070900 Campo Grande, MS, Brazil.}},
DOI = {{10.1016/j.forpol.2018.09.007}},
ISSN = {{1389-9341}},
EISSN = {{1872-7050}},
Keywords = {{Export competitiveness; Pulp production; Revealed comparative advantage;
Revealed symmetric comparative advantage; Trade balance index}},
Keywords-Plus = {{COMPETITIVENESS; POLICY}},
Research-Areas = {{Business \& Economics; Environmental Sciences \& Ecology;
Forestry}},
Web-of-Science-Categories = {{Economics; Environmental Studies; Forestry}},
Author-Email = {{fabgladys@ufl.edu}},
Number-of-Cited-References = {{41}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{7}},
Usage-Count-Since-2013 = {{7}},
Journal-ISO = {{Forest Policy Econ.}},
Doc-Delivery-Number = {{HE0KP}},
Unique-ID = {{ISI:000452955800007}},
DA = {{2019-06-24}},
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@article{ ISI:000452240300007,
Author = {Galeazzi, Cristiano P. and Almeida, Renato P. and Mazoca, Carlos E. M.
and Best, Jim L. and Freitas, Bernardo T. and Ianniruberto, Marco and
Cisneros, Julia and Tamura, Larissa N.},
Title = {{The significance of superimposed dunes in the Amazon River: Implications
for how large rivers are identified in the rock record}},
Journal = {{SEDIMENTOLOGY}},
Year = {{2018}},
Volume = {{65}},
Number = {{7}},
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Pages = {{2388-2403}},
 Month = {{DEC}},
 Abstract = {{The recognition of large fluvial channels in the geological record is of great importance for regional palaeohydraulic and palaeogeographical reconstructions, inputs to reservoir modelling, and estimating the input of sediment to sedimentary basins, with consequent larger-scale implications for modelling basin fill. However, available criteria for the interpretation of the scale of ancient fluvial systems are still poorly tested, particularly the widely-adopted assumption that the abundance of large-scale dunes in some deep channels implies that abundant large-scale cross-strata sets will be preserved in similar palaeochannels. To test this hypothesis, high-resolution multibeam echo-sounding imaging of two reaches in the Amazon River where large dunes are common were investigated, yielding an extensive dataset concerning dune geometry, position within the channel and, most importantly, the presence and distribution of smaller superimposed dunes on their lee sides. These results show that despite 90% of the bedforms at water depths > 20m being constituted by up to 12.2 m high compound dunes, 94% of the lee sides of these dunes are covered by smaller superimposed dunes. These results suggest that steep avalanche foresets that are several metres in height may be rare in the preserved stratigraphic record of these large channels, which are instead more commonly represented by decimetre-scale cross-stratified cosets formed by superimposed dunes migrating down the lee side of the large-scale host bedforms. This observation thus suggests that the recognition of compound dune cosets is key to the interpretation of river-channel scale, since compound dunes are the principal bedform in most large river channels. Consequently, successions dominated by decimetre-scale thick cross-strata sets, but that show rarer preservation of outsized metre-scale avalanche foresets, and abundant similar-sized cosets near the base of fining-upward cycles are probably the most common bedform record of large-river channels.}},
 Publisher = {{WILEY}},
 Address = {{111 RIVER ST, HOBOKEN 07030-5774, NJ USA}},
 Type = {{Article}},
 Language = {{English}},
 Affiliation = {{Galeazzi, CP (Reprint Author), Univ Sao Paulo, Inst Geociencias, Rua Lago 562,Cidade Univ, BR-05508900 Sao Paulo, SP, Brazil.
 Galeazzi, Cristiano P.; Almeida, Renato P.; Mazoca, Carlos E. M.; Tamura, Larissa N., Univ Sao Paulo, Inst Geociencias, Rua Lago 562,Cidade Univ, BR-05508900 Sao Paulo, SP, Brazil.
 Almeida, Renato P., Univ Sao Paulo, Inst Energia & Ambiente, Ave Prof Luciano Gualberto 1289,Cidade Univ, BR-05508900 Sao Paulo, SP, Brazil.
 Best, Jim L., Univ Illinois, Dept Geol, Ven Te Chow Hydrosyst Lab, 1301 West Green St, Champaign, IL 61801 USA.
 Best, Jim L., Univ Illinois, Dept Geog, Ven Te Chow Hydrosyst Lab, 1301 West Green St, Champaign, IL 61801 USA.
 Best, Jim L., Univ Illinois, Dept GIS Mech Sci & Engn, Ven Te Chow Hydrosyst Lab, 1301 West Green St, Champaign, IL 61801 USA.
 Freitas, Bernardo T., Univ Estadual Campinas, Fac Tecnol, R Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
 Ianniruberto, Marco, Univ Brasilia, Inst Geociencias, Campus Univ Darcy Ribeiro, BR-71900000 Brasilia, DF, Brazil.
 Cisneros, Julia, Univ Illinois, Dept Geol, 1301 West Green St, Champaign, IL 61801 USA.}},
 DOI = {{10.1111/sed.12471}},
 ISSN = {{0037-0746}},
 EISSN = {{1365-3091}},
 Keywords = {{Amazon River; large river bedforms; large river deposits; low-angle compound dunes; MBES; superimposed dunes}},
 Keywords-Plus = {{CROSS-STRATA; FLOW UNSTEADINESS; SUBAQUEOUS DUNES; WESTERN AMAZONIA; BAR; PRESERVATION; MIGRATION; BEDFORMS; DEPOSITS; CHANNEL}},
 Research-Areas = {{Geology}},
 Web-of-Science-Categories = {{Geology}},
 Author-Email = {{cristiano.galeazzi@usp.br}},
 ResearcherID-Numbers = {{Freitas, Bernardo Tavares/P-1864-2019
 Ianniruberto, Marco/W-9704-2018
 Almeida, Renato/G-2567-2013
 }},
 ORCID-Numbers = {{Freitas, Bernardo Tavares/0000-0001-6239-0137
 Ianniruberto, Marco/0000-0002-9056-9668
 Almeida, Renato/0000-0003-3664-1558
 }}

Tamura, Larissa/0000-0002-2663-3223}},
 Funding-Acknowledgement = {{Sao Paulo Research Foundation (FAPESP) {{2014/16739-8,
 2016/19736-5,
 2017/06874-3, 12/50260-6}; CAPES {{PROEX-558/2011}; PRFH-PETROBRAS;
 CNPq {{302905/2015-4, 301775/2012-5}; Jack and Richard Threet Chair in
 Sedimentary Geology; Department of Geology at the University of Illinois}},
 Funding-Text = {{This research was funded by the Sao Paulo Research Foundation (FAPESP)
 through Research Grants \#2014/16739-8, \#2016/19736-5, \#2017/06874-3,
 \#12/50260-6 (FAPESP-NSF-NASA Biota/Dimensions of Biodiversity). We also
 thank CAPES (PROEX-558/2011) and PRFH-PETROBRAS for student
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 301775/2012-5). We also are grateful for fieldwork funding provided by
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 Number-of-Cited-References = {{61}},
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 Usage-Count-Last-180-days = {{2}},
 Usage-Count-Since-2013 = {{2}},
 Journal-ISO = {{Sedimentology}},
 Doc-Delivery-Number = {{HD1AE}},
 Unique-ID = {{ISI:000452240300007}},
 DA = {{2019-06-24}},
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@article{ ISI:000450077300010,
 Author = {Souza, Theo S. O. and Okada, Dagoberto Yukio and Foresti, Eugenio},
 Title = {{Proof of concept and improvement of a triple chamber biosystem coupling
 anaerobic digestion, nitrification and mixotrophic endogenous
 denitrification for organic matter, nitrogen and sulfide removal from
 domestic sewage}},
 Journal = {{BIOPROCESS AND BIOSYSTEMS ENGINEERING}},
 Year = {{2018}},
 Volume = {{41}},
 Number = {{12}},
 Pages = {{1839-1850}},
 Month = {{DEC}},
 Abstract = {{In this study, two versions of a triple chamber biosystem, coupling
 anaerobic digestion, nitrification and mixotrophic endogenous
 denitrification (ADNMED), were evaluated and compared. They were
 designed to maximize the use of endogenous electron donors produced by
 anaerobic digestion (residual organic matter and sulfide) to abate a
 portion of the influent nitrogen contained in domestic sewage while
 removing the inconvenience of effluent sulfide. The first version was
 able to abate 40\% of the influent nitrogen but presented operational
 and hydrodynamic problems, which resulted in sulfide emissions. A
 modified second version was proposed, improving the first approach and
 achieving a nitrogen abatement of more than 60\% and a sulfide-free
 effluent, complying with local emission standards. The results
 demonstrated that endogenous electron donors produced by anaerobic
 digestion should not be neglected, and a significant cost reduction in
 nitrogen removal from domestic sewage could be achieved by exploiting
 their potential with novel reactor configurations.}},
 Publisher = {{SPRINGER}},
 Address = {{233 SPRING ST, NEW YORK, NY 10013 USA}},
 Type = {{Article}},
 Language = {{English}},
 Affiliation = {{Souza, TSO (Reprint Author), Univ Sao Paulo, Dept Hydraul \& Environm
 Engn, Polytech Sch, Ave Prof Almeida Prado,83,Trav 2,Cidade Univ, BR-05508900 Sao
 Paulo, SP, Brazil.
 Souza, Theo S. O., Univ Sao Paulo, Dept Hydraul \& Environm Engn, Polytech Sch, Ave
 Prof Almeida Prado,83,Trav 2,Cidade Univ, BR-05508900 Sao Paulo, SP, Brazil.
 Okada, Dagoberto Yukio, Univ Estadual Campinas, Sch Technol, Rua Paschoal Marmo,
 1888, BR-13484332 Limeira, SP, Brazil.
 Foresti, Eugenio, Univ Sao Paulo, Dept Hydraul \& Sanitat, Sao Carlos Sch Engn, Ave
 Trabalhador Sao Carlense,400, BR-13566590 Sao Carlos, SP, Brazil.}},
 DOI = {{10.1007/s00449-018-2006-0}},
 ISSN = {{1615-7591}},
 EISSN = {{1615-7605}},
 Keywords = {{Anaerobic digestion; Domestic sewage; Endogenous electron donors;

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    Nitrogen removal; Sulfide-driven autotrophic denitrification}},
Keywords-Plus = {{OXIDIZING AUTOTROPHIC DENITRIFICATION; EXTERNAL CARBON SOURCE;
WASTE-WATER; HYDROGEN-SULFIDE; BED REACTOR; SULFUR; BIOGAS;
BIODESULFURIZATION; OXIDATION; METHANE}},
Research-Areas = {{Biotechnology \& Applied Microbiology; Engineering}},
Web-of-Science-Categories = {{Biotechnology \& Applied Microbiology; Engineering,
Chemical}},
Author-Email = {{theos@usp.br}},
ResearcherID-Numbers = {{Okada, Dagoberto/C-3461-2012}},
ORCID-Numbers = {{Okada, Dagoberto/0000-0003-1859-9851}},
Funding-Acknowledgement = {{FAPESP (Fundacao de Amparo a Pesquisa do Estado de Sao
Paulo)
{{2007/58659-7, 2009/15984-0, 2012/07375-7}}; CNPq (Conselho Nacional de
Desenvolvimento Cientifico e Tecnologico)},
Funding-Text = {{This work was supported by FAPESP (Fundacao de Amparo a Pesquisa do
Estado de Sao Paulo) (Proc. no. 2007/58659-7, 2009/15984-0 and
2012/07375-7) and CNPq (Conselho Nacional de Desenvolvimento Cientifico
e Tecnologico). The authors would like to thank the mentioned Brazilian
agencies for the scholarships and financial resources that made this
research possible.}},
Number-of-Cited-References = {{32}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{7}},
Usage-Count-Since-2013 = {{15}},
Journal-ISO = {{Bioprocess. Biosyst. Eng.}},
Doc-Delivery-Number = {{HA2OB}},
Unique-ID = {{ISI:000450077300010}},
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@article{ ISI:000449247600036,
Author = {Santos, Niedja da Silva and Oliveira, Rhaul and Lisboa, Carolina Almeida
and Mona e Pinto, Joana and Sousa-Moura, Diego and Camargo, Nichollas
Serafim and Perillo, Vitoria and Oliveira, Miguel and Grisolia, Cesar
Koppe and Domingues, Ines},
Title = {{Chronic effects of carbamazepine on zebrafish: Behavioral, reproductive
and biochemical endpoints}},
Journal = {{ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY}},
Year = {{2018}},
Volume = {{164}},
Pages = {{297-304}},
Month = {{NOV 30}},
Abstract = {{Carbamazepine (Cbz), one of the most prescribed pharmaceuticals in the
world is often detected in surface waters and sediments. However, few
studies addressed its chronic effects in fish. In the present study,
Danio rerio adults were exposed for 63 days to Cbz (0 - control, 10 mu g
L-1 - concentration found in effluents, and 10,000 mu g L-1 - 5% of
LC50 at 72 h). Assessed endpoints were: feeding behavior, growth rate,
number of eggs produced and their viability, histological alterations in
female gonads, and biochemical biomarkers associated with antioxidant
defenses (catalase-CAT, and glutathione S-transferase - GST activities),
neurotransmission (acetylcholinesterase activity - AChE) and metabolism
(lactate dehydrogenase - LDH). Cbz exposure increased the total time for
food intake but did not affect D. rerio growth. Although the total
number of eggs was not affected by Cbz exposure, the eggs viability was
significantly impaired. Exposure to Cbz caused alterations in the female
gonads follicular stages. In terms of biochemical endpoints, CAT
activity in liver and gills, was sensitive to the pharmaceutical
exposure presenting a decreased activity. AChE activity was induced in
the head (both concentrations) and muscle (10,000 mu g L-1). GST
activity was increased in gills (both concentrations) but inhibited in
the intestine. Concerning LDH, enzymatic activity was increased in the
liver and decreased in muscle and gills. Several of the above-mentioned
effects can be directly linked with effects at population level (e.g.
feeding behavior) and occurred at environmental concentrations (the
lowest concentration tested), thus serious concerns regarding risks
posed by Cbz residues to fish populations arise with this study.}},
Publisher = {{ACADEMIC PRESS INC ELSEVIER SCIENCE}},
Address = {{525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Oliveira, M (Reprint Author), Univ Aveiro, Dept Biol, Campus Univ

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Santiago, P-3810193 Aveiro, Portugal.

Oliveira, M (Reprint Author), Univ Aveiro, CESAM, Campus Univ Santiago, P-3810193 Aveiro, Portugal.

Santos, Niedja da Silva; Oliveira, Miguel; Domingues, Ines, Univ Aveiro, Dept Biol, Campus Univ Santiago, P-3810193 Aveiro, Portugal.

Santos, Niedja da Silva; Oliveira, Miguel; Domingues, Ines, Univ Aveiro, CESAM, Campus Univ Santiago, P-3810193 Aveiro, Portugal.

Oliveira, Rhaul; Lisboa, Carolina Almeida; Mona e Pinto, Joana; Sousa-Moura, Diego; Perillo, Vitoria; Grisolia, Cesar Koppe, Univ Brasilia, Inst Ciencias Biol, Dept Genet & Morfol, Lab Genet Toxicol, BR-70910900 Brasilia, DF, Brazil.

Oliveira, Rhaul, Univ Estadual Campinas, UNICAMP, Fac Tecnol, BR-13484332 Limeira, SP, Brazil.

Oliveira, Rhaul, Univ Sao Paulo, Fac Ciencias Farmaceut, Programa Posgrad Toxicol & Anal Toxicol, BR-05508000 Sao Paulo, Brazil.

Camargo, Nichollas Serafim, Univ Brasilia, Inst Ciencias Biol, Lab Nanobiotecnol, AsaNorte, Dept Genet & Morfol, BR-70910900 Brasilia, DF, Brazil.}}

DOI = {{10.1016/j.ecoenv.2018.08.015}},

ISSN = {{0147-6513}},

EISSN = {{1090-2414}},

Keywords = {{Human pharmaceutical; Danio rerio; Behavior; Biochemical biomarkers; Histology}},

Keywords-Plus = {{SHORT-TERM EXPOSURE; DANIO-RERIO; ACETYLCHOLINESTERASE ACTIVITY; SUBACUTE EXPOSURES; DRUG CARBAMAZEPINE; MICRONUCLEUS ASSAY; OXIDATIVE STRESS; FISH; TOXICITY; PHARMACEUTICALS}},

Research-Areas = {{Environmental Sciences & Ecology; Toxicology}},

Web-of-Science-Categories = {{Environmental Sciences; Toxicology}},

Author-Email = {{migueloliveira@ua.pt}},

ResearcherID-Numbers = {{Oliveira, Rhaul/T-7582-2017

Oliveira, Miguel/E-4090-2010}},

ORCID-Numbers = {{da Silva Santos, Niedja/0000-0002-1220-1593

Oliveira, Rhaul/0000-0002-0272-3857

Oliveira, Miguel/0000-0001-5404-7718}},

Funding-Acknowledgement = {{Brazilian Ministry of Education and Ministry of Science and Technology

of Brazil; CAPES; CNPq {{305741/2015-2}; FAPDF research grant

{{1250/2016}; CNPq scholarship; CESAM {{UID/AMB/50017 -

POCI-01-0145-FEDER-007638}; FCT/MCTES through national funds (PIDDAC);

FEDER, within the PT2020 Partnership Agreement; Compete 2020; program

Investigator FCT; Human Potential Operational Program; European Social

Fund {{IF/00335-2015}; Portuguese Science and Technology Foundation

(FCT) {{SFRH/BPD/90521/2012}}},

Funding-Text = {{Brazilian Ministry of Education and Ministry of Science and Technology of Brazil for the scholarship provided to RO (CNPq BJT-A/PNPD CAPES);

DSM for CAPES Ph.D. scholarship. CKG for CNPq research grant

305741/2015-2; TSA for FAPDF research grant (1250/2016), NFO and RCS for

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of the program Investigator FCT, co-funded by the Human Potential

Operational Program and European Social Fund (IF/00335-2015). ID was

funded through a Post-Doc grant (SFRH/BPD/90521/2012) by the Portuguese

Science and Technology Foundation (FCT).}},

Number-of-Cited-References = {{66}},

Times-Cited = {{5}},

Usage-Count-Last-180-days = {{12}},

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Journal-ISO = {{Ecotox. Environ. Safe.}},

Doc-Delivery-Number = {{GZ2VX}},

Unique-ID = {{ISI:000449247600036}},

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@article{ ISI:000442058700003,

Author = {Moura, Rafael B. and Santos, Carla E. D. and Okada, Dagoberto Y. and Martins, Tiago H. and Ferraz Junior, Antonio Djalma N. and Damianovic, Marcia H. R. Z. and Foresti, Eugenio},

Title = {{Carbon-nitrogen removal in a structured-bed reactor (SBRRIA) treating sewage: Operating conditions and metabolic perspectives}},

Journal = {{JOURNAL OF ENVIRONMENTAL MANAGEMENT}},

Year = {{2018}},

Volume = {{224}},

Pages = {{19-28}},
Month = {{OCT 15}},
Abstract = {{The present study evaluated the efficiency of a structured-bed reactor subjected to recirculation and intermittent aeration (SBRRIA) to promote nitrogen and carbon removal from domestic sewage. The intermittent aeration and the recycling rate of 3 keeps the desired mixing degree inside the SBRRIA. Four different operational conditions were tested by varying the hydraulic retention time (HRT) from 12 to 8 h and aerated and nonaerated periods (A/NA) from 2 h/1 h and 3 h/1 h. At the THD of 8 h and A/NA of 2 h/1 h there was a decrease in the nitrification process (77.5\%) due to the increase of organic matter availability, affecting the total-N removal performance. However, by increasing the aerated period from 2h to 3 h, the nitrification efficiency rose to 91.1\%, reaching a total-N removal efficiency of 79\%. The system reached a maximum total-N loading removed of 0.117 kgN.m(-3).d(-1) by applying an HRT of 8 h and an intermittent aeration cycle of 3 h, aerated and 1 h non-aerated. The simultaneous nitrification and denitrification (SND) process was related to a complex interplay among microorganisms affiliated mostly to Acidovorax sp., Comamonas sp., Dechloromonas sp., Hydrogenophaga sp., Mycobacterium sp., Rhodobacter sp., and Steroidobacter sp.}},
Publisher = {{ACADEMIC PRESS LTD- ELSEVIER SCIENCE LTD}},
Address = {{24-28 OVAL RD, LONDON NW1 7DX, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Moura, RB (Reprint Author), Univ Fed Alfenas, Inst Sci \& Technol, Rod Jose Aurelio Vilela 11999,Cidade Univ, BR-37715400 Pocos De Caldas, MG, Brazil.
Moura, Rafael B., Univ Fed Alfenas, Inst Sci \& Technol, Rod Jose Aurelio Vilela 11999,Cidade Univ, BR-37715400 Pocos De Caldas, MG, Brazil.
Moura, Rafael B.; Santos, Carla E. D.; Martins, Tiago H.; Damianovic, Marcia H. R. Z.; Foresti, Eugenio, Univ Sao Paulo, Ctr Res Dev \& Innovat Environm Engn, Biol Proc Lab, Sao Carlos Sch Engn,EESC, Av Joao Dagnone 1100, BR-13563120 Sao Carlos, SP, Brazil.
Okada, Dagoberto Y., Univ Estadual Campinas, Sch Technol, Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Ferraz Junior, Antonio Djalma N., Brazilian Ctr Res Energy \& Mat CNPEM, Brazilian Bioethanol Sci \& Technol Lab CTBE, Rua Giuseppe Maximo Scolfaro 10000, BR-13083970 Campinas, SP, Brazil.}},
DOI = {{10.1016/j.jenvman.2018.07.014}},
ISSN = {{0301-4797}},
EISSN = {{1095-8630}},
Keywords = {{Carbon and nitrogen removal; Simultaneous nitrification and denitrification; Structured-bed biofilm reactor}},
Keywords-Plus = {{BIOLOGICAL NUTRIENT REMOVAL; SEQUENCING BATCH REACTOR; DOMESTIC WASTE-WATER; ANAEROBIC AMMONIUM OXIDATION; GRANULAR SLUDGE REACTOR; DENITRIFICANS GEN. NOV.; ORGANIC LOADING RATE; SIMULTANEOUS NITRIFICATION; INTERMITTENT AERATION; HYDROGEN-PRODUCTION}},
Research-Areas = {{Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Environmental Sciences}},
Author-Email = {{rafael.moura@unifal-mg.edu.br}},
ResearcherID-Numbers = {{Okada, Dagoberto/C-3461-2012
Martins, Tiago/D-4557-2014}},
ORCID-Numbers = {{Okada, Dagoberto/0000-0003-1859-9851
Moura, Rafael/0000-0002-0273-5663
Martins, Tiago/0000-0002-3643-5722}},
Funding-Acknowledgement = {{FAPESP (Fundacao de Amparo Pesquisa do Estado de Sao Paulo, Brazil);
CNPq (Conselho Nacional de Desenvolvimento Cientifico e Tecnologico, Brazil)}},
Funding-Text = {{This study was supported by FAPESP (Fundacao de Amparo Pesquisa do Estado de Sao Paulo, Brazil) and CNPq (Conselho Nacional de Desenvolvimento Cientifico e Tecnologico, Brazil).}},
Number-of-Cited-References = {{66}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{11}},
Usage-Count-Since-2013 = {{27}},
Journal-ISO = {{J. Environ. Manage.}},
Doc-Delivery-Number = {{GQ9AQ}},
Unique-ID = {{ISI:000442058700003}},
DA = {{2019-06-24}},
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@article{ ISI:000450034800008,
Author = {Gallep, Cristiano M. and Viana, Joao F. and Cifra, Michal and Clarke,
Dominic and Robert, Daniel},
Title = {{RESEARCH IN CONTEXT: PART OF A SPECIAL ISSUE ON FUNCTIONAL-DEVELOPMENTAL
PLANT CELL BIOLOGY Peter Barlow's insights and contributions to the
study of tidal gravity variations and ultra-weak light emissions in
plants}},
Journal = {{ANNALS OF BOTANY}},
Year = {{2018}},
Volume = {{122}},
Number = {{5}},
Pages = {{757-766}},
Month = {{OCT 5}},
Abstract = {{Background A brief review is given of Peter W. Barlows' contributions to
research on gravity tide-related phenomena in plant biology, or
'selenonastic' effects as he called them, including his early research
on root growth. Also, new results are presented here from long-term
recordings of spontaneous ultra-weak light emission during germination,
reinforcing the relationship between local lunisolar tidal acceleration
and seedling growth.
Scope The main ideas and broad relevance of the work by Barlow and his
collaborators about the effects of gravity on plants are reviewed,
highlighting the necessity of new models to explain the apparent
synchronism between root growth and microscale gravity changes 10' times
lower than that exerted by the Earth's gravity. The new results, showing
for the first time the germination of coffee beans in sequential tests
over 2 months, confirm the co-variation between the patterns in
ultra-weak light emission and the lunisolar tidal gravity curves for the
initial growth phase. For young sprouts (<1 month old), the rhythm of
growth as well as variation in light emission exhibit the once a day and
twice a day periodic variations, frequency components that are the
hallmark of local lunisolar gravimetric tides. Although present, this
pattern is less pronounced in coffee beans older than 1 month.
Conclusions The apparent co-variation between ultra-weak light emission
and growth pattern in coffee seedlings and the lunisolar gravity cycles
corroborate those previously found in seedlings from other species. It
is proposed here that such patterns may attenuate with time for older
sprouts with slow development. These data suggest that new models
considering both intra- and intercellular interactions are needed to
explain the putative sensing and reaction of seedlings to the variations
in the gravimetric tide. Here, a possible model is presented based on
supracellular matrix interconnections.}},
Publisher = {{OXFORD UNIV PRESS}},
Address = {{GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Gallep, CM (Reprint Author), Univ Estadual Campinas, Sch Technol, DTT
FT, R Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Gallep, Cristiano M.; Viana, Joao F., Univ Estadual Campinas, Sch Technol, DTT FT,
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Cifra, Michal, Czech Acad Sci, Inst Photon & Elect, Chaberska 57, Prague 18251 8,
Czech Republic.
Clarke, Dominic; Robert, Daniel, Univ Bristol, Sch Biol Sci, Life Sci Bldg,2B06,24
Tyndall Ave, Bristol BS8 1TQ, Avon, England.}},
DOI = {{10.1093/aob/mcx176}},
ISSN = {{0305-7364}},
EISSN = {{1095-8290}},
Keywords = {{Germination; lunisolar gravity tide; ultra-weak light emission}},
Keywords-Plus = {{LOCAL GRAVIMETRIC TIDE; ARABIDOPSIS-THALIANA; PHOTON-EMISSION; LEAF
MOVEMENTS; BIOPHOTON EMISSION; ELONGATION GROWTH; OXIDATIVE STRESS;
WHEAT SEEDLINGS; LUNAR GRAVITY; ACCELERATION}},
Research-Areas = {{Plant Sciences}},
Web-of-Science-Categories = {{Plant Sciences}},
Author-Email = {{gallep@ft.unicamp.br}},
Funding-Acknowledgement = {{Sao Paulo Research Foundation (FAPESP) {{16/50344-6,
15/11280-0,
04/10146-3}}; National Research Council - CNPq, Brazil {{301420/2015-7}};
Czech Science Foundation {{13-29294S}}; Czech Academy of Science
{{SAV-15-22}}; Slovak Academy of Science {{SAV-15-22}}; COST Actions
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Theoretical Physics, Santa Barbara; National Science Foundation {{NSF

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Phy11-25915}}},
Funding-Text = {{This work was partially supported by Sao Paulo Research Foundation
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acknowledge Peter W. Barlow for his support, ever stimulating
discussions and for his friendship. This article is dedicated to the
memory of Peter W Barlow.}},
Number-of-Cited-References = {{42}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{1}},
Journal-ISO = {{Ann. Bot.}},
Doc-Delivery-Number = {{HA2BK}},
Unique-ID = {{ISI:000450034800008}},
OA = {{Bronze}},
DA = {{2019-06-24}},
}

@article{ ISI:000433609100051,
Author = {Bonatti, Rodrigo S. and Siqueira, Rayane R. and Padilha, Giovana S. and
Bortolozzo, Ausdinir D. and Osorio, Wislei R.},
Title = {{Distinct Al-p/Si-p composites affecting its densification and mechanical
behavior}},
Journal = {{JOURNAL OF ALLOYS AND COMPOUNDS}},
Year = {{2018}},
Volume = {{757}},
Pages = {{434-447}},
Month = {{AUG 15}},
Abstract = {{This investigation is focused on the characterization of distinct
environmental-friendly Al-p/Si-p composites. Differently from the
traditional Al/Si composites, which are produced with Al-based alloy
castings, the investigated composites are elaborated using Al and Si
powder particles, sequentially compacted and sintered. The green and
sintered densifications are determined, which are affected by both Si
content and the applied compaction load. The preprogramming of the
compaction pressure and sintering time induce to similar ultimate
tensile strength (UTS) of an Al-Si casting alloy. The specific strength
per relative manufacturing cost comparing with Al/SiC composites is also
shown. Since the restriction legislations have banned hazardous
materials, the proposed Al composites have an environmental-friendly
aspect associated with a low manufacturing cost and recycling aspect.
(C) 2018 Elsevier B.V. All rights reserved.}},
Publisher = {{ELSEVIER SCIENCE SA}},
Address = {{PO BOX 564, 1001 LAUSANNE, SWITZERLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Osorio, WR (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
Technol, BR-13484332 Limeira, SP, Brazil.
Bonatti, Rodrigo S.; Osorio, Wislei R., Univ Estadual Campinas, UNICAMP, Sch
Technol, BR-13484332 Limeira, SP, Brazil.
Siqueira, Rayane R.; Padilha, Giovana S.; Bortolozzo, Ausdinir D.; Osorio, Wislei
R., Univ Estadual Campinas, UNICAMP, Res Grp Mfg Adv Mat CPMMA, Sch Appl Sci,FCA,
Campus Limeira,1300 Pedro Zaccaria St, BR-13484350 Limeira, SP, Brazil.}},
DOI = {{10.1016/j.jallcom.2018.05.055}},
ISSN = {{0925-8388}},
EISSN = {{1873-4669}},
Keywords = {{Al matrix composite; Powder metallurgy; Sintering; Relative packing
density; Al powders; Discontinuous Si particles reinforcement}},
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Keywords-Plus = {{METAL-MATRIX COMPOSITES; CORROSION BEHAVIOR; POWDER-METALLURGY;
VOLUME
  CHANGES; MICROSTRUCTURE; MIXTURES; SILICON; ALLOY}},
Research-Areas = {{Chemistry; Materials Science; Metallurgy \& Metallurgical
Engineering}},
Web-of-Science-Categories = {{Chemistry, Physical; Materials Science,
Multidisciplinary; Metallurgy \&
  Metallurgical Engineering}},
Author-Email = {{wislei.osorio@fca.unicamp.br}},
ResearcherID-Numbers = {{Osorio, Wislei R*/E-2585-2013}},
Funding-Acknowledgement = {{FAE-PEX- UNICAMP {{}}2335/17, 2478/18}}; FAPESP {{}}
2013/12729-5}}; CNPq
  (The Brazilian Research Council) {{}}304950/2017-3, 446797/2014-6}},
Funding-Text = {{The authors acknowledge financial support provided by FAE-PEX- UNICAMP
  (Grant \#2335/17 and \#2478/18), FAPESP (2013/12729-5) and CNPq (The
  Brazilian Research Council, Grants \#304950/2017-3 and \#446797/2014-6).
  Acknowledgements are also provided to Mr. Luiz Antonio Garcia and MSc.
  Diego Costa (UNICAMP/FT) due to them valuable technical contributions.}},
Number-of-Cited-References = {{59}},
Times-Cited = {{5}},
Usage-Count-Last-180-days = {{6}},
Usage-Count-Since-2013 = {{15}},
Journal-ISO = {{J. Alloy. Compd.}},
Doc-Delivery-Number = {{GH7FP}},
Unique-ID = {{ISI:000433609100051}},
DA = {{2019-06-24}},
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@article{ ISI:000438180700014,
Author = {Morozesk, Mariana and Franqui, Lidiane S. and Mansano, Adrislaine S. and
  Martinez, Diego Stefani T. and Fernandes, Marisa N.},
Title = {{Interactions of oxidized multiwalled carbon nanotube with cadmium on
  zebrafish cell line: The influence of two co-exposure protocols on in
  vitro toxicity tests}},
Journal = {{AQUATIC TOXICOLOGY}},
Year = {{2018}},
Volume = {{200}},
Pages = {{136-147}},
Month = {{JUL}},
Abstract = {{The widespread production and application of carbon nanotubes (CNT) have
  raising concerns about their release into the environment and, the joint
  toxicity of CNT with pre-existing contaminants needs to be assessed.
  This is the first study that investigated the co-exposure of oxidized
  multiwalled carbon nanotubes (ox-MWCNT) and cadmium (Cd) using a
  zebrafish liver cell line (ZFL). Two in vitro co-exposure protocols
  differing by the order of ox-MWCNT interaction with Cd and fetal bovine
  serum (FBS) proteins were evaluated. Ox-MWCNT was physical and chemical
  characterized and its adsorption capacity and colloidal stability in
  cell culture medium was determined in both protocols. Cytotoxicity was
  investigated by M'FT, neutral red, trypan blue, lactate dehydrogenase
  assays and the necrosis and apoptosis events were determined using flow
  cytometer. The Cd presence in medium did not interfere in the protein
  corona composition of MWCNT but the order of interaction of FBS and Cd
  interfered in its colloidal stability and metal adsorption rate. The
  ox-MWCNT increased Cd toxicity at low concentration probably by a
  ``Trojan horse{''} and/or synergistic effect, and induced apoptosis and
  necrosis in ZFL cells. Although it was not observed differences of
  toxicity between protocols, the interaction of ox-MWCNT first with Cd
  led to its precipitation in cell culture medium and, as a consequence,
  to a possible false viability result by neutral red assay. Taken
  together, it was evident that the order of compounds interactions
  disturbs the colloidal stability and affects the in vitro toxicological
  assays. Considering that Protocol A showed more ox-MWCNT stability after
  interaction with Cd, this protocol is recommended to be adopted in
  future studies.}},
Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Fernandes, MN (Reprint Author), Fed Univ Sao Carlos UFSCar, Physiol
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  Martinez, DST (Reprint Author), Brazilian Ctr Res Energy \& Mat CNPEM, Polo Alta

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Morozesk, Mariana; Fernandes, Marisa N., Fed Univ Sao Carlos UFSCar, Physiol Sci Dept, Washington Luiz Hwy, Km 235, BR-13565905 Sao Carlos, SP, Brazil.

Franqui, Lidiane S.; Martinez, Diego Stefani T., Brazilian Ctr Res Energy & Mat CNPEM, Brazilian Nanotechnol Natl Lab LNNano, Polo Alta Tecnol Campinas 2, Giuseppe Maximo Scolfaro St 10-000, BR-13083970 Campinas, SP, Brazil.

Franqui, Lidiane S.; Martinez, Diego Stefani T., Univ Campinas UNICAMP, Sch Technol, Paschoal Marino St 1888, BR-13484332 Limeira, SP, Brazil.

Mansano, Adrislaine S., Fed Univ Sao Carlos UFSCar, Dept Ecol & Evolutionary Biol, Washington Luiz Hwy, Km 235, BR-13565905 Sao Carlos, SP, Brazil.}}

DOI = {{10.1016/j.aquatox.2018.05.002}},

ISSN = {{0166-445X}},

EISSN = {{1879-1514}},

Keywords = {{Nanoecotoxicology; Protein corona; Colloidal stability; Cell viability; Flow cytometry; Cd adsorption}},

Keywords-Plus = {{ORGANIC NANOMATERIAL FULLERENE; OXIDATIVE STRESS; ENGINEERED NANOMATERIALS; AQUEOUS-SOLUTION; PROTEIN CORONA; DAPHNIA-MAGNA; HEAVY-METALS; NEUTRAL RED; ASSAY; FISH}},

Research-Areas = {{Marine & Freshwater Biology; Toxicology}},

Web-of-Science-Categories = {{Marine & Freshwater Biology; Toxicology}},

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ResearcherID-Numbers = {{Mansano, Adrislaine/D-1188-2017

Franqui, Lidiane S/E-4816-2015}},

ORCID-Numbers = {{Mansano, Adrislaine/0000-0002-3118-4960

Franqui, Lidiane S/0000-0002-7018-5157}},

Funding-Acknowledgement = {{CNPq {{{141118/2014-8}}}; CAPES {{{88881.134311/2016-1}}}; FAPESP

{{2014/05701-0}}; FAPESP/INCT-Inomat {{{2014/50906-9}}}; CNPq/INCT-TA

{{573949/2008-5}}; CNPq/Rede Cigenanotox {{{552120/2011-1}}}; SisNANO}},

Funding-Text = {{This work was supported by the following Brazilian Funding Agencies:

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(Proc. 2014/05701-0), FAPESP/INCT-Inomat (Proc. 2014/50906-9),

CNPq/INCT-TA (Proc. 573949/2008-5, CNPq/Rede Cigenanotox (Proc.

552120/2011-1 and SisNANO.}},

Number-of-Cited-References = {{78}},

Times-Cited = {{1}},

Usage-Count-Last-180-days = {{11}},

Usage-Count-Since-2013 = {{25}},

Journal-ISO = {{Aquat. Toxicol.}},

Doc-Delivery-Number = {{GM5ME}},

Unique-ID = {{ISI:000438180700014}},

DA = {{2019-06-24}},

}

@article{ ISI:000438312300056,

Author = {da Cunha, Amanda de Cassia and Reganani Coneglian, Cassiana Maria and Catapani Poletti, Elaine Cristina},

Title = {{Sewage discharge and water self-decay: Streeter and Phelps model application}},

Journal = {{COMPUTATIONAL & APPLIED MATHEMATICS}},

Year = {{2018}},

Volume = {{37}},

Number = {{3}},

Pages = {{3514-3524}},

Month = {{JUL}},

Abstract = {{Due to the high waste deposition in superficial water, studies are necessary to emphasize the importance to monitor and apply tools, such as mathematical modelling. In this study, we used the classic Streeter and Phelps model to simulate the travel time necessary to depurate organic matter in the Tatu stream, at Limeira, So Paulo, Brazil, and to simulate the point-to-point depuration of organic matter in comparison to point-to-point empirical analysis. According to the simulations, organic matter would be established to 10 mg/L in few hours of time course of water without discharges in the stream, having the watercourse self-decay capacity. In addition, the analysis indicates that possible launches are being carried out along the stream, because, at the collection points, the obtained results presented higher biochemical oxygen demand than the expected for organic matter depuration, which denote discharges occurrences. Thus, this study emphasizes the relevance of monitoring actions and puts the model as a suitable tool to identify

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    discharge sources in water.}},
  Publisher = {{SPRINGER HEIDELBERG}},
  Address = {{TIERGARTENSTRASSE 17, D-69121 HEIDELBERG, GERMANY}},
  Type = {{Article}},
  Language = {{English}},
  Affiliation = {{da Cunha, AD (Reprint Author), Univ Estadual Campinas, Paschoal Marmo
1888, BR-13484332 Limeira, SP, Brazil.
da Cunha, Amanda de Cassia; Reganhan Coneglian, Cassiana Maria; Catapani Poletti,
Elaine Cristina, Univ Estadual Campinas, Paschoal Marmo 1888, BR-13484332 Limeira, SP,
Brazil.}},
  DOI = {{10.1007/s40314-017-0526-x}},
  ISSN = {{0101-8205}},
  EISSN = {{1807-0302}},
  Keywords = {{Superficial water quality; Dissolved oxygen (DO); Water management;
Water reoxygenation; Water deoxygenation}},
  Keywords-Plus = {{QUALITY}},
  Research-Areas = {{Mathematics}},
  Web-of-Science-Categories = {{Mathematics, Applied}},
  Author-Email = {{amanda_cunhal@yahoo.com.br
cassianac@ft.unicamp.br
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  Funding-Acknowledgement = {{Capes}},
  Funding-Text = {{Funding was provided by Capes.}},
  Number-of-Cited-References = {{23}},
  Times-Cited = {{0}},
  Usage-Count-Last-180-days = {{2}},
  Usage-Count-Since-2013 = {{2}},
  Journal-ISO = {{Comput. Appl. Math.}},
  Doc-Delivery-Number = {{GM6UR}},
  Unique-ID = {{ISI:000438312300056}},
  DA = {{2019-06-24}},
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@article{ ISI:000434448900005,
  Author = {Alves, A. A. C. and Spadoti, D. H. and Bravo-Roger, L. L.},
  Title = {{Optically Controlled Multiresonator for Passive Chipless Tag}},
  Journal = {{IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS}},
  Year = {{2018}},
  Volume = {{28}},
  Number = {{6}},
  Pages = {{467-469}},
  Month = {{JUN}},
  Abstract = {{In this letter, an optically controlled passive multiresonator for
chipless tag design of radio frequency identification systems operating
in UHF range frequency is presented. The proposed multiresonator is
composed of three resonators with only 8.9 mm x 5.4 mm overall size, and
its ID states are controlled by an optical switch fixed in a 0.3-mm gap.
The silicon optical switch can change its electrical state from
semiconductor to a near-conducting state when properly illuminated by a
laser source. This principle is applied to control the resonator
operating frequency and, consequently, the tag ID. The multiresonator is
numerically and experimentally evaluated for its both ID states, i.e., 0
and 1 states. The optical switch was illuminated by a laser source at
980 nm with 17 mW of output power. Comparisons between simulated and
measured S-parameters show a strong correlation for 0 and 1 ID states,
validating the proposed optically controlled passive multiresonator for
chipless tag. The power level transition between logic states 0 to 1 is,
approximately, 4.8 dB for both simulation and measured results. This
proposal has great potential applications for printed light sensors.}},
  Publisher = {{IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC}},
  Address = {{445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA}},
  Type = {{Article}},
  Language = {{English}},
  Affiliation = {{Alves, AAC (Reprint Author), Univ Fed Itajuba, Dept Inst Syst Engn \&
Informat Technol, BR-37500903 Itajuba, Brazil.
Alves, A. A. C.; Spadoti, D. H., Univ Fed Itajuba, Dept Inst Syst Engn \& Informat
Technol, BR-37500903 Itajuba, Brazil.
Bravo-Roger, L. L., Univ Estadual Campinas, Dept Fac Technol, BR-13484332 Campinas,
SP, Brazil.}},
  DOI = {{10.1109/LMWC.2018.2824726}},
  ISSN = {{1531-1309}},
  EISSN = {{1558-1764}},
}

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Keywords = {{Chipless; radio frequency identification (RFID); sensing; silicon
switch; tag}},
Keywords-Plus = {{RESONATORS}},
Research-Areas = {{Engineering}},
Web-of-Science-Categories = {{Engineering, Electrical \& Electronic}},
Author-Email = {{andrea.alves@mtel.inatel.br
spadoti@edu.br
leobravo@ft.unicamp.br}},
ResearcherID-Numbers = {{Spadoti, Danilo H/J-2519-2014}},
ORCID-Numbers = {{Spadoti, Danilo H/0000-0002-4046-4809}},
Funding-Acknowledgement = {{State University of Campinas; Federal University of
Itajuba, Itajuba,
Brazil}},
Funding-Text = {{This work was supported in part by the State University of Campinas
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Number-of-Cited-References = {{8}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{2}},
Usage-Count-Since-2013 = {{6}},
Journal-ISO = {{IEEE Microw. Wirel. Compon. Lett.}},
Doc-Delivery-Number = {{GI5ZJ}},
Unique-ID = {{ISI:000434448900005}},
DA = {{2019-06-24}},
}

@article{ ISI:000433291900016,
Author = {Coluci, V. R. and Dantas, S. O. and Tewary, V. K.},
Title = {{Generalized Green's function molecular dynamics for canonical ensemble
simulations}},
Journal = {{PHYSICAL REVIEW E}},
Year = {{2018}},
Volume = {{97}},
Number = {{5}},
Month = {{MAY 29}},
Abstract = {{The need of small integration time steps (similar to 1 fs) in
conventional molecular dynamics simulations is an important issue that
inhibits the study of physical, chemical, and biological systems in real
timescales. Additionally, to simulate those systems in contact with a
thermal bath, thermostating techniques are usually applied. In this
work, we generalize the Green's function molecular dynamics technique to
allow simulations within the canonical ensemble. By applying this
technique to one-dimensional systems, we were able to correctly describe
important thermodynamic properties such as the temperature fluctuations,
the temperature distribution, and the velocity autocorrelation function.
We show that the proposed technique also allows the use of time steps
one order of magnitude larger than those typically used in conventional
molecular dynamics simulations. We expect that this technique can be
used in long-timescale molecular dynamics simulations.}},
Publisher = {{AMER PHYSICAL SOC}},
Address = {{ONE PHYSICS ELLIPSE, COLLEGE PK, MD 20740-3844 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Coluci, VR (Reprint Author), Univ Estadual Campinas, Sch Technol,
UNICAMP, BR-13484332 Limeira, SP, Brazil.
Coluci, V. R., Univ Estadual Campinas, Sch Technol, UNICAMP, BR-13484332 Limeira,
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Dantas, S. O., Univ Fed Juiz de Fora, ICE, Dept Fis, BR-36036330 Juiz De Fora, MG,
Brazil.
Tewary, V. K., NIST, Appl Chem \& Mat Div, Boulder, CO 80305 USA.}},
DOI = {{10.1103/PhysRevE.97.053310}},
Article-Number = {{053310}},
ISSN = {{2470-0045}},
EISSN = {{2470-0053}},
Keywords-Plus = {{STOCHASTIC DIFFERENTIAL-EQUATIONS; LANGEVIN DYNAMICS; CHAIN MODEL;
INTEGRATION; POLYMERS; THERMOSTAT; ALGORITHMS; WATER}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Fluids \& Plasmas; Physics, Mathematical}},
Funding-Acknowledgement = {{CNPq; UFJF; FAPEMIG; FAPESP {[2010/50646-6,
2016/01736-9]}},
Funding-Text = {{We acknowledge the financial support from CNPq, UFJF, FAPEMIG, and
FAPESP (Grants No. 2010/50646-6 and No. 2016/01736-9).}},
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Number-of-Cited-References = {{36}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{4}},
Journal-ISO = {{Phys. Rev. E}},
Doc-Delivery-Number = {{GH3GZ}},
Unique-ID = {{ISI:000433291900016}},
DA = {{2019-06-24}},
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@article{ ISI:000432205900016,
Author = {de Sousa, Marcelo and Martins, Carlos H. Z. and Franqui, Lidiane S. and
Fonseca, Leandro C. and Delite, Fabricio S. and Lanzoni, Evandro M. and
Martinez, Diego Stefani T. and Alves, Oswaldo L.},
Title = {{Covalent functionalization of graphene oxide with D-mannose: evaluating
the hemolytic effect and protein corona formation}},
Journal = {{JOURNAL OF MATERIALS CHEMISTRY B}},
Year = {{2018}},
Volume = {{6}},
Number = {{18}},
Pages = {{2803-2812}},
Month = {{MAY 14}},
Abstract = {{In this work, graphene oxide (GO) was covalently functionalized with
D-mannose (man-GO) using mannosylated ethylenediamine. XPS (C1s and N1s)
confirmed the functionalization of GO through the binding energies at
288.2 eV and 399.8 eV, respectively, which are attributed to the amide
bond. ATR-FTIR spectroscopy showed an increase in the amine bond
intensity, at 1625 cm(-1) (stretching C=O), after the functionalization
step. Furthermore, the man-GO toxicity to human red blood cells
(hemolysis) and its nanobiointeractions with human plasma proteins (hard
corona formation) were evaluated. The mannosylation of GO drastically
reduced its toxicity to red blood cells. SDS-PAGE analysis showed that
the mannosylation process of GO also drastically reduced the amount of
the proteins in the hard corona. Additionally, proteomics analysis by
LC-MS/MS revealed 109 proteins in the composition of the man-GO hard
corona. Finally, this work contributes to future biomedical applications
of graphene-based materials functionalized with active biomolecules.}},
Publisher = {{ROYAL SOC CHEMISTRY}},
Address = {{THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS,
ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{de Sousa, M; Martinez, DST; Alves, OL (Reprint Author), Univ Estadual
Campinas, Inst Chem, Lab Solid State Chem, BR-13083970 Campinas, SP, Brazil.
Martinez, DST (Reprint Author), Brazilian Ctr Res Energy \& Mat CNPEM, Brazilian
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Martinez, DST (Reprint Author), Univ Estadual Campinas, Sch Technol, BR-13484332
Limeira, SP, Brazil.
de Sousa, Marcelo; Martins, Carlos H. Z.; Fonseca, Leandro C.; Martinez, Diego
Stefani T.; Alves, Oswaldo L., Univ Estadual Campinas, Inst Chem, Lab Solid State
Chem, BR-13083970 Campinas, SP, Brazil.
Franqui, Lidiane S.; Lanzoni, Evandro M.; Martinez, Diego Stefani T., Brazilian Ctr
Res Energy \& Mat CNPEM, Brazilian Nanotechnol Natl Lab LNNano, BR-13084970 Campinas,
SP, Brazil.
Franqui, Lidiane S.; Delite, Fabricio S.; Martinez, Diego Stefani T., Univ Estadual
Campinas, Sch Technol, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1039/c7tb02997g}},
ISSN = {{2050-750X}},
EISSN = {{2050-7518}},
Keywords-Plus = {{CARBON NANOTUBES; IN-VITRO; BIOCOMPATIBILITY; BINDING; NANOMATERIALS;
CYTOTOXICITY; FABRICATION; REDUCTION; DELIVERY; FILMS}},
Research-Areas = {{Materials Science}},
Web-of-Science-Categories = {{Materials Science, Biomaterials}},
Author-Email = {{marcelosousap2@yahoo.com.br
diego.martinez@lnnano.cnpem.br
oalves@iqm.unicamp.br}},
ResearcherID-Numbers = {{Martins, Carlos Henrique H.Z. Zanini/H-6022-2018
Alves, Oswaldo/J-7124-2012
Sousa, Marcelo/P-1894-2018
Lanzoni, Evandro Martin/D-4443-2015
Franqui, Lidiane S/E-4816-2015}},
ORCID-Numbers = {{Martins, Carlos Henrique H.Z. Zanini/0000-0003-1422-055X}}
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Alves, Oswaldo/0000-0002-1518-2092
Sousa, Marcelo/0000-0002-8279-5470
Lanzoni, Evandro Martin/0000-0001-9784-0935
Franqui, Lidiane S/0000-0002-7018-5157}},
Funding-Acknowledgement = {{CNPq; INCT-Inomat; NanoBioss-SisNANO/MCTI}},
Funding-Text = {{The authors gratefully acknowledge financial support from CNPq,
  INCT-Inomat, and NanoBioss-SisNANO/MCTI. The authors also extend
  gratitude to CNPEM open-facilities: LMN, LCS, and NBT at LNNano for
  X-ray photoelectron spectroscopy, Atomic force microscope, Hemolytic and
  protein corona studies, respectively; and MAS facility at Brazilian
  National Biosciences Laboratory (LNBio) for Mass spectrometry analysis.}},
Number-of-Cited-References = {{67}},
Times-Cited = {{2}},
Usage-Count-Last-180-days = {{14}},
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Journal-ISO = {{J. Mat. Chem. B}},
Doc-Delivery-Number = {{GF8FY}},
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@article{ ISI:000429877200012,
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Author = {Altenburger, Rolf and Scholze, Martin and Busch, Wibke and Escher, Beate
  I. and Jakobs, Gianina and Krauss, Martin and Krueger, Janet and Neale,
  Peta A. and Ait-Aissa, Selim and Almeida, Ana Catarina and Seiler,
  Thomas-Benjamin and Brion, Francois and Hilscherova, Klara and Hollert,
  Henner and Novak, Jiri and Schlichting, Rita and Serra, Helene and Shao,
  Ying and Tindall, Andrew and Tolefsen, Knut-Erik and Umbuzeiro, Gisela
  and Williams, Tim D. and Kortenkamp, Andreas},
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Title = {{Mixture effects in samples of multiple contaminants - An
  inter-laboratory study with manifold bioassays}},
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Journal = {{ENVIRONMENT INTERNATIONAL}},
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Year = {{2018}},
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Volume = {{114}},
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Pages = {{95-106}},
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Month = {{MAY}},
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Abstract = {{Chemicals in the environment occur in mixtures rather than as individual
  entities. Environmental quality monitoring thus faces the challenge to
  comprehensively assess a multitude of contaminants and potential adverse
  effects. Effect-based methods have been suggested as complements to
  chemical analytical characterisation of complex pollution patterns. The
  regularly observed discrepancy between chemical and biological
  assessments of adverse effects due to contaminants in the field may be
  either due to unidentified contaminants or result from interactions of
  compounds in mixtures. Here, we present an interlaboratory study where
  individual compounds and their mixtures were investigated by extensive
  concentration-effect analysis using 19 different bioassays. The assay
  panel consisted of 5 whole organism assays measuring apical effects and
  14 cell-and organism-based bioassays with more specific effect
  observations. Twelve organic water pollutants of diverse structure and
  unique known modes of action were studied individually and as mixtures
  mirroring exposure scenarios in freshwaters. We compared the observed
  mixture effects against component-based mixture effect predictions
  derived from additivity expectations (assumption of non-interaction).
  Most of the assays detected the mixture response of the active
  components as predicted even against a background of other inactive
  contaminants. When none of the mixture components showed any activity by
  themselves then the mixture also was without effects. The mixture
  effects observed using apical endpoints fell in the middle of a
  prediction window defined by the additivity predictions for
  concentration addition and independent action, reflecting well the
  diversity of the anticipated modes of action. In one case, an
  unexpectedly reduced solubility of one of the mixture components led to
  mixture responses that fell short of the predictions of both additivity
  mixture models. The majority of the specific cell- and organism-based
  endpoints produced mixture responses in agreement with the additivity
  expectation of concentration addition. Exceptionally, expected
  (additive) mixture response did not occur due to masking effects such as
  general toxicity from other compounds. Generally, deviations from an
  additivity expectation could be explained due to experimental factors,
  specific limitations of the effect endpoint or masking side effects such
  as cytotoxicity in in vitro assays. The majority of bioassays were able
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to quantitatively detect the predicted non-interactive, additive combined effect of the specifically bioactive compounds against a background of complex mixture of other chemicals in the sample. This supports the use of a combination of chemical and bioanalytical monitoring tools for the identification of chemicals that drive a specific mixture effect. Furthermore, we demonstrated that a panel of bioassays can provide a diverse profile of effect responses to a complex contaminated sample. This could be extended towards representing mixture adverse outcome pathways. Our findings support the ongoing development of bioanalytical tools for (i) compiling comprehensive effect-based batteries for water quality assessment, (ii) designing tailored surveillance methods to safeguard specific water uses, and (iii) devising strategies for effect-based diagnosis of complex contamination.}}

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Language = {{English}},
Affiliation = {{Altenburger, R (Reprint Author), UFZ Helmholtz Ctr Environm Res, Dept Bioanalyt Ecotoxicol, Permoserstr 15, D-04318 Leipzig, Germany.
Altenburger, Rolf; Busch, Wibke; Escher, Beate I.; Jakobs, Gianina; Krauss, Martin; Krueger, Janet; Schlichting, Rita, UFZ Helmholtz Ctr Environm Res, D-04318 Leipzig, Germany.
Altenburger, Rolf; Seiler, Thomas-Benjamin; Hollert, Henner; Shao, Ying, Rhein Westfal TH Aachen, Inst Environm Res, D-52074 Aachen, Germany.
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Hilscherova, Klara; Novak, Jiri, Masaryk Univ, Res Ctr Tox Cpds Environm RECETOX, Kamenice 753-5, Brno 62500, Czech Republic.
Tindall, Andrew, WatchFrog, Batiment Genavenir 3,1 Rue Pierre Fontaine, F-91000 Evry, France.
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Williams, Tim D., Univ Birmingham, Sch Biosci, Birmingham B15 2TT, W Midlands, England.}}},
DOI = {{10.1016/j.envint.2018.02.013}},
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Keywords = {{Mixture toxicity; Combined effect; Effect-based methods; Water monitoring; Water contamination; Water framework directive}},
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Research-Areas = {{Environmental Sciences & Ecology}},
Web-of-Science-Categories = {{Environmental Sciences}},
Author-Email = {{rolf.altenburger@ufz.de}},
ResearcherID-Numbers = {{AIT-AISSA, Selim/Q-8702-2018
Busch, Wibke/I-9348-2012
Krauss, Martin/E-1672-2012
BRION, Francois/Q-8713-2018
Tindall, Andrew/O-2947-2016
Umbuzeiro, Gisela A./H-4603-2011
Seiler, Thomas-Benjamin/K-6294-2012
Escher, Beate I/W-3651-2017
Neale, Peta A/F-2167-2010
}},
ORCID-Numbers = {{AIT-AISSA, Selim/0000-0001-7817-1932
Busch, Wibke/0000-0002-5497-6266
Krauss, Martin/0000-0002-0362-4244
BRION, Francois/0000-0003-2341-4196
Tindall, Andrew/0000-0001-8119-0923
Umbuzeiro, Gisela A./0000-0002-8623-5200
Seiler, Thomas-Benjamin/0000-0001-8127-510X
Neale, Peta A/0000-0002-4418-1654

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Almeida, Ana/0000-0001-8248-0041
Williams, Timothy/0000-0002-5857-3851
Serra, Helene/0000-0002-5184-1403
Novak, Jiri/0000-0002-4656-8406}},
Funding-Acknowledgement = {{European Union Seventh Framework Programme project
SOLUTIONS (FP7-ENV)
{{603437}}; FAPESP {{2015/24758-5}}; National Health and Medical
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{{APP1074775}}}},
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Author = {Fonseca, Leandro C. and de Araujo, Maciel M. and de Moraes, Ana Carolina
M. and da Silva, Douglas S. and Ferreira, Ariane G. and Franqui, Lidiane
S. and Martinez, Diego Stefani T. and Alves, Oswaldo L.},
Title = {{Nanocomposites based on graphene oxide and mesoporous silica
nanoparticles: Preparation, characterization and nanobiointeractions
with red blood cells and human plasma proteins}},
Journal = {{APPLIED SURFACE SCIENCE}},
Year = {{2018}},
Volume = {{437}},
Pages = {{110-121}},
Month = {{APR 15}},
Abstract = {{The current work refers to the development of a novel nanocomposite
based on graphene oxide (GO) and mesoporous amino silica nanoparticles
(H2N-MSNs) and its biological interaction with red blood cells (RBCs)
and human blood plasma toward the investigation of nanobiointeractions.
Silica nanoparticles and several graphene oxide-based materials are,
separately, known for their high hemolytic potential and strong
interaction with human plasma proteins. In this context, the GO-MSN
interaction and its influence in minimizing the reported effects were
investigated. The materials were synthesized by covalently attaching
H2N-MSNs onto the surface of GO through an amidation reaction. GO-MSN
nanocomposites were obtained by varying the mass of H2N-MSNs and were
characterized by FTIR, NMR, XRD, TGA, zeta potential and TEM. The
characterization results confirm that nanocomposites were obtained,
suggest covalent bond attachment mostly by amine-epoxy reactions and
evidence an unexpected reduction reaction of GO by H2N-MSNs, whose
mechanism is proposed. Biological assays showed a decrease of hemolysis
(RBC lysis) and a minimization of the interaction with human plasma
proteins (protein corona formation). These are important findings toward
achieving in vivo biocompatibility and understanding the
nanobiointeractions. Finally, this work opens possibilities for new
nanomedicine applications of GO-MSN nanocomposites, such as drug
delivery system. (C) 2017 Elsevier B.V. All rights reserved.}},
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Affiliation = {{Fonseca, LC; Alves, OL (Reprint Author), Univ Estadual Campinas, Inst
Chem, Lab Solid State Chem, BR-13083970 Campinas, SP, Brazil.
Fonseca, Leandro C.; de Araujo, Maciel M.; de Moraes, Ana Carolina M.; da Silva,
Douglas S.; Alves, Oswaldo L., Univ Estadual Campinas, Inst Chem, Lab Solid State
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Ferreira, Ariane G.; Franqui, Lidiane S.; Martinez, Diego Stefani T., Brazilian Ctr
Res Energy & Mat CNPEM, Brazilian Nanotechnol Natl Lab LNNano, BR-13083970 Campinas,
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SP, Brazil.
  Franqui, Lidiane S.; Martinez, Diego Stefani T., Univ Estadual Campinas, Sch
  Technol, BR-13484332 Limeira, SP, Brazil.}},
  DOI = {{10.1016/j.apsusc.2017.12.082}},
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  Keywords = {{Amine nucleophile; EDC; NHS; 1-Ethyl-3-(3 dimethylaminopropyl)
  carbodiimide; N-Hydroxysuccinimide; Crosslinking agents}},
  Keywords-Plus = {{DRUG-DELIVERY; BIOMEDICAL APPLICATIONS; CONTROLLED-RELEASE; CORONA;
  CYTOTOXICITY; FABRICATION; MOLECULES; EFFICIENT; HYBRIDS}},
  Research-Areas = {{Chemistry; Materials Science; Physics}},
  Web-of-Science-Categories = {{Chemistry, Physical; Materials Science, Coatings &
  Films; Physics,
  Applied; Physics, Condensed Matter}},
  Author-Email = {{leandro.fonseca89@gmail.com
  oalves@iqm.unicamp.br}},
  ResearcherID-Numbers = {{Franqui, Lidiane S/E-4816-2015
  Alves, Oswaldo/J-7124-2012}},
  ORCID-Numbers = {{Franqui, Lidiane S/0000-0002-7018-5157
  Alves, Oswaldo/0000-0002-1518-2092}},
  Funding-Acknowledgement = {{CAPES; INCT-Inomat, Brazilian Nanotoxicology Network
  (Cigenanotox);
  NanoBioss/MCTIC; CNPEM open-facilities}},
  Funding-Text = {{The authors would like to acknowledge the financial support from
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  INCT-Inomat, Brazilian Nanotoxicology Network (Cigenanotox) and
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  Doc-Delivery-Number = {{FX0KN}},
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@article{ ISI:000446318600022,
  Author = {da Rocha, Otidene R. S. and Dantas, Renato F. and Nascimento Junior, W.
  J. and Duarte-Coelho, A. C. and Silva, R. O.},
  Title = {{ORGANOPHOSPHATE ESTERS REMOVAL BY UV/H2O2 PROCESS MONITORED BY P-31
  NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY}},
  Journal = {{BRAZILIAN JOURNAL OF CHEMICAL ENGINEERING}},
  Year = {{2018}},
  Volume = {{35}},
  Number = {{2}},
  Pages = {{521-530}},
  Month = {{APR-JUN}},
  Abstract = {{The present work aims to study the photocatalytic degradation of three
  organophosphate esters considered environmental emerging contaminants by
  the UV/H2O2 system with the use of P-31 NMR spectroscopy to
  investigative their removal after the treatment. Results demonstrated
  the efficiency of the oxidation system in removing the esters
  tris(2-butoxyethyl) phosphate (TBEP), tris(2-chloroethyl) phosphate
  (TCEP) and tributyl phosphate (TBP) from aqueous solutions when they
  were individually present and mixed. High levels of degradation of these
  chemicals were achieved, in addition to the good performance of the
  analytical technique applied in the study, which represents some
  advantages in comparison with other techniques reported in the
  literature. An increase in the 31P NMR signal removal could also be
  observed when the oxidizing agent concentration increases. Decreases in
  solution acute toxicity were also verified for both TBP and TBEP treated
  samples when compared with the samples before the treatment.}},
  Publisher = {{BRAZILIAN SOC CHEMICAL ENG}},
  Address = {{RUA LIBERO BADARO 152-11 ANDAR, CEP 01008-90 SAO PAULO, BRAZIL}},
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Affiliation = {{Dantas, RF (Reprint Author), Univ Estadual Campinas, Sch Technol, UNICAMP, Paschoal Marmo 1888, BR-13484332 Limeira, Brazil.
  da Rocha, Otidene R. S.; Nascimento Junior, W. J.; Duarte-Coelho, A. C., Univ Fed Pernambuco, Dept Chem Engn, Av Prof Arthur de Sa S-N, Recife, PE, Brazil.
  Dantas, Renato F., Univ Estadual Campinas, Sch Technol, UNICAMP, Paschoal Marmo 1888, BR-13484332 Limeira, Brazil.
  Silva, R. O., Univ Fed Pernambuco, Dept Fundamental Chem, Av Jornalista Anibal Fernandes S-N, Recife, PE, Brazil.}},
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  Organophosphate esters; Photocatalysis; Ecotoxicity assessment}},
Keywords-Plus = {{ADVANCED OXIDATION PROCESSES; BROMINATED FLAME RETARDANTS; WASTE-WATER;
  EMERGING CONTAMINANTS; TREATMENT PLANTS; AQUEOUS-SOLUTION; SLUDGE
  TREATMENT; ARTEMIA-SALINA; UV PHOTOLYSIS; GROUND-WATER}},
Research-Areas = {{Engineering}},
Web-of-Science-Categories = {{Engineering, Chemical}},
Author-Email = {{renatofalcaod@ft.unicamp.br}},
ResearcherID-Numbers = {{Silva, Ricardo O/A-9461-2013}},
ORCID-Numbers = {{Silva, Ricardo O/0000-0001-8090-7320}},
Funding-Acknowledgement = {{`Conselho Nacional de Desenvolvimento Cientifico e Tecnologico{'}}
  (CNPq); `Fundacao de Amparo a Ciencia do Estado de Pernambuco{'}}
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Funding-Text = {{The authors are grateful to the `Conselho Nacional de Desenvolvimento Cientifico e Tecnologico{'}} (CNPq) and the `Fundacao de Amparo a Ciencia do Estado de Pernambuco{'}} (FACEPE) for the financial support.}},
Number-of-Cited-References = {{46}},
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Journal-ISO = {{Braz. J. Chem. Eng.}},
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Author = {Aiube, Carlos Martins and Lobo, Tatiane Martins and Sousa-Moura, Diego and Machado Ferraz, Irvin Bryan and Osugi, Marly Eiko and Grisolia, Cesar Koppe and Oliveira, Rhaul and Weber, Ingrid Tavora},
Title = {{Study of YVO4 as a photocatalyst: Correlation between synthetic route and ecotoxicity}},
Journal = {{JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING}},
Year = {{2018}},
Volume = {{6}},
Number = {{2}},
Pages = {{2846-2854}},
Month = {{APR}},
Abstract = {{Yttrium orthovanadate (YVO4) powders were synthesized by two different routes: the combustion route (C sample), and the hydrothermal route (H samples). In all samples, oxygen vacancies were observed by Raman, UV-vis diffuse reflectance and photoluminescence (PL) spectroscopy; however they were more significant in C sample. Photocatalytic discoloration of Rhodamine B solutions ranged from 40 to 64% and C and H4 samples presented the highest efficiencies. Although both samples showed similar photocatalytic efficiency, C sample is 11 times more efficient in producing reactive oxygen species than H4 sample, and an interesting effect of the treated solutions was observed in the Fish Embryotoxicity Test, carried out in D. rerio. The C-treated solution was more toxic than the untreated solution, while the H4-treated solution did not show toxicity enhancement. C-treated solution caused a significant mortality of D. rerio embryos beginning at the 4th day of exposure and reached total mortality at the 6th day. Thus, the synthetic route employed in the preparation of C and H4 samples leads to different toxic effects in the treated solutions. These results pointed out that microstructural characteristics and synthetic parameters are not only important for obtaining highly active materials, but they also impact on the toxicity of the effluents.}},
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Darcy Ribeiro, BR-70910900 Brasilia, DF, Brazil.
  Aiube, Carlos Martins; Lobo, Tatiane Martins; Osugi, Marly Eiko; Weber, Ingrid
Tavora, Univ Brasilia, UnB, Inst Quim, Campus Darcy Ribeiro, BR-70910900 Brasilia, DF,
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  Sousa-Moura, Diego; Machado Ferraz, Irvin Bryan; Grisolia, Cesar Koppe, Univ
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  Oliveira, Rhaul, Univ Sao Paulo, FCF, Programa Posgrad Toxicol \& Analises Toxicol,
BR-05508000 Sao Paulo, SP, Brazil.
  Weber, Ingrid Tavora, Univ Fed Pernambuco, UFPE, Dept Quim Fundamental, Programa
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DOI = {{10.1016/j.jece.2018.04.011}},
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Keywords = {{Yttrium orthovanadate; Combustion route; Hydrothermal route; Rhodamine
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  ANTIBACTERIAL ACTIVITY; ELECTRONIC-STRUCTURE; ZNO NANOPARTICLES;
  SINGLE-CRYSTALS; VISIBLE-LIGHT; DEGRADATION; SUSPENSIONS}},
Research-Areas = {{Engineering}},
Web-of-Science-Categories = {{Engineering, Environmental}},
Author-Email = {{ingrid@ufpe.br}},
ResearcherID-Numbers = {{Osugi, Marly E/J-4316-2014
  Oliveira, Rhaul/N-9465-2019
}},
ORCID-Numbers = {{Oliveira, Rhaul/0000-0002-0272-3857
  Martins Aiube, Carlos/0000-0003-2614-4363}},
Funding-Acknowledgement = {{Brazilian Ministry of Education, Ministry of Science and
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Number-of-Cited-References = {{44}},
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Unique-ID = {{ISI:000436927400131}},
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Author = {Ferreira, Adriano da Silva and da Silva Santos, Carlos Henrique and
  Goncalves, Marcos Sergio and Hernandez Figueroa, Hugo Enrique},
Title = {{Towards an integrated evolutionary strategy and artificial neural
  network computational tool for designing photonic coupler devices}},
Journal = {{APPLIED SOFT COMPUTING}},
Year = {{2018}},
Volume = {{65}},
Pages = {{1-11}},
Month = {{APR}},
Abstract = {{Photonics has been widely explored in computing and communications,
  mainly to rationalize the relationship between device size minimization
and data processing/transmission maximization. Generally driven by
optimization and modeling techniques, the design of photonic devices is
often performed by bio-inspired algorithms integrated to electromagnetic
solvers, which have achieved advances but is still time-consuming. As an

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alternative to a costly finite element method (FEM) solver, a multilayer perceptron (MLP) neural network is proposed for computing power coupling efficiency of photonic couplers, originally designed through an integrated evolutionary strategy (ES) and FEM routine. We address the ES-FEM design of two efficient couplers, present the MLP implementation and the MLP training and testing over the routine generated datasets, and measure MLP and FEM runtime. MLP suitably predicted the power coupling efficiency of a variety of unknown couplers on tests. The measured runtime showed MLP is similar to 10(5) faster than FEM. In conclusion, MLP is a potential tool to be integrated to ES on the design of such photonic couplers. (c) 2017 Elsevier B.V. All rights reserved.}},

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Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Ferreira, AD (Reprint Author), Univ Estadual Campinas, Sch Elect \& Comp Engr, Dept Commun, BR-13083852 Campinas, SP, Brazil.
Ferreira, Adriano da Silva; Hernandez Figueroa, Hugo Enrique, Univ Estadual Campinas, Sch Elect \& Comp Engr, Dept Commun, BR-13083852 Campinas, SP, Brazil.
da Silva Santos, Carlos Henrique, Sao Paulo Fed Inst Educ Sci \& Technol, Campus Itapetininga, BR-18202000 Itapetininga, Brazil.
Goncalves, Marcos Sergio, Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, Brazil.}}},
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Keywords = {{Photonic coupler; Evolutionary algorithm; Artificial neural network; Device optimization}},
Keywords-Plus = {{OPTIMIZATION; SIMULATION; COMPACT}},
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Web-of-Science-Categories = {{Computer Science, Artificial Intelligence; Computer Science, Interdisciplinary Applications}},
Author-Email = {{adrianof@decom.fee.unicamp.br}},
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}},
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Hernandez-Figueroa, Hugo/0000-0003-2419-6979
Ferreira, Adriano/0000-0002-7338-0804}},
Funding-Acknowledgement = {{Coordination for the Improvement of Higher Education Personnel (CAPES);
Sao Paulo Federal Institute of Education, Science and Technology (IFSP) {{PRP226/2016}}; State of Sao Paulo Research Foundation (FAPESP) {{2012/14553-9}}}},
Funding-Text = {{This work was supported by the Coordination for the Improvement of Higher Education Personnel (CAPES), Sao Paulo Federal Institute of Education, Science and Technology (IFSP) PRP226/2016, and State of Sao Paulo Research Foundation (FAPESP) (grant 2012/14553-9). We thank Mr. Christian Edward Harryman for providing language help.}},
Number-of-Cited-References = {{36}},
Times-Cited = {{5}},
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@article{ ISI:000428240500007,
Author = {Avancini, Sidney S. and Dexheimer, Veronica and Farias, Ricardo L. S. and Timoteo, Varese S.},
Title = {{Anisotropy in the equation of state of strongly magnetized quark matter within the Nambu-Jona-Lasinio model}},
Journal = {{PHYSICAL REVIEW C}},
Year = {{2018}},
Volume = {{97}},
Number = {{3}},
Month = {{MAR 26}},
Abstract = {{In this article, we calculate the magnetization and other thermodynamical quantities for strongly magnetized quark matter within

the Nambu-Jona-Lasinio model at zero temperature. We assume two scenarios: chemically equilibrated charge neutral matter present in the interiors of compact stars and zero-strangeness isospin-symmetric matter created in nuclear experiments. We show that the magnetization oscillates with density but in a much more smooth form than what was previously shown in the literature. As a consequence, we do not see the unphysical behavior in the pressure in the direction perpendicular to the magnetic field that was previously found. Finally, we also analyze the effects of a vector interaction on our results.}}

Publisher = {{AMER PHYSICAL SOC}},
Address = {{ONE PHYSICS ELLIPSE, COLLEGE PK, MD 20740-3844 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Avancini, SS (Reprint Author), Univ Fed Santa Catarina, Dept Fis, BR-88040900 Florianopolis, SC, Brazil.
Avancini, Sidney S., Univ Fed Santa Catarina, Dept Fis, BR-88040900 Florianopolis, SC, Brazil.
Dexheimer, Veronica, Kent State Univ, Dept Phys, Kent, OH 44242 USA.
Farias, Ricardo L. S., Univ Fed Santa Maria, Dept Fis, BR-97105900 Santa Maria, RS, Brazil.
Timoteo, Varese S., Univ Estadual Campinas, Grp Opt \& Modelagem Numer GOMNI, Fac Technol, UNICAMP, BR-13484332 Limeira, SP, Brazil.}}},
DOI = {{10.1103/PhysRevC.97.035207}},
Article-Number = {{035207}},
ISSN = {{2469-9985}},
EISSN = {{2469-9993}},
Keywords-Plus = {{COLOR SUPERCONDUCTIVITY; VECTOR INTERACTION; DYNAMICAL MODEL; FIELD; QCD; STARS; CONSISTENT; MAGNETARS; STRENGTH; COLLAPSE}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Nuclear}},
Author-Email = {{sidney.avancini@ufsc.br
vdexheim@kent.edu
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varese@ft.unicamp.br}},
ResearcherID-Numbers = {{avancini, sidney/V-4953-2017
Farias, Ricardo L S/G-3896-2012}},
ORCID-Numbers = {{Farias, Ricardo L S/0000-0003-4461-7494}},
Funding-Acknowledgement = {{NewCompStar COST Action {{MP1304}}; LOEWE program HIC; CNPq {{308828/2013-5, 306484/2016-1, 306195/2015-1}}; FAPESP {{2016/07061-3}}},
Funding-Text = {{The authors acknowledge support from NewCompStar COST Action MP1304 (V.D.) and from the LOEWE program HIC for FAIR (V.D.). Work partially financed by CNPq under grants 308828/2013-5 (R.L.S.F), 306484/2016-1 (S.S.A), and 306195/2015-1 (V.S.T.) and FAPESP 2016/07061-3 (V.S.T.). We thank M. B. Pinto for discussions and useful comments.}},
Number-of-Cited-References = {{61}},
Times-Cited = {{4}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{0}},
Journal-ISO = {{Phys. Rev. C}},
Doc-Delivery-Number = {{GA3PD}},
Unique-ID = {{ISI:000428240500007}},
OA = {{Other Gold}},
DA = {{2019-06-24}},
}

@article{ ISI:000425558600017,
Author = {Evangelista, Beatriz Leao and Rosado, Lais Peixoto and Giordano Penteado, Carmenlucia Santos},
Title = {{Life cycle assessment of concrete paving blocks using electric arc furnace slag as natural coarse aggregate substitute}},
Journal = {{JOURNAL OF CLEANER PRODUCTION}},
Year = {{2018}},
Volume = {{178}},
Pages = {{176-185}},
Month = {{MAR 20}},
Abstract = {{This study assessed the environmental impacts of natural coarse aggregate and electric arc furnace aggregate production, and the impacts of paving blocks production using both aggregates in the proportion of 50%. The life cycle impact assessment has been performed by using the IMPACT 2002 + method, considering the impact categories of carcinogens, non-carcinogens, respiratory inorganics, terrestrial ecotoxicity, global warming and non-renewable energy. In the electric arc furnace aggregate

production, the results indicate that metal recovering is responsible for the negative impacts (84%); electricity, diesel and lubricating oil consumption contribute for respiratory inorganics, global warming, non-renewable energy and non-carcinogens impact categories, while transport contributes for the same categories and terrestrial ecotoxicity. Considering the paving blocks production, cement has the highest contribution for all impact categories, except terrestrial ecotoxicity; the paving blocks produced with electric arc furnace aggregate present the lowest impacts for the climate change and ecosystem quality categories, and avoided impacts for human health and resources damage categories. (C) 2018 Elsevier Ltd. All rights reserved.}},

Publisher = {{ELSEVIER SCI LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Penteado, CSG (Reprint Author), Univ Estadual Campinas, Sch Technol, Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Evangelista, Beatriz Leao; Rosado, Lais Peixoto; Giordano Penteado, Carmenlucia Santos, Univ Estadual Campinas, Sch Technol, Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1016/j.jclepro.2018.01.007}},
ISSN = {{0959-6526}},
EISSN = {{1879-1786}},
Keywords = {{Electric arc furnace slag; Alternative coarse aggregate; Paving blocks; Life cycle assessment}},
Keywords-Plus = {{SOLID-WASTE MANAGEMENT; STEEL SLAG; EAF SLAG; ENVIRONMENTAL ASSESSMENT; IMPACT ASSESSMENT; LCA; STABILITY}},
Research-Areas = {{Science \& Technology - Other Topics; Engineering; Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Green \& Sustainable Science \& Technology; Engineering, Environmental; Environmental Sciences}},
Author-Email = {{carmenlucia@ft.unicamp.br}},
ORCID-Numbers = {{Penteado, Carmenlucia/0000-0001-5731-7947
Peixoto Rosado, Lais/0000-0002-5978-8408}},
Funding-Acknowledgement = {{Coordination for the Improvement of Higher Education Personnel (CAPES - Brazil)}},
Funding-Text = {{The authors wish to acknowledge the financial support from the Coordination for the Improvement of Higher Education Personnel (CAPES - Brazil) for providing a Master scholarship for the first author.
Likewise, they are grateful to the steelmaking facility and the paving block facility, for providing the data for the LCI.}},
Number-of-Cited-References = {{35}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{11}},
Usage-Count-Since-2013 = {{25}},
Journal-ISO = {{J. Clean Prod.}},
Doc-Delivery-Number = {{FW8DR}},
Unique-ID = {{ISI:000425558600017}},
DA = {{2019-06-24}},
}

@article{ ISI:000428936900002,
Author = {Arruda, Thiago da Silva and Dias, Ulisses and Dias, Zaroni},
Title = {{A GRASP-Based Heuristic for the Sorting by Length-Weighted Inversions Problem}},
Journal = {{IEEE-ACM TRANSACTIONS ON COMPUTATIONAL BIOLOGY AND BIOINFORMATICS}},
Year = {{2018}},
Volume = {{15}},
Number = {{2}},
Pages = {{352-363}},
Month = {{MAR-APR}},
Abstract = {{Genome Rearrangements are large-scale mutational events that affect genomes during the evolutionary process. Therefore, these mutations differ from punctual mutations. They can move genes from one place to the other, change the orientation of some genes, or even change the number of chromosomes. In this work, we deal with inversion events which occur when a segment of DNA sequence in the genome is reversed. In our model, each inversion costs the number of elements in the reversed segment. We present a new algorithm for this problem based on the

metaheuristic called Greedy Randomized Adaptive Search Procedure (GRASP) that has been routinely used to find solutions for combinatorial optimization problems. In essence, we implemented an iterative process in which each iteration receives a feasible solution whose neighborhood is investigated. Our analysis shows that we outperform any other approach by significant margin. We also use our algorithm to build phylogenetic trees for a subset of species in the *Yersinia* genus and we compared our trees to other results in the literature.}}

Publisher = {{IEEE COMPUTER SOC}},
Address = {{10662 LOS VAQUEROS CIRCLE, PO BOX 3014, LOS ALAMITOS, CA 90720-1314 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Arruda, TD (Reprint Author), Univ Estadual Campinas, Inst Comp, BR-13083852 Campinas, SP, Brazil.
Arruda, Thiago da Silva; Dias, Zanoni, Univ Estadual Campinas, Inst Comp, BR-13083852 Campinas, SP, Brazil.
Dias, Ulisses, Univ Estadual Campinas, Fac Technol, BR-13484332 Limeira, SP, Brazil.}}},
DOI = {{10.1109/TCBB.2015.2474400}},
ISSN = {{1545-5963}},
EISSN = {{1557-9964}},
Keywords = {{Genome rearrangements; length-weighted inversions; GRASP}},
Keywords-Plus = {{GENOME REARRANGEMENTS; POLYNOMIAL ALGORITHM; SIGNED PERMUTATIONS; HYBRID GRASP; REVERSALS; GENE; DISTANCE; HISTORY}},
Research-Areas = {{Biochemistry \& Molecular Biology; Computer Science; Mathematics}},
Web-of-Science-Categories = {{Biochemical Research Methods; Computer Science, Interdisciplinary Applications; Mathematics, Interdisciplinary Applications; Statistics \& Probability}},
Author-Email = {{thiago.arruda@students.ic.unicamp.br
ulisses@ft.unicamp.br
zanoni@ic.unicamp.br}},
Funding-Acknowledgement = {{FAPESP {[2012/01584-3, 2014/19401-8]; CNPq {[477692/2012-5, 483370/2013-4]; CAPES/COFECUB {[831/15]; Center for Computational Engineering and Sciences at Unicamp through the FAPESP/CEPID {[2013/08293-7]; FAPESP; CAPES; CNPq}}}},
Funding-Text = {{This work was made possible by a Postdoctoral Fellowship from FAPESP to UD (number 2012/01584-3) and by project fundings from CNPq (numbers 477692/2012-5 and 483370/2013-4), FAPESP (number 2014/19401-8) and CAPES/COFECUB (number 831/15). The authors also thank the Center for Computational Engineering and Sciences at Unicamp for financial support through the FAPESP/CEPID Grant 2013/08293-7. FAPESP, CAPES, and CNPq are Brazilian research funding agencies. Parts of this paper previously appeared in the Proceedings of the First International Conference on Algorithms for Computational Biology 2014 (AlCoB) {[1].}},
Number-of-Cited-References = {{44}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{2}},
Usage-Count-Since-2013 = {{4}},
Journal-ISO = {{IEEE-ACM Trans. Comput. Biol. Bioinform.}},
Doc-Delivery-Number = {{GB3DZ}},
Unique-ID = {{ISI:000428936900002}},
DA = {{2019-06-24}},
}

@article{ ISI:000425758800001,
Author = {Artal, Mariana Coletty and dos Santos, Amanda and Henry, Theodore Burdick and Umbuzeiro, Gisela de Aragao},
Title = {{Development of an acute toxicity test with the tropical marine amphipod *Parhyale hawaiiensis*}},
Journal = {{ECOTOXICOLOGY}},
Year = {{2018}},
Volume = {{27}},
Number = {{2}},
Pages = {{103-108}},
Month = {{MAR}},
Abstract = {{There is a lack of suitable tropical marine species for ecotoxicity tests. An attractive model organism for ecotoxicology is the marine amphipod *Parhyale hawaiiensis*, which is already a model for genetic and

developmental studies. This species is widespread, can tolerate changes in salinity, is easy to handle and is representative of circumtropical regions. The aim of this work was to describe standardized procedures for laboratory husbandry, define conditions for acute toxicity tests, and to provide acute toxicity test results for some reference toxicants. Culturing conditions for the organism in the laboratory were established in reconstituted seawater (30 +/- 2 salinity), 24 +/- 2 A degrees C, photoperiod 12/12 h light/dark. Acute toxicity test procedures were developed for 96 h-exposure time, and organisms at ages < 7 days. The miniaturized version of the test, based on 96-well microplates and 200 A mu L of exposure media provided consistent results compared to larger exposure volumes (80-mL vials protocol). Acute toxicity of Ag, Cd, Cu, Zn and ammonia determined for *P. hawaiiensis* were consistent to previous results for other marine amphipods. We conclude that *P. hawaiiensis* can be successfully cultured in standardized conditions and be effectively used in acute toxicity testing. Further development and use of this model will enable standardized and reproducible ecotoxicology investigations in understudied and vulnerable tropical marine ecosystems.}},

Publisher = {{SPRINGER}},
Address = {{VAN GODEWIJCKSTRAAT 30, 3311 GZ DORDRECHT, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Umbuzeiro, GD (Reprint Author), Univ Sao Paulo, Sch Pharmaceut Sci, BR-05508000 Sao Paulo, Brazil.
Umbuzeiro, GD (Reprint Author), Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, Brazil.
Artal, Mariana Coletty; dos Santos, Amanda; Umbuzeiro, Gisela de Aragao, Univ Sao Paulo, Sch Pharmaceut Sci, BR-05508000 Sao Paulo, Brazil.
Artal, Mariana Coletty; dos Santos, Amanda; Umbuzeiro, Gisela de Aragao, Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, Brazil.
Henry, Theodore Burdick, Heriot Watt Univ, Inst Life \& Earth Sci, Sch Energy Geosci Infrastruct \& Soc, Edinburgh EH14 4AS, Midlothian, Scotland.
Henry, Theodore Burdick, Univ Tennessee, Ctr Environ Biotechnol, 676 Dabney Hall, 1416 Circle Dr, Knoxville, TN 37996 USA.}},
DOI = {{10.1007/s10646-017-1875-3}},
ISSN = {{0963-9292}},
EISSN = {{1573-3017}},
Keywords = {{Metal toxicity; Ammonia; Microplate test; Miniaturization; Culture conditions}},
Keywords-Plus = {{CRUSTACEANS; BIOASSAYS; SALINITY; AMMONIA; CULTURE}},
Research-Areas = {{Environmental Sciences \& Ecology; Toxicology}},
Web-of-Science-Categories = {{Ecology; Environmental Sciences; Toxicology}},
Author-Email = {{giselau@ft.unicamp.br}},
ResearcherID-Numbers = {{dos Santos, Amanda/V-9851-2018
Umbuzeiro, Gisela A./H-4603-2011
Henry, Theodore/C-2634-2013
}},
ORCID-Numbers = {{dos Santos, Amanda/0000-0002-8728-4311
Umbuzeiro, Gisela A./0000-0002-8623-5200
Henry, Theodore/0000-0002-9675-9454
Artal, Mariana/0000-0002-0831-3824}},
Funding-Acknowledgement = {{`Fundacao de Amparo a Pesquisa do Estado de Sao Paulo{''} (FAPESP)
{{2014/08829-7}; `Conselho Nacional de Desenvolvimento Cientifico e Tecnologico{''} (CNPq-PVE) {[400362/2014-7]}},
Funding-Text = {{This study was founded by `Fundacao de Amparo a Pesquisa do Estado de Sao Paulo{''} (FAPESP Process: 2014/08829-7), `Conselho Nacional de Desenvolvimento Cientifico e Tecnologico{''} (CNPq-PVE Process: 400362/2014-7), `Coordenacao de Aperfeicoamento de Pessoal de Nivel Superior{''} (CAPES), `Instituto Nacional de Ciencia, Tecnologia e Informacao em Materiais Complexos Funcionais{''} (INOMAT). The authors thank M. Flynn, A. Caloto-Oliveira and G. Almeida for the organism collection, F. Leite and S.L. Gomes for the organism identification.}},
Number-of-Cited-References = {{32}},
Times-Cited = {{3}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{10}},
Journal-ISO = {{Ecotoxicology}},
Doc-Delivery-Number = {{FX0TD}},
Unique-ID = {{ISI:000425758800001}},
DA = {{2019-06-24}},

}

@article{ ISI:000423214300006,
Author = {Quintana, Gabriel O. and Fagnani, Enelton and Candelero, Fernando P. and Guimaraes, Jose R.},
Title = {{The Dichromate Method versus the Photoelectrochemical Method: the Synergistic Influence of Turbidity and Chlorides on Chemical Oxygen Demand Analysis}},
Journal = {{JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY}},
Year = {{2018}},
Volume = {{29}},
Number = {{3}},
Pages = {{490-498}},
Month = {{MAR}},
Abstract = {{This paper compares the dichromate method with the photoelectrochemical method (PeCOD), with regards to the influence of chloride and turbidity with chemical oxygen demand (COD) determination. Whereas the upper limits of chloride concentration are well established for both techniques, the influence of turbidity and the combined interference of underdosing chlorides and turbidity together have never been reported. When only potassium hydrogen phthalate or sorbitol were analyzed, the results show no significant difference in either method when 607 mg Cl-L-1 or 230 NTU of turbidity were added to the samples within the range of 100-900 mg L-1 COD. However, a combined effect of these two interferents leads to significantly different results, mainly for low COD range, as evidenced by the Student's t-test for paired samples (p = 0.05).}},
Publisher = {{SOC BRASILEIRA QUIMICA}},
Address = {{CAIXA POSTAL 26037, 05599-970 SAO PAULO, BRAZIL}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Guimaraes, JR (Reprint Author), Univ Estadual Campinas, Fac Engrn Civil Arquitetura \& Urbanismo, Rua Saturnino De Brito 224,POB 6143, BR-13083889 Campinas, SP, Brazil.
Quintana, Gabriel O.; Fagnani, Enelton, Univ Estadual Campinas, Fac Tecnol, Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Candelero, Fernando P.; Guimaraes, Jose R., Univ Estadual Campinas, Fac Engrn Civil Arquitetura \& Urbanismo, Rua Saturnino De Brito 224,POB 6143, BR-13083889 Campinas, SP, Brazil.}},
DOI = {{10.21577/0103-5053.20170161}},
ISSN = {{0103-5053}},
EISSN = {{1678-4790}},
Keywords = {{advanced oxidation process; interference study; organic matter determination; wastewater characterization}},
Keywords-Plus = {{FLOW-INJECTION ANALYSIS; RAPID-DETERMINATION; ORGANIC-COMPOUNDS; WATER;
DIGESTION; ELECTRODE; SYSTEM}},
Research-Areas = {{Chemistry}},
Web-of-Science-Categories = {{Chemistry, Multidisciplinary}},
Author-Email = {{jorober@fec.unicamp.br}},
ORCID-Numbers = {{Fagnani, Enelton/0000-0002-2409-5070}},
Funding-Acknowledgement = {{National Council for Scientific and Technological Development (CNPq);
Teaching, Research and Extension Support Foundation (FAEPEX) of the University of Campinas (UNICAMP); Coordination for the Improvement of Higher Education Personnel (CAPES)}},
Funding-Text = {{The authors thank the National Council for Scientific and Technological Development (CNPq) for the undergraduate scholarship; the Teaching, Research and Extension Support Foundation (FAEPEX) of the University of Campinas (UNICAMP), and the Coordination for the Improvement of Higher Education Personnel (CAPES) for financial support; the Espaco da Escrita, Coordenadoria Geral da Universidade, UNICAMP, for the language services; and Daniel Augusto Camargo Bueno for technical support.}},
Number-of-Cited-References = {{24}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{6}},
Usage-Count-Since-2013 = {{16}},
Journal-ISO = {{J. Braz. Chem. Soc.}},
Doc-Delivery-Number = {{FT5SU}},
Unique-ID = {{ISI:000423214300006}},
OA = {{DOAJ Gold}},

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DA = {{2019-06-24}},  
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@article{ ISI:000423723200005,  
  Author = {Chuma, Euclides Lourenco and Rodriguez, Lisandro de la Torre and Iano,  
    Yuzo and Bravo Roger, Leonardo L. and Sanchez-Soriano, Miguel-Angel},  
  Title = {{Compact rectenna based on a fractal geometry with a high conversion  
    energy efficiency per area}},  
  Journal = {{IET MICROWAVES ANTENNAS \& PROPAGATION}},  
  Year = {{2018}},  
  Volume = {{12}},  
  Number = {{2}},  
  Pages = {{173-178}},  
  Month = {{FEB 7}},  
  Abstract = {{This work presents the design of a rectenna topology by using a compact  
    microstrip patch antenna based on a fractal model and with the rectifier  
    circuit integrated into the same physical structure. This configuration  
    presents a very reduced circuit area, which makes the proposed rectenna  
    circuit suitable for harvesting and wireless power transfer applications  
    where the size is critical. The proposed compact rectenna, implemented  
    on a low-cost FR-4 substrate, can harvest RF power from 2.45GHz (ISM  
    band) with an efficiency of approximate to 62\% when the input power  
    harvested by the rectenna is +2dBm. The suggested rectenna has been  
    manufactured and experimentally characterised, showing a good agreement  
    with the expected simulated results.}},  
  Publisher = {{INST ENGINEERING TECHNOLOGY-IET}},  
  Address = {{MICHAEL FARADAY HOUSE SIX HILLS WAY STEVENAGE, HERTFORD SG1 2AY, ENGLAND}},  
  Type = {{Article}},  
  Language = {{English}},  
  Affiliation = {{Chuma, EL (Reprint Author), Univ Campinas UNICAMP, Sch Elect \& Comp  
    Engn, Dept Commun, BR-13083852 Campinas, SP, Brazil.  
    Chuma, Euclides Lourenco; Rodriguez, Lisandro de la Torre; Iano, Yuzo, Univ  
    Campinas UNICAMP, Sch Elect \& Comp Engn, Dept Commun, BR-13083852 Campinas, SP,  
    Brazil.  
    Bravo Roger, Leonardo L., Univ Campinas UNICAMP, Sch Technol, BR-13484332 Campinas,  
    SP, Brazil.  
    Sanchez-Soriano, Miguel-Angel, Univ Alicante, Dept Phys Syst Engn \& Theory Signal,  
    Alicante, Spain.}},  
  DOI = {{10.1049/iet-map.2016.1150}},  
  ISSN = {{1751-8725}},  
  EISSN = {{1751-8733}},  
  Keywords = {{rectennas; topology; microstrip antennas; UHF antennas; compact  
    rectenna; fractal geometry; high conversion energy efficiency; compact  
    microstrip patch antenna; rectifier circuit; FR-4 substrate; frequency  
    2; 45 GHz}},  
  Research-Areas = {{Engineering; Telecommunications}},  
  Web-of-Science-Categories = {{Engineering, Electrical \& Electronic;  
    Telecommunications}},  
  Author-Email = {{euclides.chuma@ieee.org}},  
  ResearcherID-Numbers = {{Chuma, Euclides Lourenco/D-5629-2018  
    }},  
  ORCID-Numbers = {{Chuma, Euclides Lourenco/0000-0003-0279-6172  
    Sanchez-Soriano, Miguel Angel/0000-0003-1954-5177}},  
  Number-of-Cited-References = {{17}},  
  Times-Cited = {{6}},  
  Usage-Count-Last-180-days = {{3}},  
  Usage-Count-Since-2013 = {{27}},  
  Journal-ISO = {{IET Microw. Antennas Propag.}},  
  Doc-Delivery-Number = {{FU3BB}},  
  Unique-ID = {{ISI:000423723200005}},  
  DA = {{2019-06-24}},  
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@article{ ISI:000445113800032,  
  Author = {Do Nascimento Junior, W. J. and da Rocha, O. R. S. and Dantas, Renato F.  
    and da Silva, J. P. and Barbosa, A. A.},  
  Title = {{Kinetic study of food dyes removal from aqueous solutions by solar  
    heterogeneous photocatalysis with artificial neural networks and  
    phytotoxicity assessment}},  
  Journal = {{DESALINATION AND WATER TREATMENT}},  
  Year = {{2018}},  
  Volume = {{104}},
```



```
Pages = {{304-314}},
Month = {{FEB}},
Abstract = {{Effluent treatment for food industry wastewater is a subject of growing
concern among the scientific community. Synthetic dyes are a major case
and their presence can disturb aquatic environments and introduce highly
toxic potentials to the ecosystem, even at low concentrations. In this
study, the chemical kinetics of a degradation process was studied for
the treatment of a Tartrazine (E102) and Brilliant Blue (E133) solution
by different methods. First, the efficiency of eight advanced oxidative
processes systems was investigated in their treatment. The most
efficient result was obtained in a UV-solar/H2O2/TiO2 system, which
reached a degradation percentage of 99.36% in 180 min. Second, a 23
factorial planning was used to enhance quantitative degradation in this
system and a similar result (99.21%) was reached in 90 min with the
optimal conditions. The kinetics of this experiment was fitted in a
pseudo-first-order model and the rate constant (k) estimated as 0.0541
min(-1). An artificial neural network was developed for the experiment
to describe the degradation behaviour over time with a minimum error.
Chemical oxygen demand and conductivity were estimated in order to
assure the environmental quality of the samples. A Lactuca sativa
bioassay revealed an upturn in LC50, the concentration to inhibit 50%
of the organism growth, from 39.31% (v/v) to 87.73% (v/v). The result
indicates a highly favourable reduction in acute phytotoxicity, that
coupled with quantitative efficiency, makes the proposed use of solar
light as radiation source and improvements in water quality parameters a
suitable tool for large-scale synthetic dye treatment.}},
Publisher = {{DESALINATION PUBL}},
Address = {{36 WALCOTT VALLEY DRIVE,, HOPKINTON, MA 01748 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{da Rocha, ORS (Reprint Author), Fed Univ Pernambuco UFPE, Dept Chem
Engn, Prof Arthur de Sa Av,Cidade Univ, Recife, PE, Brazil.
Do Nascimento Junior, W. J., State Univ Campinas UNICAMP, Chem Engn Fac, Albert
Einstein Av 500, BR-13083852 Campinas, SP, Brazil.
da Rocha, O. R. S.; da Silva, J. P.; Barbosa, A. A., Fed Univ Pernambuco UFPE, Dept
Chem Engn, Prof Arthur de Sa Av,Cidade Univ, Recife, PE, Brazil.
Dantas, Renato F., State Univ Campinas UNICAMP, Sch Technol, Paschoal Marmo 1888,
BR-13484332 Limeira, Brazil.}},
DOI = {{10.5004/dwt.2018.21841}},
ISSN = {{1944-3994}},
EISSN = {{1944-3986}},
Keywords = {{Tartrazine; Brilliant Blue; Advanced oxidation processes; Heterogeneous
photocatalysis; Artificial neural networks}},
Keywords-Plus = {{ADVANCED OXIDATION PROCESSES; BRILLIANT-BLUE FCF; TARTRAZINE DYE;
SUNSET
YELLOW; AZO-DYES; DEGRADATION; TOXICITY; WATER; PRODUCTS; LIGHT}},
Research-Areas = {{Engineering; Water Resources}},
Web-of-Science-Categories = {{Engineering, Chemical; Water Resources}},
Author-Email = {{welenilton@gmail.com
otidene@hotmail.com
renatofalcaod@hotmail.com
josivan\ silva@hotmail.com
adabarbosa@hotmail.com}},
ORCID-Numbers = {{Rocha, Otidene/0000-0001-5216-1752}},
Number-of-Cited-References = {{47}},
Times-Cited = {{2}},
Usage-Count-Last-180-days = {{5}},
Usage-Count-Since-2013 = {{6}},
Journal-ISO = {{Desalin. Water Treat.}},
Doc-Delivery-Number = {{GU2QB}},
Unique-ID = {{ISI:000445113800032}},
OA = {{Bronze}},
DA = {{2019-06-24}},
}

@article{ ISI:000434777800058,
Author = {Malvestiti, Jacqueline A. and Dantas, Renato F.},
Title = {{Disinfection of secondary effluents by O-3, O-3/H2O2 and UV/H2O2:
Influence of carbonate, nitrate, industrial contaminants and regrowth}},
Journal = {{JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING}},
Year = {{2018}},
Volume = {{6}},
```

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Number = {{1}},
Pages = {{560-567}},
Month = {{FEB}},
Abstract = {{The objective of this work was to verify the efficiency of O-3, O-3/H2O2
and UV/H2O2 treatments to disinfect municipal effluents as well as to
verify the influence of carbonate, nitrate and industrial contaminants
on the disinfection and reactivation of total coliforms and Escherichia
coli after the treatments. The results showed that all AOP treatments
were affected by the presence of carbonate and nitrate. In general, they
reduced the inactivation of total coliforms and E. coli. However,
carbonate was the main inhibitor of disinfection. Ozone disinfection
showed to be more affected by scavenging compounds than the other
methods The choice of the disinfection indicator is very important for
the correct assessment of disinfection reduction by scavengers.
Industrial contaminants also acted as radical scavengers. However, their
influence was very limited. To assess the bacteria reactivation after
the treatments the wastewater was kept in bottles for 24 h. Among the
three tested oxidation processes, the ozone-alone was the less efficient
regarding the bacteria reactivation. It seems that the presence of
scavenging can change the mechanism of inactivation and promote faster
regrowth.}},
Publisher = {{ELSEVIER SCI LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Dantas, RF (Reprint Author), Univ Campinas UNICAMP, Sch Technol,
Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Malvestiti, Jacqueline A.; Dantas, Renato F., Univ Campinas UNICAMP, Sch Technol,
Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1016/j.jece.2017.12.058}},
ISSN = {{2213-3437}},
Keywords = {{AOP; Secondary effluent; Disinfection; Regrowth}},
Keywords-Plus = {{ADVANCED OXIDATION PROCESSES; WASTE-WATER; HYDROGEN-PEROXIDE;
ORGANIC-MATTER; PHOTO-FENTON; CHEMICAL OXIDATION; ESCHERICHIA-COLI;
ACTIVATED-SLUDGE; AQUEOUS-SOLUTION; KINETIC-MODEL}},
Research-Areas = {{Engineering}},
Web-of-Science-Categories = {{Engineering, Environmental}},
Author-Email = {{renatofalcaod@ft.unicamp.br}},
Funding-Acknowledgement = {{National Council of Scientific and Technological
Development (CNPq)
{{[]306218/2014-3]; Sao Paulo Research Foundation (FAPESP)
{{[]2014/17774-1, 2016/07911-7]}},
Funding-Text = {{This work was supported by the National Council of Scientific and
Technological Development (CNPq) {{[]306218/2014-3] and the Sao Paulo
Research Foundation (FAPESP) {{[]2014/17774-1] and {{[]2016/07911-7].}},
Number-of-Cited-References = {{42}},
Times-Cited = {{4}},
Usage-Count-Last-180-days = {{4}},
Usage-Count-Since-2013 = {{5}},
Journal-ISO = {{J. Environ. Chem. Eng.}},
Doc-Delivery-Number = {{GI8MB}},
Unique-ID = {{ISI:000434777800058}},
DA = {{2019-06-24}},
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@article{ ISI:000434777800166,
Author = {Prediger, Patricia and Cheminski, Thais and Neves, Tauany de Figueiredo
and Nunes, William Bardelin and Sabino, Livia and Franco Picone,
Carolina Siqueira and Oliveira, Rafael L. and Duarte Correia, Carlos
Roque},
Title = {{Graphene oxide nanomaterials for the removal of non-ionic surfactant
from water}},
Journal = {{JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING}},
Year = {{2018}},
Volume = {{6}},
Number = {{1}},
Pages = {{1536-1545}},
Month = {{FEB}},
Abstract = {{The presence of surfactants in aquatic environment is a major public
health concern. Recently, several methods have been developed to remove
these compounds, among these are the adsorption processes. The great
challenge of this technology is to achieve high removal capacities, fast
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adsorption and efficient adsorbent recoveries. The aim of our study was to synthesize GO and rGO and use them for non-ionic surfactant (TX-100) adsorption in consecutive cycles. Both nanomaterials were synthesized and characterized by several analyses including BET method for superficial area, XRD, Raman Spectroscopy, CP/MAS 13C NMR, TGA, FT-IR, XPS, SEM and TEM microscopies. The optimization of the adsorption process was performed by varying many parameters, including the experiment time, nanomaterials/surfactant ratio, temperature, pH and ultrasound irradiation. GO and rGO showed fast TX-100 adsorption, about 30 min to reach equilibrium. The experiments showed that the pH variation affects the removal efficiency for both nanomaterials with pH 6 being the optimized condition. The pseudo-second order kinetic model showed the best fit to the experimental data for both nanomaterials. The equilibrium data for GO and rGO were fitted to the Fowler-Guggenheim and the Langmuir models, respectively. The rGO was verified as the best adsorbent for TX-100 removal, suggesting that hydrophobic and pi-stacking interactions are dominant in the process. Besides the superior adsorption efficiency, rGO formed larger aggregates after TX-100 removal than GO, facilitating its separation from solution. Under optimized conditions, GO and rGO revealed superior removal capacities when compared to others adsorbents (1203 and 1683 mg/g, respectively).}}

Publisher = {{ELSEVIER SCI LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Prediger, P (Reprint Author), Univ Campinas UNICAMP, Fac Tecnol, BR-13484332 Limeira, SP, Brazil.
Prediger, Patricia; Cheminski, Thais; Neves, Tauany de Figueiredo; Nunes, William Bardelin; Sabino, Livia, Univ Campinas UNICAMP, Fac Tecnol, BR-13484332 Limeira, SP, Brazil.
Franco Picone, Carolina Siqueira, Univ Campinas UNICAMP, Fac Engn Alimentos, BR-13083682 Campinas, SP, Brazil.
Oliveira, Rafael L.; Duarte Correia, Carlos Roque, Univ Campinas UNICAMP, Inst Quim, CP 6154, BR-13084970 Campinas, SP, Brazil.}}},
DOI = {{10.1016/j.jece.2018.01.072}},
ISSN = {{2213-2929}},
EISSN = {{2213-3437}},
Keywords = {{Graphene oxide; Adsorption; Non-ionic surfactant; Purification; Recycling}},
Keywords-Plus = {{CARBON NANOTUBES; MECHANICAL-PROPERTIES; ADSORPTION; MODELS; REDUCTION; SIZE; DYE}},
Research-Areas = {{Engineering}},
Web-of-Science-Categories = {{Engineering, Environmental}},
Author-Email = {{patriciap@fr.unicamp.br}},
ResearcherID-Numbers = {{Picone, Carolina/Q-2494-2018
CEPID-FAPESP, CIBFar/J-2382-2015
PREDIGER, PATRICIA/G-7989-2019}},
ORCID-Numbers = {{Picone, Carolina/0000-0003-0610-9667
CEPID-FAPESP, CIBFar/0000-0003-2719-0302
PREDIGER, PATRICIA/0000-0002-0094-6870}},
Funding-Acknowledgement = {{Research Supporting Foundation of the State of Sao Paulo (FAPESP)
{{2015/07033-7, 2015/07773-0}}},
Funding-Text = {{We would like to thank the Research Supporting Foundation of the State of Sao Paulo (FAPESP, proposal no. 2015/07033-7 and 2015/07773-0), LNNano - Brazilian Nanotechnology National Laboratory, CNPEM/MCTI for TEM and XPS analyses. The authors thank Espaco da Escrita - Coordenadoria Geral da Universidade - UNICAMP - for the language services provided.}},
Number-of-Cited-References = {{53}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{5}},
Usage-Count-Since-2013 = {{9}},
Journal-ISO = {{J. Environ. Chem. Eng.}},
Doc-Delivery-Number = {{GI8MB}},
Unique-ID = {{ISI:000434777800166}},
DA = {{2019-06-24}},
}

@article{ ISI:000426230400009,
Author = {Centurion, V. B. and Moura, A. G. L. and Delforno, T. P. and Okada, D.

Y. and Dos Santos, V. P. and Varesche, M. B. A. and Oliveira, V. M.},
Title = {{Anaerobic co-digestion of commercial laundry wastewater and domestic
sewage in a pilot-scale EGSB reactor: The influence of surfactant
concentration on microbial diversity}},
Journal = {{INTERNATIONAL BIODETERIORATION \& BIODEGRADATION}},
Year = {{2018}},
Volume = {{127}},
Pages = {{77-86}},
Month = {{FEB}},
Abstract = {{Different molecular tools (PCR-DGGE, 16S rRNA high-throughput sequencing
and sequencing of the bama gene) were used to assess and compare the
microbial diversity in a pilot-scale expanded granular sludge bed (EGSB)
reactor used for the anaerobic co-digestion of commercial laundry
wastewater and domestic sewage and subjected to increasing
concentrations of linear alkylbenzene sulfonate (LAS). Using PCR-DGGE, a
microbial stratification along the sludge bed of the reactor was
observed. When analyzed using 16S rRNA gene sequencing, the samples
exhibited high microbial diversity and richness, with the lowest Shannon
index obtained for the highest concentration of surfactant. For the
Bacteria domain, the genera Bellilinea, Syntrophus, Syntrophobacter,
Cytophaga, Bacteroides and Synergistes were the most abundant, whereas
for the Archaea domain, the genera Methanosaeta and Methanolinea were
predominant. The Pseudomonas genus was the only genus that was predicted
to be involved in all steps of surfactant degradation. Additionally,
bama gene sequencing indicated the presence of the species
Syntrophorhabdus aromaticivorans, Desulfosarcina cetonica and Syntrophus
aciditrophicus, which have genetic potential for the aromatic ring
cleavage under anaerobic conditions. Therefore, despite the high
toxicity of LAS under anaerobic conditions, the use of different
molecular tools revealed the great diversity and richness of the
microbial community from the granular biomass of the EGSB pilot reactor,
indicating that a microbial consortium is necessary for complete LAS
degradation. Additionally, the sequencing analysis of the batnA gene
represents a step forward in the understanding of the core microbial
community involved in aromatic ring cleavage for anaerobic digestion of
real laundry wastewater, which may guide future studies.}},
Publisher = {{ELSEVIER SCI LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Centurion, VB (Reprint Author), Campinas Univ, UNICAMP, Res Ctr Chem
Biol \& Agr CPQBA, Microbial Resources Div, BR-13081970 Paulinia, SP, Brazil.
Centurion, V. B.; Delforno, T. P.; Dos Santos, V. P.; Oliveira, V. M., Campinas
Univ, UNICAMP, Res Ctr Chem Biol \& Agr CPQBA, Microbial Resources Div, BR-13081970
Paulinia, SP, Brazil.
Okada, D. Y., Campinas Univ, UNICAMP, Div Technol Environm Sanitat, Sch Technol,
BR-13484332 Limeira, SP, Brazil.
Moura, A. G. L.; Varesche, M. B. A., Univ Sao Paulo EESC USP, Enegn Sch Sao Carlos,
Dept Hydraul \& Sanitat, Lab Biol Proc, Campus 2, BR-13563120 Sao Carlos, SP,
Brazil.}},
DOI = {{10.1016/j.ibiod.2017.11.017}},
ISSN = {{0964-8305}},
EISSN = {{1879-0208}},
Keywords = {{Linear alkylbenzene sulfonate (LAS); Expanded granular sludge bed
(EGSB); illumina sequencing; Microbial diversity; Anaerobic degradation}},
Keywords-Plus = {{LINEAR ALKYL BENZENE SULFONATES; 16S RIBOSOMAL-RNA; SP-NOV; GEN-NOV;
ANIONIC SURFACTANT; STATISTICAL-ANALYSIS; MARINE-SEDIMENTS; DEGRADATION;
BIODEGRADATION; COMMUNITY}},
Research-Areas = {{Biotechnology \& Applied Microbiology; Environmental Sciences \&
Ecology}},
Web-of-Science-Categories = {{Biotechnology \& Applied Microbiology; Environmental
Sciences}},
Author-Email = {{vborincenturion@yahoo.com.br
alanamou@hotmail.com
tiago.palladino@gmail.com
dagokada@gmail.com
viviane@cpqba.unicamp.br
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vmaia@cpqba.unicamp.br}},
ResearcherID-Numbers = {{Okada, Dagoberto/C-3461-2012
Delforno, Tiago/D-8331-2012
Varesche, Maria Bernadete/K-6127-2012}},

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ORCID-Numbers = {{Okada, Dagoberto/0000-0003-1859-9851
  Delforno, Tiago/0000-0002-1705-0763
  }},
Funding-Acknowledgement = {{Sao Paulo Research Foundation - FAPESP {{}}2015/08219-7,
2014/16426-0,
  2016/11948-3, 2015/06246-7}; Conselho Nacional de Desenvolvimento
  Cientifico e Tecnoldgico (CNPq) {{}}131391/2016-0}},
Funding-Text = {{The authors are grateful to the Sao Paulo Research Foundation -
FAPESP,
  Processes no. 2015/08219-7, 2014/16426-0, 2016/11948-3 and 2015/06246-7
  and the Conselho Nacional de Desenvolvimento Cientifico e Tecnoldgico
  (CNPq), Process no. 131391/2016-0 for their financial support.}},
Number-of-Cited-References = {{54}},
Times-Cited = {{6}},
Usage-Count-Last-180-days = {{12}},
Usage-Count-Since-2013 = {{33}},
Journal-ISO = {{Int. Biodeterior. Biodegrad.}},
Doc-Delivery-Number = {{FX6XK}},
Unique-ID = {{ISI:000426230400009}},
DA = {{2019-06-24}},
}

@article{ ISI:000422965000016,
Author = {Scheffer, V. C. and Thevamaran, R. and Coluci, V. R.},
Title = {{Compressive response and deformation mechanisms of vertically aligned
  helical carbon nanotube forests}},
Journal = {{APPLIED PHYSICS LETTERS}},
Year = {{2018}},
Volume = {{112}},
Number = {{2}},
Month = {{JAN 8}},
Abstract = {{We study the dynamic compressive response of vertically aligned helical
  carbon nanotube forests using a mesoscale model. To describe the
  compressive response, the model includes the helical geometry of the
  constituent coils, the entanglement between neighboring coils, and the
  sideways interactions among coils. Coarse-grained simulations show forest
  densification and stress localization, which are caused by different
  deformation mechanisms such as coil packing, buckling, and crushing. We
  find that these mechanisms depend on the initial overlap between coils
  and lead to a nonlinear stress-strain behavior that agrees with recent
  impact experiments. The nonlinear stressstrain behavior was shown to be
  composed of an initial linear increase of stress in strain followed by
  an exponential growth. These regimes are an outcome of the
  characteristics of both the individual coils and the entangled
  morphology of the forests. Published by AIP Publishing.}},
Publisher = {{AMER INST PHYSICS}},
Address = {{1305 WALT WHITMAN RD, STE 300, MELVILLE, NY 11747-4501 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Scheffer, VC (Reprint Author), Univ Campinas UNICAMP, Sch Technol,
BR-13484332 Limeira, SP, Brazil.
  Scheffer, V. C.; Coluci, V. R., Univ Campinas UNICAMP, Sch Technol, BR-13484332
  Limeira, SP, Brazil.
  Thevamaran, R., Univ Wisconsin, Dept Engn Phys, Madison, WI 53706 USA.}},
DOI = {{10.1063/1.5008983}},
Article-Number = {{021902}},
ISSN = {{0003-6951}},
EISSN = {{1077-3118}},
Keywords-Plus = {{FOAMS}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Applied}},
ResearcherID-Numbers = {{Coluci, Vitor/E-1079-2012}},
ORCID-Numbers = {{Coluci, Vitor/0000-0001-5179-6182}},
Funding-Acknowledgement = {{FAPESP {{}}10/50646-6, 16/01736-9}; CAPES}},
Funding-Text = {{We acknowledge the financial support from FAPESP (Grant Nos.
10/50646-6
  and 16/01736-9) and CAPES. We also thank Professor C. Daraio for sharing
  the experimental results of Ref. 5 prior to the publication.}},
Number-of-Cited-References = {{25}},
Times-Cited = {{2}},
Usage-Count-Last-180-days = {{10}},
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Journal-ISO = {{Appl. Phys. Lett.}},
Doc-Delivery-Number = {{FT2IS}},
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@inproceedings{ ISI:000461414100006,
Author = {Santos, Vlademir Fazio and Yacoub, Michel Daoud and Ursini, Edson L. and
Martins, Paulo S.},
Book-Group-Author = {{IEEE}},
Title = {{A MANAGEMENT TOOL BASED ON DISCRETE EVENT SIMULATION FOR HUMANITARIAN
SUPPORT}},
Booktitle = {{2018 WINTER SIMULATION CONFERENCE (WSC)}},
Series = {{Winter Simulation Conference Proceedings}},
Year = {{2018}},
Pages = {{45-56}},
Note = {{Winter Simulation Conference (WSC), Gothenburg, SWEDEN, DEC 09-12, 2018}},
Organization = {{AnyLogic Co; Bayer; Chalmers; Arena; Simio; Vinnova; WSC Fdn;
Incontrol;
FlexSim; Volvo; Volvo Trucks; Aeroseum; SKF; SAS; Simplan; Springer;
Journal Simulat; Assoc Comp Machinery, Special Interest Grp Simulat;
Amer Stat Assoc; Arbeitsgemeinschaft Simulat; Inst Elect \& Elect
Engineers, Syst Man \& Cybernet Soc; Inst Ind \& Syst Engineers; Inst
Operat Res \& Management Sci, Simulat Soc; Natl Inst Standards \&
Technol; Operat Res Soc; Soc Modeling \& Simulat Int}},
Abstract = {{Humanitarian aid is material or logistical assistance provided for
humanitarian purposes, typically in response to humanitarian crises
including natural disasters and man-made disaster. Humanitarian
assistance requiring short response time windows in almost the whole
world may be subject to long queues due to managing problems, e.g., the
lack of control and/or inefficient infrastructure. This work tackles
such challenge by proposing a low-cost planning and managing model and
method based on a discrete-event simulation mirror connected throughWEB
tools to a near or far management level. The usual configuration of
parallel servers (for instance, supported by local RFID monitoring) is
implemented by a discrete-event simulation model that is validated by
Jackson Networks (and vice versa). The results show a flexible model
that may identify bottlenecks in advance in order to accommodate traffic
flow variations.}},
Publisher = {{IEEE}},
Address = {{345 E 47TH ST, NEW YORK, NY 10017 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Santos, VF (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
Elect \& Comp Engrn FEEC, Av Albert Einstein 400, BR-13083852 Campinas, SP, Brazil.
Santos, Vlademir Fazio; Yacoub, Michel Daoud, Univ Estadual Campinas, UNICAMP, Sch
Elect \& Comp Engrn FEEC, Av Albert Einstein 400, BR-13083852 Campinas, SP, Brazil.
Ursini, Edson L.; Martins, Paulo S., Univ Estadual Campinas, UNICAMP, Sch Technol
FT, R Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.}},
ISSN = {{0891-7736}},
ISBN = {{978-1-5386-6572-5}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Theory \& Methods}},
Author-Email = {{vlafazio@gmail.com
michel@decom.fee.unicamp.br
ursini@ft.unicamp.br
paulo@ft.unicamp.br}},
Number-of-Cited-References = {{19}},
Times-Cited = {{0}},
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Usage-Count-Since-2013 = {{0}},
Doc-Delivery-Number = {{BM2RX}},
Unique-ID = {{ISI:000461414100006}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000461414101030,
Author = {Emiliano Leite, J. R. and Massaro, F. R. and Martins, Paulo S. and
Ursini, Edson L.},
Book-Group-Author = {{IEEE}},
Title = {{REDUCING POWER CONSUMPTION IN SMART CAMPUS NETWORK APPLICATIONS THROUGH
SIMULATION OF HIGH-PRIORITY SERVICE, TRAFFIC BALANCING, PREDICTION AND
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FUZZY LOGIC}},
Booktitle = {{2018 WINTER SIMULATION CONFERENCE (WSC)}},
Series = {{Winter Simulation Conference Proceedings}},
Year = {{2018}},
Pages = {{1156-1167}},
Note = {{Winter Simulation Conference (WSC), Gothenburg, SWEDEN, DEC 09-12, 2018}},
Organization = {{AnyLogic Co; Bayer; Chalmers; Arena; Simio; Vinnova; WSC Fdn;
Incontrol;
FlexSim; Volvo; Volvo Trucks; Aeroseum; SKF; SAS; Simplan; Springer;
Journal Simulat; Assoc Comp Machinery, Special Interest Grp Simulat;
Amer Stat Assoc; Arbeitsgemeinschaft Simulat; Inst Elect \& Elect
Engineers, Syst Man \& Cybernet Soc; Inst Ind \& Syst Engineers; Inst
Operat Res \& Management Sci, Simulat Soc; Natl Inst Standards \&
Technol; Operat Res Soc; Soc Modeling \& Simulat Int}},
Abstract = {{In this work, we tackle power consumption reduction of battery-dependent
devices in a smart campus (including hospital) application. These
devices are connected by networked systems which may be subject to
fluctuation of the message delays that control essential equipment. We
show through five case studies using discrete event simulation that
power consumption may be reduced using proper prioritization and
balancing of the network emergency traffic. A predictor algorithm and a
fuzzy logic controller were used to indicate the level upon which the
system must switch off the load in order to reduce power consumption.
The analysis of a case study shows that a considerable reduction in
power consumption was achieved through the reduction of message delays
and also due to the fuzzy control of AC and lighting equipment.}},
Publisher = {{IEEE}},
Address = {{345 E 47TH ST, NEW YORK, NY 10017 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Leite, JRE (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
Technol, BR-13484332 Limeira, SP, Brazil.
Emiliano Leite, J. R.; Massaro, F. R.; Martins, Paulo S.; Ursini, Edson L., Univ
Estadual Campinas, UNICAMP, Sch Technol, BR-13484332 Limeira, SP, Brazil.}},
ISSN = {{0891-7736}},
ISBN = {{978-1-5386-6572-5}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Theory \& Methods}},
Author-Email = {{joserobertoemilianoite@gmail.com
frmassaro@gmail.com
paulo@ft.unicamp.br
ursini@ft.unicamp.br}},
Funding-Acknowledgement = {{Sao Paulo Research Foundation (FAPESP) {{2018/20715-8}}},
Funding-Text = {{The authors would like to acknowledge grant \#2018/20715-8, Sao Paulo
Research Foundation (FAPESP). The opinions, hypotheses and conclusions
or recommendations expressed in this material are the responsibility of
the author(s) and do not necessarily reflect the views of FAPESP.}},
Number-of-Cited-References = {{10}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{0}},
Doc-Delivery-Number = {{BM2RX}},
Unique-ID = {{ISI:000461414101030}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000461314200006,
Author = {Leite, J. R. E. and Martins, Paulo S. and Ursini, Edson L.},
Editor = {{Chakrabarti, S and Saha, HN}},
Title = {{Analysis of an AdHoc Network in an Intelligent Transportation System}},
Booktitle = {{2018 IEEE 9TH ANNUAL INFORMATION TECHNOLOGY, ELECTRONICS AND MOBILE
COMMUNICATION CONFERENCE (IEMCON)}},
Year = {{2018}},
Pages = {{30-36}},
Note = {{9th IEEE Annual Information Technology, Electronics and Mobile
Communication Conference (IEMCON), Univ British Columbia, Vancouver,
CANADA, NOV 01-03, 2018}},
Organization = {{Inst Engn \& Management; IEEE Vancouver Sect; UBC; Univ Engn \&
Management}},
Abstract = {{This work presents six simulation case studies of AdHoc and IoT
Networks, considering congested and uncongested nodes, messages with and
without priorities, including routing optimization and message losses

```

using the Two-ray as a propagation model and the RWP as the mobility model. The goal is to analyze the traffic of the mediator to estimate its capacity considering an ITS application. Specifically, we aim at determining the processor utilization and message delays. The proposed model and simulation tool may be used to plan and dimension the network. The results showed that routing optimization and prioritization of messages are relevant to the effective resource usage of the network.}}

Publisher = {{IEEE}},
Address = {{345 E 47TH ST, NEW YORK, NY 10017 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Leite, JRE (Reprint Author), Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, SP, Brazil.
Leite, J. R. E.; Martins, Paulo S.; Ursini, Edson L., Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, SP, Brazil.}},
ISBN = {{978-1-5386-7266-2}},
Keywords = {{ITS; VANETS; IoT; mediator; traffic analysis; routing optimization}},
Research-Areas = {{Engineering; Telecommunications}},
Web-of-Science-Categories = {{Engineering, Electrical \& Electronic; Telecommunications}},
Author-Email = {{jremilianoite@gmail.com
paulo@ft.unicamp.br
ursini@ft.unicamp.br}},
Number-of-Cited-References = {{12}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
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Doc-Delivery-Number = {{BM2QM}},
Unique-ID = {{ISI:000461314200006}},
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}

@article{ ISI:000437822300006,
Author = {Sanchez-Domene, David and Navarro-Lozano, Alba and Acayaba, Raphael and Picheli, Katiuce and Montagner, Cassiana and Rossa-Feres, Denise de Cerqueira and da Silva, Fernando Rodrigues and de Almeida, Eduardo Alves},
Title = {{Eye malformation baseline in Scinax fuscovarius larvae populations that inhabit agroecosystem ponds in southern Brazil}},
Journal = {{AMPHIBIA-REPTILIA}},
Year = {{2018}},
Volume = {{39}},
Number = {{3}},
Pages = {{325-334}},
Abstract = {{Events of mass malformations in amphibian populations that have exceeded historical records have been reported over the past thirty years. Many of these events have been linked to human activities that occurred near amphibian breeding habitats. The rise in biofuels has promoted, and continues to promote, the growth of sugarcane plantations in Brazil, with the northwest region of Sao Paulo State having experienced the largest sugarcane expansion over the past few decades. In this region, we sampled temporary ponds located in agroecosystems dominated to different degrees by sugarcane. We found several larvae of Scinax fuscovarius with eye malformations (anophthalmia, aphakia, microphthalmia and sub-development). In this study, we assessed whether the distance from the ponds to the nearest sugarcane crop, the proportion of sugarcane surrounding the ponds, the presence of pesticides in the ponds, or the proportion of land uses with potential teratogens that surround the ponds were related to the frequencies of amphibian eye malformations. We found pesticides present in 11 of the 18 ponds, but none of the predictor variables was associated with the frequencies of amphibian eye malformations. Thus, our results suggest that the observed frequencies of amphibian eye malformations could be a consequence of natural mutation rates, and these data could be used as a malformation baseline for the region. This malformation baseline is the first reported for amphibians in South America and may be useful in future surveys on amphibian populations in tropical agroecosystems.}},
Publisher = {{BRILL ACADEMIC PUBLISHERS}},
Address = {{PLANTIJSN STRAAT 2, P O BOX 9000, 2300 PA LEIDEN, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Sanchez-Domene, D (Reprint Author), Univ Estadual Paulista, Inst Pesquisa Bioenergia, BR-13500230 Rio Claro, SP, Brazil.

Sanchez-Domene, David, Univ Estadual Paulista, Inst Pesquisa Bioenergia, BR-13500230 Rio Claro, SP, Brazil.

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DOI = {{10.1163/15685381-20181038}},

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Keywords = {{abnormalities; amphibians; pesticides; sugarcane; teratogens}},

Keywords-Plus = {{AMPHIBIAN MALFORMATIONS; AGRICULTURAL LANDSCAPE; ABNORMALITIES; CONSERVATION; PATTERNS; DIVERSITY; ARGENTINA; FROGS}},

Research-Areas = {{Zoology}},

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Almeida, Eduardo Alves/B-7630-2012
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Montagner, Cassiana Carolina/0000-0002-6475-5969}},

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Funding-Text = {{This research was supported with a doctoral grant by the National
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Number-of-Cited-References = {{41}},

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@article{ ISI:000408755300147,

Author = {Coa, Francine and Strauss, Mathias and Clemente, Zaira and Rodrigues Neto, Laia L. and Lopes, Josias R. and Alencar, Rafael S. and Souza Filho, Antonio G. and Alves, Oswaldo L. and Castro, Vera Lucia S. S. and Barbieri, Edison and Martinez, Diego Stefani T.},

Title = {{Coating carbon nanotubes with humic acid using an eco-friendly mechanochemical method: Application for Cu(II) ions removal from water and aquatic ecotoxicity}},

Journal = {{SCIENCE OF THE TOTAL ENVIRONMENT}},

Year = {{2017}},

Volume = {{607}},

Pages = {{1479-1486}},

Month = {{DEC 31}},

Abstract = {{In this work, industrial grade multi-walled carbon nanotubes (MWCNT) were coated with humic acid (HA) for the first time by means of a milling process, which can be considered an eco-friendly mechanochemical method to prepare materials and composites. The HA-MWCNT hybrid material was characterized by atomic force microscopy (AFM), scanning electron

microscopies (SEM and STEM), X-ray photoelectron spectroscopy (XPS), thermogravimetric analysis (TGA), and Raman spectroscopy. STEM and AFM images demonstrated that the MWCNTs were efficiently coated by the humic acid, thus leading to an increase of 20% in the oxygen content at the nanotube surface as observed by the XPS data. After the milling process, the carbon nanotubes were shortened as unveiled by SEM images and the values of ID/IG intensity ratio increased due to shortening of the nanotubes and increasing in the number defects at the graphitic structure of carbon nanotubes walls. The analysis of TGA data showed that the quantity of the organic matter of HA on the nanotube surface was 25%. The HA coating was responsible to favor the dispersion of MWCNTs in ultrapure water (i.e. -42 mV, zeta-potential value) and to improve their capacity for copper removal. HA-MWCNTs hybrid material adsorbed 2.5 times more Cu(II) ions than oxidized MWCNTs with HNO₃, thus evidencing that it is a very efficient adsorbent material for removing copper ions from reconstituted water. The HA-MWCNTs hybrid material did not show acute ecotoxicity to the}},

Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
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Language = {{English}},
Affiliation = {{Martinez, DST (Reprint Author), Brazilian Ctr Res Energy \& Mat CNPEM, Brazilian Nanotechnol Natl Lab LNNano, BR-13083970 Campinas, SP, Brazil.
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Coa, Francine; Barbieri, Edison, Inst Pesca APTA SAA SP, BR-11990000 Cananeaia, SP, Brazil.
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Rodrigues Neto, Laia L.; Martinez, Diego Stefani T., Univ Campinas Unicamp, Sch Technol, BR-13484332 Limeira, SP, Brazil.
Alencar, Rafael S.; Souza Filho, Antonio G., Univ Fed Ceara, Dept Fis, BR-60455900 Fortaleza, Ceara, Brazil.
Alves, Oswaldo L., Univ Campinas Unicamp, Inst Chem, Lab Solid State Chem LQES, BR-13084970 Campinas, SP, Brazil.}},
DOI = {{10.1016/j.scitotenv.2017.07.045}},
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Keywords = {{Ball milling; Mechanochemistry; Functionalization; Nanoecotoxicology}},
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Research-Areas = {{Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Environmental Sciences}},
Author-Email = {{ebarbieri@pesca.sp.gov.br
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ResearcherID-Numbers = {{Barbieri, Edison B/N-9616-2015
Souza, Antonio G./D-8978-2011
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Souza, Antonio G./0000-0003-3802-1168
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Silva Alencar, rafael/0000-0002-9992-7564
Castro, Vera Lucia/0000-0002-5045-4540
Barbieri, Edison/0000-0001-5527-2335}},
Funding-Acknowledgement = {{Sao Paulo Research Foundation (FAPESP) {{2014/01995-9}}},
Funding-Text = {{The authors thank the Coordination for the Improvement of Higher Level or Education Personnel (Capes), Sao Paulo Research Foundation (FAPESP) {{grant number 2014/01995-9}}, National Council for Scientific and Technological Development (CNPq), National Institute of Science, Technology, and Innovation on Complex Functional Materials (INCT-Inomat), Brazilian Nanotoxicology Network (Cigenanotox), and National System of Laboratories on Nanotechnologies (SisNANO). The authors also extend gratitude to CNPEM open-facilities (LMN, LME, LCS,

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    LAM, and NBT).}},
Number-of-Cited-References = {{53}},
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Author = {Freitas, Bernardo T. and Almeida, Renato P. and Carrera, Simone C. and
Figueiredo, Felipe T. and Turra, Bruno B. and Varejao, Filipe G. and
Assine, Mario L.},
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Title = {{Aptian sedimentation in the Reconcavo-Tucano-Jatoba Rift System and its
tectonic and paleogeographic significance}},
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Journal = {{JOURNAL OF SOUTH AMERICAN EARTH SCIENCES}},
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Year = {{2017}},
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Volume = {{80}},
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Pages = {{460-481}},
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Abstract = {{This study, based on detailed sedimentologic and stratigraphic analysis
of the Aptian succession preserved in the Reconcavo-Tucano-Jatoba Rift
System (RTJ), present new elements for biostratigraphic correlation and
paleogeographic reconstruction in the mid-Cretaceous South Atlantic
realm, supporting novel interpretations on the tectonic and sedimentary
evolution related to the W-Gondwana breakup. The Aptian sedimentary
succession in the RTJ has been referred to as Marizal Formation, and
interpreted as post-rift deposits. Detailed sedimentologic and
stratigraphic studies of these deposits enabled the recognition and
individualization of two distinctive sedimentary units that can be
traced in the entire RTJ. These units are here described and named
Banzae and Cicero Dantas members of the Marizal Formation. Their contact
is locally marked by the fossiliferous successions of the here proposed
Amargosa Bed, lying at the top of the Banzae Member. Both members of the
Marizal Formation record large river systems captured by the Tucano
Basin with the local development of eolian dune fields and fault bounded
alluvial fans. The Amargosa Bed represents a regional-scale base level
change preserved between the Aptian fluvial successions along the RTJ.
Hence, the studied sedimentary record presents important implications
for the timing and direction of marine incursions affecting NE-Brazil
interior basins during the Aptian. A remarkable contrast in preserved
fluvial architecture between the Banzae Member, characterized by
connected channel bodies, and the Cicero Dantas Member, characterized by
isolated channel bodies within overbank fines, is here reported. The
main interpreted control for the observed contrast in fluvial
stratigraphy is sedimentary yield variation. The interval is also
subject to the interpretation of a regional shift in the mechanism
responsible for the subsidence of the basins formed during the
Cretaceous break-up of the Central South Atlantic. This view is
challenged by our results which reveal that basin forming extension
continued throughout the Aptian. As a conclusion, the detailed
stratigraphy of the Marizal Formation forward alternative geodynamic
interpretations for the Aptian successions in northeastern Brazil,
bringing new elements to the mid-Cretaceous biogeographical,
paleogeographical and tectonic reconstructions of western Gondwana. (C)
2017 Elsevier Ltd. All rights reserved.}},
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Type = {{Article}},
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Language = {{English}},
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Varejao, Filipe G.; Assine, Mario L., Univ Estadual Paulista, Inst Geociencias \& Ciencias Exatas, Ave 24 A,1515, BR-13506900 Rio Claro, SP, Brazil.}},
 DOI = {{10.1016/j.jsames.2017.10.001}},
 ISSN = {{0895-9811}},
 Keywords = {{Gondwana paleogeography; Big rivers; Controls on sedimentation; Marizal formation; Banae member; Cicero dantas member}},
 Keywords-Plus = {{EARLY CRETACEOUS PALEOGEOGRAPHY; ACTIVE EXTENSIONAL BASIN; SOUTH-ATLANTIC; SEQUENCE STRATIGRAPHY; ALLUVIAL ARCHITECTURE; NORTHEASTERN BRAZIL; CRUSTAL DETACHMENT; MORRISON FORMATION; FLOW UNSTEADINESS; FLUVIAL SYSTEM}},
 Research-Areas = {{Geology}},
 Web-of-Science-Categories = {{Geosciences, Multidisciplinary}},
 Author-Email = {{bernardotf@gmail.com}},
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 ORCID-Numbers = {{Figueiredo, Felipe T/0000-0001-6998-8772
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 Freitas, Bernardo Tavares/0000-0001-6239-0137
 Almeida, Renato/0000-0003-3664-1558}},
 Funding-Acknowledgement = {{Sao Paulo Research Foundation (FAPESP) {{2009/53363-8, 2013/01825-3, 2014/16739-8, 2016/03091-5, 2016/19736-5, 2010/51559-0}; CAPES {{2014/00519-9}},
 {{PROEX-558/2011}; CNPq {{301775/2012-5}; Petrobras {{2014/00519-9}}}},
 Funding-Text = {{The authors are thankful to the Sao Paulo Research Foundation (FAPESP) which sponsored this work through the research grants 2009/53363-8, 2013/01825-3, 2014/16739-8, 2016/03091-5, 2016/19736-5 and scholarship 2010/51559-0. Thanks are also due to CAPES (PROEX-558/2011) for student scholarships, to CNPq for researcher scholarships (301775/2012-5), and to Petrobras for research grants (2014/00519-9). The authors are very grateful to the welcoming and helpful people who live in the research area; to the students and colleagues who contributed during field work, specially Cristiano Galeazzi, Paulo Hino and Andre Stern; to the geologist Carolina Reis from the Geological Survey of Brazil for sharing her knowledge on the Tucano Basin geology; to the Chico Mendes Institute for Biodiversity Conservation (ICMBio) at Paulo Afonso-BA, to the National Indian Foundation (FUNAI) at Paulo Afonso-BA, and to Otavio Nolasco de Farias on behalf of the Serra Branca Private Environmental Protection Area at Jeremoabo-BA for logistical support and for granting us access to their land properties in the Tucano Basin. We are thankful to James Kellog, Claiton Scherer and Gelson Fambrini for their constructive reviews and editorial comments. This study is a NAP GEO-SEDEX contribution, with the institutional support of the University of Sao Paulo (PrPesq).}},
 Number-of-Cited-References = {{134}},
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 Journal-ISO = {{J. South Am. Earth Sci.}},
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@article{ ISI:000416161600010,

Author = {Umbuzeiro, Gisela A. and Szymczyk, Malgorzata and Li, Min and Chen, Yufei and Vendemiatti, Josiane A. S. and de Albuquerque, Anjaina F. and dos Santos, Amanda and Maselli, Bianca de S. and Kummrow, Fabio and Vinueza, Nelson R. and Freeman, Harold S.},
 Title = {{Purification and characterization of three commercial phenylazoaniline disperse dyes}},
 Journal = {{COLORATION TECHNOLOGY}},
 Year = {{2017}},
 Volume = {{133}},
 Number = {{6}},
 Pages = {{513-518}},
 Month = {{DEC}},
 Abstract = {{Although tons of disperse dyes are used worldwide, little information on their ecotoxicity is available. While in silico models can be used to

predict their ecotoxicity, experimental results from *Daphnia* can show significantly higher toxicity than predicted. Thus the objective of this work was to extend the knowledge base in this area by evaluating the ecotoxicity of three widely used disperse dyes and comparing the results to predicted values. Bearing in mind that generating ecotoxicity data on azo disperse dyes is complicated because they are not readily found as homogeneous compounds, we employed chromatographic methods to purify three commercially dyes C.I. Disperse Violet 93, Blue 291, and Blue 373 already found in the aquatic environment. No acute toxicity was observed for *Daphnia similis*. These results seems to be in general agreement when compared with ECOSAR predicted values. We hypothesize that differences in *Kow* values could explain the variations in results.}}

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Publisher = {{WILEY}},
Address = {{111 RIVER ST, HOBOKEN 07030-5774, NJ USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Umbuzeiro, GA (Reprint Author), Univ Estadual Campinas, Sch Technol,
Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Umbuzeiro, Gisela A.; Vendemiatti, Josiane A. S.; de Albuquerque, Anjaina F.; dos
Santos, Amanda, Univ Estadual Campinas, Sch Technol, Rua Paschoal Marmo 1888,
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Szymczyk, Malgorzata; Li, Min; Chen, Yufei; Vinueza, Nelson R.; Freeman, Harold S.,
NCSU, Coll Text, 1020 Main Campus Dr, Raleigh, NC 27695 USA.
Maselli, Bianca de S., Univ Sao Paulo, Fac Pharmaceut Sci, Av Prof Lineu Prestes
580, BR-05508000 Sao Paulo, SP, Brazil.
Kummrow, Fabio, UNIFESP, Inst Environm Chem \& Pharmaceut Sci, Rua Sao Nicolau 210,
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Web-of-Science-Categories = {{Chemistry, Applied; Engineering, Chemical; Materials
Science, Textiles}},
Author-Email = {{giselau@ft.unicamp.br}},
ResearcherID-Numbers = {{dos Santos, Amanda/V-9851-2018
Umbuzeiro, Gisela A./H-4603-2011
Vendemiatti, Josiane/H-5705-2017
Szymczyk, Malgorzata/P-3878-2019
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Fernandes de Albuquerque, Anjaina/G-6841-2016}},
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Umbuzeiro, Gisela A./0000-0002-8623-5200
Vendemiatti, Josiane/0000-0003-0712-3145
Szymczyk, Malgorzata/0000-0003-4998-5552
Kummrow, Fabio/0000-0003-2977-0108
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Funding-Acknowledgement = {{FULBRIGHT Scholar/CAPES; FAPESP {{2008/10449-7}}},
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2008/10449-7 for funding this work. The use of facilities at North
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Journal-ISO = {{Color. Technol.}},
Doc-Delivery-Number = {{FN6YB}},
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@article{ ISI:000407009400082,
Author = {Verissimo, Nathalia C. and Freitas, Emmanuelle S. and Cheung, Noe and
Garcia, Amauri and Osorio, Wislei R.},
Title = {{The effects of Zn segregation and microstructure length scale on the
corrosion behavior of a directionally solidified Mg-25 wt.%Zn alloy}},
Journal = {{JOURNAL OF ALLOYS AND COMPOUNDS}},
Year = {{2017}},
Volume = {{723}},
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Abstract = {{Biodegradable implants can be used in order to avoid removal surgery. Mg-Zn alloys are considered interesting alternatives for biomedical applications, however, studies concerning the effects of microstructural features in the as-solidified condition and segregation aspects on the resulting electrochemical behavior are scarce. This investigation is focused on the evaluation of the electrochemical corrosion of an as-solidified Mg-25 wt.% Zn alloy in a 0.15 M NaCl solution at 25 degrees C. EIS plots, potentiodynamic polarization curves and equivalent circuits are used. It is shown that Zn segregation affects both the galvanic couple and the cathode-to-anode area ratio. It was found that finer and homogeneously distributed Mg-rich six-fold branched equiaxed dendritic grains induce lower corrosion current density and higher polarization resistance when compared with equivalent results of coarser ones. (C) 2017 Elsevier B.V. All rights reserved.}},

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Address = {{PO BOX 564, 1001 LAUSANNE, SWITZERLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Osorio, WR (Reprint Author), Univ Estadual Campinas, UNICAMP, Res Grp Mfg Adv Mat CPMMA, Sch Appl Sci FCA, BR-13484350 Limeira, SP, Brazil. Verissimo, Nathalia C.; Freitas, Emmanuelle S.; Cheung, Noe; Garcia, Amauri, Univ Estadual Campinas, UNICAMP, Dept Mfg \& Mat Engrn, BR-13083860 Campinas, SP, Brazil. Osorio, Wislei R., Univ Estadual Campinas, UNICAMP, Res Grp Mfg Adv Mat CPMMA, Sch Appl Sci FCA, BR-13484350 Limeira, SP, Brazil. Osorio, Wislei R., Univ Estadual Campinas, UNICAMP, Sch Technol, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1016/j.jallcom.2017.06.199}},
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Keywords = {{Mg-Zn alloys; Solidification; Microstructure; Impedance; Polarization}},
Keywords-Plus = {{ELECTROCHEMICAL IMPEDANCE; RESISTIVITY DISTRIBUTIONS; MECHANICAL-PROPERTIES; HYDROGEN COLLECTION; SOLDER ALLOY; MASS-LOSS; MAGNESIUM; FILMS; BIODEGRADATION; NANOCOMPOSITE}},
Research-Areas = {{Chemistry; Materials Science; Metallurgy \& Metallurgical Engineering}},
Web-of-Science-Categories = {{Chemistry, Physical; Materials Science, Multidisciplinary; Metallurgy \& Metallurgical Engineering}},
Author-Email = {{wislei.osorio@fca.unicamp.br}},
ResearcherID-Numbers = {{Osorio, Wislei R*/E-2585-2013
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Cheung, Noe/E-9806-2012
Garcia, Amauri/C-6916-2012
Verissimo, Nathalia/G-8076-2014}},
ORCID-Numbers = {{Freitas, Emmanuelle/0000-0002-6526-3878
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Garcia, Amauri/0000-0002-3834-3258
Osorio, Wislei Riuper/0000-0002-2754-9584
Verissimo, Nathalia/0000-0002-2399-2140}},
Funding-Acknowledgement = {{FAEPEX-UNICAMP; CNPq (Brazilian Research Council); CAPES; FAPESP-Sao Paulo Research Foundation [{}2013/23396-7, 2014/50502-5]}},
Funding-Text = {{The authors acknowledge the financial support provided by FAEPEX-UNICAMP, CNPq (The Brazilian Research Council), CAPES and FAPESP-Sao Paulo Research Foundation (grants 2013/23396-7 and 2014/50502-5).}},
Number-of-Cited-References = {{38}},
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DA = {{2019-06-24}},
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@article{ ISI:000410010500071,

Author = {Neale, Peta A. and Altenburger, Rolf and Ait-Aissa, Selim and Brion, Francois and Busch, Wibke and Umbuzeiro, Gisela de Aragao and Denison, Michael S. and Du Pasquier, David and Hilscherova, Klara and Hollert, Henner and Morales, Daniel A. and Novak, Jiri and Schlichting, Rita and Seiler, Thomas-Benjamin and Serra, Helene and Shao, Ying and Tindall,

Andrew J. and Tollefsen, Knut Erik and Williams, Timothy D. and Escher, Beate I.},
Title = {{Development of a bioanalytical test battery for water quality monitoring: Fingerprinting identified micropollutants and their Contribution to effects in surface water}},
Journal = {{WATER RESEARCH}},
Year = {{2017}},
Volume = {{123}},
Pages = {{734-750}},
Month = {{OCT 15}},
Abstract = {{Surface waters can contain a diverse range of organic pollutants, including pesticides, pharmaceuticals and industrial compounds. While bioassays have been used for water quality monitoring, there is limited knowledge regarding the effects of individual micropollutants and their relationship to the overall mixture effect in water samples. In this study, a battery of in vitro bioassays based on human and fish cell lines and whole organism assays using bacteria, algae, daphnids and fish embryos was assembled for use in water quality monitoring. The selection of bioassays was guided by the principles of adverse outcome pathways in order to cover relevant steps in toxicity pathways known to be triggered by environmental water samples. The effects of 34 water pollutants, which were selected based on hazard quotients, available environmental quality standards and mode of action information, were fingerprinted in the bioassay test battery. There was a relatively good agreement between the experimental results and available literature effect data. The majority of the chemicals were active in the assays indicative of apical effects, while fewer chemicals had a response in the specific reporter gene assays, but these effects were typically triggered at lower concentrations. The single chemical effect data were used to improve published mixture toxicity modeling of water samples from the Danube River. While there was a slight increase in the fraction of the bioanalytical equivalents explained for the Danube River samples, for some endpoints less than 1% of the observed effect could be explained by the studied chemicals. The new mixture models essentially confirmed previous findings from many studies monitoring water quality using both chemical analysis and bioanalytical tools. In short, our results indicate that many more chemicals contribute to the biological effect than those that are typically quantified by chemical monitoring programs or those regulated by environmental quality standards. This study not only demonstrates the utility of fingerprinting single chemicals for an improved understanding of the biological effect of pollutants, but also highlights the need to apply bioassays for water quality monitoring in order to prevent underestimation of the overall biological effect. (C) 2017 Elsevier Ltd. All rights reserved.}},
Publisher = {{PERGAMON-ELSEVIER SCIENCE LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Escher, BI (Reprint Author), UFZ Helmholtz Ctr Environm Res, Permoserstr 15, D-04318 Leipzig, Germany.
Neale, Peta A., Griffith Univ, Australian Rivers Inst, Griffith Sch Environm, Southport, Qld 4222, Australia.
Neale, Peta A.; Escher, Beate I., Univ Queensland, Natl Res Ctr Environm Toxicol Entox, Brisbane, Qld 4108, Australia.
Altenburger, Rolf; Busch, Wibke; Schlichting, Rita; Escher, Beate I., UFZ Helmholtz Ctr Environm Res, Permoserstr 15, D-04318 Leipzig, Germany.
Ait-Aissa, Selim; Brion, Francois; Serra, Helene, Inst Natl Environm Ind & Risques INERIS, Unite Ecotoxicol, F-60550 Verneuil En Halatte, France.
Umbuzeiro, Gisela de Aragao; Morales, Daniel A., Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, SP, Brazil.
Denison, Michael S., Univ Calif Davis, Dept Environm Toxicol, Davis, CA 95616 USA.
Du Pasquier, David; Tindall, Andrew J., WatchFrog, Batiment Genavenir 3,1 Rue Pierre Fontaine, F-91000 Evry, France.
Hilscherova, Klara; Novak, Jiri, Masaryk Univ, Res Ctr Tox Cpds Environm RECETOX, Kamenice 753-5, Brno 62500, Czech Republic.
Hollert, Henner; Seiler, Thomas-Benjamin; Shao, Ying, Rhein Westfal TH Aachen, Inst Environm Res, Dept Ecosyst Anal, D-52074 Aachen, Germany.
Tollefsen, Knut Erik, Norwegian Inst Water Res NIVA, Gaustadalleen 21, N-0349 Oslo, Norway.
Williams, Timothy D., Univ Birmingham, Sch Biosci, Birmingham B15 2TT, W Midlands, England.
Escher, Beate I., Eberhard Karls Univ Tubingen, Ctr Appl Geosci, Environm Toxicol,

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D-72074 Tübingen, Germany.}},
DOI = {{10.1016/j.watres.2017.07.016}},
ISSN = {{0043-1354}},
Keywords = {{In vitro; Cell-based bioassay; In vivo; Fish embryo toxicity test;
  ToxCast; Mixture toxicity}},
Keywords-Plus = {{IN-VITRO BIOASSAYS; BASE-LINE TOXICITY; OXIDATIVE STRESS-RESPONSE;
  DISINFECTION BY-PRODUCTS; EFFECT-BASED TOOLS; WASTE-WATER;
  ESTROGEN-RECEPTOR; RISK-ASSESSMENT; TRIGGER VALUES; RECYCLED WATER}},
Research-Areas = {{Engineering; Environmental Sciences \& Ecology; Water Resources}},
Web-of-Science-Categories = {{Engineering, Environmental; Environmental Sciences;
  Water Resources}},
Author-Email = {{beate.escher@ufz.de}},
ResearcherID-Numbers = {{Busch, Wibke/I-9348-2012
  Tindall, Andrew/O-2947-2016
  AIT-AISSA, Selim/Q-8702-2018
  Seiler, Thomas-Benjamin/K-6294-2012
  Neale, Peta A/F-2167-2010
  Umbuzeiro, Gisela A./H-4603-2011
  BRION, Francois/Q-8713-2018
  }},
ORCID-Numbers = {{Busch, Wibke/0000-0002-5497-6266
  Tindall, Andrew/0000-0001-8119-0923
  AIT-AISSA, Selim/0000-0001-7817-1932
  Seiler, Thomas-Benjamin/0000-0001-8127-510X
  Neale, Peta A/0000-0002-4418-1654
  Umbuzeiro, Gisela A./0000-0002-8623-5200
  BRION, Francois/0000-0003-2341-4196
  Williams, Timothy/0000-0002-5857-3851
  Serra, Helene/0000-0002-5184-1403
  Novak, Jiri/0000-0002-4656-8406}},
Funding-Acknowledgement = {{European Union {{603437}}; National Health and Medical
  Research Council
  (NHMRC) - European Union Collaborative Research Grant {{APP1074775}};
  Fapesp {{2015/24758-5, 2013/16956-6}}; CSC}},
Funding-Text = {{The project SOLUTIONS is supported by the European Union Seventh
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  (UFZ), Ana Catarina Almeida (NIVA), Jose Zwarg (FT/UNICAMP), Leticia
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  assistance and Nils Klüber (UFZ) for helpful discussions.}},
Number-of-Cited-References = {{83}},
Times-Cited = {{39}},
Usage-Count-Last-180-days = {{20}},
Usage-Count-Since-2013 = {{88}},
Journal-ISO = {{Water Res.}},
Doc-Delivery-Number = {{FG3AZ}},
Unique-ID = {{ISI:000410010500071}},
ESI-Highly-Cited-Paper = {{Y}},
ESI-Hot-Paper = {{N}},
DA = {{2019-06-24}},
}

@article{ ISI:000418408700008,
Author = {da Rocha, Otidene R. S. and Dantas, Renato F. and do Nascimento Junior,
  Welenilton Jose and Fujiwara, Yuji and Menezes Bezerra Duarte, Marta
  Maria and da Silva, Josivan Pedro},
Title = {{Kinetic study and modelling of cephalixin removal from aqueous solution
  by advanced oxidation processes through artificial neural networks}},
Journal = {{DESALINATION AND WATER TREATMENT}},
Year = {{2017}},
Volume = {{92}},
Pages = {{72-79}},
Month = {{OCT}},

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Abstract = {{The degradation of the antibiotic cephalixin (CEX) was studied by UV direct photolysis and hydrogen peroxide combined with UVC and solar radiation. A factorial plan was used to evaluate the efficiency of the processes and the influence of variables. UVC direct photolysis had a minor contribution (12%) on CEX removal during the UV/H2O2 treatment. The best UV/H2O2 performance from the factorial plan was able to achieve a high degradation percentage for CEX and aromaticity (83.2% and 76.2%, respectively) in 60 min, while solar photolysis was not able to achieve high degradation percentage at the applied conditions. Statistical analyses pointed to the high statistical significance of the oxidant concentration for the process and the weak dependence of the other variables. The kinetic study demonstrated that the pseudo-first-order model was the more appropriate for both direct photolysis and UV/H2O2 treatments with rate constants of $k(\text{UVC}) = 0.0031 \text{ min}^{-1}$ and $k(\text{UV}/\text{H}_2\text{O}_2) = 0.0367 \text{ min}^{-1}$. The use of artificial neural network was proven to be efficient to predict CEX removal by photolysis and photochemical treatments from aqueous solutions.}},

Publisher = {{DESALINATION PUBL}},
Address = {{36 WALCOTT VALLEY DRIVE,, HOPKINTON, MA 01748 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{da Rocha, ORS (Reprint Author), Univ Fed Pernambuco, Dept Chem Engr, Artur De Sa S-N,Cidade Univ, Recife, PE, Brazil.
da Rocha, Otidene R. S.; do Nascimento Junior, Welenilton Jose; Fujiwara, Yuji; Menezes Bezerra Duarte, Marta Maria; da Silva, Josivan Pedro, Univ Fed Pernambuco, Dept Chem Engr, Artur De Sa S-N,Cidade Univ, Recife, PE, Brazil.
Dantas, Renato F., Univ Campinas UNICAMP, Sch Technol, Paschoal Marmo 1888, BR-13484332 Limeira, Brazil.}},
DOI = {{10.5004/dwt.2017.21438}},
ISSN = {{1944-3994}},
EISSN = {{1944-3986}},
Keywords = {{Advanced oxidation processes; Cephalixin; Photochemical oxidation; Photolysis; Artificial neural networks}},
Keywords-Plus = {{RESPONSE-SURFACE METHODOLOGY; ACTIVATED CARBON; SONOCHEMICAL DEGRADATION; RESISTANCE GENES; ANTIBIOTICS; WATER; PHARMACEUTICALS; UV; EFFLUENT; RISK}},
Research-Areas = {{Engineering; Water Resources}},
Web-of-Science-Categories = {{Engineering, Chemical; Water Resources}},
Author-Email = {{otidene@hotmail.com
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welenilton@gmail.com
yujif85@gmail.com
mmmbduarte@gmail.com
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ORCID-Numbers = {{Rocha, Otidene/0000-0001-5216-1752}},
Funding-Acknowledgement = {{Brazilian National Council for Scientific Development (CNPq); A Formula Manipulation Drugstore}},
Funding-Text = {{The authors are thankful for the financial and resourceful support by the Brazilian National Council for Scientific Development (CNPq) and A Formula Manipulation Drugstore.}},
Number-of-Cited-References = {{49}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{3}},
Usage-Count-Since-2013 = {{9}},
Journal-ISO = {{Desalin. Water Treat.}},
Doc-Delivery-Number = {{FQ5NV}},
Unique-ID = {{ISI:000418408700008}},
OA = {{Bronze}},
DA = {{2019-06-24}},
}

@article{ ISI:000412110800006,
Author = {de Macedo Adamov, Nadya Soares and do Nascimento, Nivaldo Ferreira and Silva Maciel, Elayna Cristina and Pereira-Santos, Matheus and Senhorini, Jose Augusto and Calado, Leonardo Luiz and Evangelista, Mariana Machado and Okada Nakaghi, Laura Satiko and Marin Guerrero, Alan Hertz and Fujimoto, Takafumi and Yasui, George Shigueki},
Title = {{Triploid Induction in the Yellowtail Tetra, *Astyanax altiparanae*, Using Temperature Shock: Tools for Conservation and Aquaculture}},
Journal = {{JOURNAL OF THE WORLD AQUACULTURE SOCIETY}},
Year = {{2017}},

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Volume = {{48}},
Number = {{5}},
Pages = {{741-750}},
Month = {{OCT}},
Abstract = {{Triploidization is an interesting tool to produce sterile fish. In the
yellowtail tetra, Astyanax altiparanae, this can be applied for
aquaculture and surrogate technologies. In this study, we compared the
efficacy of cold (2 C) or heat shock (38 C, 40 C, and 42 C) on triploid
induction in the yellowtail tetra. The eggs were treated with cold or
heat shock, 2 min postfertilization (30min in cold shock or 2min in heat
shock). Intact embryos served as the control group. Ploidy status was
confirmed by karyotyping, flow cytometry, and nuclear diameter of
erythrocytes. The hatching rate decreased after cold shock (12.69 +/-
15.76%) and heat shock at 42 C(0.35 +/- 0.69%) in comparison with the
control group (63.19 +/- 16.82%). At 38 C and 40 C, hatching rates
(61.29 +/- 17.73% and 61.75 +/- 22.1%, respectively) were not
decreased. Only one triploid arose at 38 C (1/80). At 40 C, a high
number of triploids arose (72/78). At 42 C, very few embryos developed
into the hatching stage. A large number of haploid individuals arose
after cold shock (61/75), with only one triploid. Our results indicate
that heat shocking of embryos at 40 C is optimum for triploid production
in the yellowtail tetra.}},
Publisher = {{WILEY}},
Address = {{111 RIVER ST, HOBOKEN 07030-5774, NJ USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Yasui, GS (Reprint Author), Univ Sao Paulo, Dept Vet Med, FZEA, Ave
Duque Caxias Norte 225, BR-13630080 Sao Paulo, Brazil.
Yasui, GS (Reprint Author), Chico Mendes Inst Biodivers Conservat, Lab Fish
Biotechnol, Natl Ctr Res \& Conservat Continental Fish, Rodovia Pref Euberto Nemesio
Pereira de Godoy, BR-13630970 Sao Paulo, Brazil.
de Macedo Adamov, Nadya Soares; Yasui, George Shigueki, Univ Sao Paulo, Dept Vet
Med, FZEA, Ave Duque Caxias Norte 225, BR-13630080 Sao Paulo, Brazil.
do Nascimento, Nivaldo Ferreira; Silva Maciel, Elayna Cristina; Senhorini, Jose
Augusto; Calado, Leonardo Luiz; Marin Guerrero, Alan Hertz; Yasui, George Shigueki,
Chico Mendes Inst Biodivers Conservat, Lab Fish Biotechnol, Natl Ctr Res \& Conservat
Continental Fish, Rodovia Pref Euberto Nemesio Pereira de Godoy, BR-13630970 Sao
Paulo, Brazil.
do Nascimento, Nivaldo Ferreira; Pereira-Santos, Matheus; Evangelista, Mariana
Machado; Okada Nakaghi, Laura Satiko, Sao Paulo State Univ, Aquaculture Ctr, Via
Acesso Prof Paulo Donato Castellane S-N, BR-14884900 Sao Paulo, Brazil.
Calado, Leonardo Luiz, Univ Campinas UNICAMP, Sch Technol, BR-13484332 Sao Paulo,
Brazil.
Fujimoto, Takafumi, Hokkaido Univ, Fac Fisheries Sci, 3-1-1 Minato Cho, Hakodate,
Hokkaido 0418611, Japan.}},
DOI = {{10.1111/jwas.12390}},
ISSN = {{0893-8849}},
EISSN = {{1749-7345}},
Keywords-Plus = {{NATURAL TRIPLOIDY; MISGURNUS-ANGUILLICAUDATUS; B-CHROMOSOMES;
RIVER-BASIN; FISH; CHARACIFORMES; CHARACIDAE; PISCES; BIOLOGY; LOACH}},
Research-Areas = {{Fisheries}},
Web-of-Science-Categories = {{Fisheries}},
Author-Email = {{yasui@usp.br}},
ResearcherID-Numbers = {{Yasui, George S/N-4060-2013
}},
ORCID-Numbers = {{Marin Guerrero, Alan Hertz/0000-0001-7842-133X}},
Funding-Acknowledgement = {{Sao Paulo Research Foundation (FAPESP) {{2010/17429-1,
2011/11664-1}}}},
Funding-Text = {{We are grateful to the Sao Paulo Research Foundation (FAPESP) for the
financial support of this research (Young Investigators Award Grant
\#2010/17429-1 and Young Researcher Scholarship \#2011/11664-1). We also
acknowledge CEPTA/ICMBio for generously providing the facilities and
experimental fish and Claire Riggs for the review of this manuscript.}},
Number-of-Cited-References = {{54}},
Times-Cited = {{4}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{6}},
Journal-ISO = {{J. World Aquacult. Soc.}},
Doc-Delivery-Number = {{FI6MO}},
Unique-ID = {{ISI:000412110800006}},
DA = {{2019-06-24}},
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@article{ ISI:000411122000001,
Author = {da Silva, Celmar Guimaraes and Medina, Bruno Figueiredo and da Silva,
Maressa Rodrigues and Kawakami, Willian Hitoshi and Naves Rocha, Miguel
Mechi},
Title = {{A fast feature vector approach for revealing simplex and
equi-correlation data patterns in reorderable matrices}},
Journal = {{INFORMATION VISUALIZATION}},
Year = {{2017}},
Volume = {{16}},
Number = {{4}},
Pages = {{261-274}},
Month = {{OCT}},
Abstract = {{Reorderable matrices may be used as support for tabular displays such as
heatmaps. Matrix reordering algorithms provide an initial permutation of
these matrices, which should help to reveal hidden patterns in the
dataset in the visual structure. Some of these algorithms directly
permute the data matrix, instead of its row- and column-proximity
matrices. We present a data matrix reordering method (feature
vector-based sort - FVS), which reorders a data matrix aiming to reveal
simplex and equi-correlation patterns. Our approach extracts feature
vectors from a data matrix and uses them to calculate row and column
permutations of the data matrix. We used FVS for reordering data
matrices of distinct real-world scenarios, in which it revealed those
patterns. Our experiments with synthetic matrices revealed that FVS is
faster than other known matrix-reordering algorithms and produces
results of approximately the same quality (in terms of stress function)
when these patterns are hidden in the data matrix. We also present some
real-world datasets reordered by our algorithm and discuss the patterns
that it uncovers.}},
Publisher = {{SAGE PUBLICATIONS LTD}},
Address = {{1 OLIVERS YARD, 55 CITY ROAD, LONDON EC1Y 1SP, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{da Silva, CG (Reprint Author), Univ Estadual Campinas, Sch Technol, R
Paschoal Marmo 1888, BR-13484332 Sao Paulo, Brazil.
da Silva, Celmar Guimaraes; Medina, Bruno Figueiredo; da Silva, Maressa Rodrigues;
Kawakami, Willian Hitoshi; Naves Rocha, Miguel Mechi, Univ Campinas Unicamp, Sch
Technol, Software Engn \& Informat Syst Lab SEIS, Sao Paulo, Brazil.}},
DOI = {{10.1177/1473871616666392}},
ISSN = {{1473-8716}},
EISSN = {{1473-8724}},
Keywords = {{Reorderable matrix; data canonical patterns; seriation}},
Keywords-Plus = {{ALGORITHM}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Software Engineering}},
Author-Email = {{celmar@ft.unicamp.br}},
Funding-Acknowledgement = {{Sao Paulo Research Foundation (FAPESP) {{2014/11186-0,
2015/00411-6,
2015/14854-7}}; National Council for Scientific and Technological
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Funding-Text = {{The author(s) disclosed receipt of the following financial support for
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was supported by the Sao Paulo Research Foundation (FAPESP) (grant
numbers \#2014/11186-0, \#2015/00411-6 and \#2015/14854-7), by National
Council for Scientific and Technological Development (CNPq) (grant
number 123354/2015-3) and also by CAPES.}},
Number-of-Cited-References = {{28}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{2}},
Journal-ISO = {{Inf. Vis.}},
Doc-Delivery-Number = {{FH4KG}},
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DA = {{2019-06-24}},
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@article{ ISI:000409091800006,
Author = {Belli, Roberto and Portugheis, Jaime and Runge, Cristhof},
Title = {{On Optimal Non-Equally Spaced M-PAM in Dimmable Visible Light
Communication}},
Journal = {{IEEE PHOTONICS TECHNOLOGY LETTERS}},
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Year = {{2017}},
Volume = {{29}},
Number = {{19}},
Pages = {{1619-1622}},
Month = {{OCT 1}},
Abstract = {{In this letter, channel capacity of dimmable visible light communication
systems with M-ary pulse amplitude modulation (M-PAM) channel input
alphabets is investigated. Mutual information is maximized considering
both the probability input distribution and the M-PAM levels
simultaneously. Schemes with non-equally spaced M-PAM levels are
obtained as a result of this maximization process and they lead to gains
in capacity when compared with previous schemes proposed in the
literature.}},
Publisher = {{IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC}},
Address = {{445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Belli, R (Reprint Author), Univ Estadual Campinas, Sch Technol,
BR-13484332 Limeira, SP, Brazil.
Belli, Roberto; Portugheis, Jaime; Runge, Cristhof, Univ Estadual Campinas, Sch
Technol, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1109/LPT.2017.2737597}},
ISSN = {{1041-1135}},
EISSN = {{1941-0174}},
Keywords = {{VLC systems; dimming; optical wireless communications; channel capacity}},
Keywords-Plus = {{CAPACITY ANALYSIS}},
Research-Areas = {{Engineering; Optics; Physics}},
Web-of-Science-Categories = {{Engineering, Electrical \& Electronic; Optics; Physics,
Applied}},
Author-Email = {{rbelli@gmail.com
jaime@ft.unicamp.br
cristjrr@ft.unicamp.br}},
ORCID-Numbers = {{Roosen Runge, Cristhof/0000-0002-6031-2941}},
Number-of-Cited-References = {{14}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{2}},
Usage-Count-Since-2013 = {{12}},
Journal-ISO = {{IEEE Photonics Technol. Lett.}},
Doc-Delivery-Number = {{FF6CS}},
Unique-ID = {{ISI:000409091800006}},
DA = {{2019-06-24}},
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@article{ ISI:000408183700054,
Author = {Angelin, Andressa F. and Cecche Lintz, Rosa C. and Gachet-Barbosa, Luisa
A. and Osorio, Wislei R.},
Title = {{The effects of porosity on mechanical behavior and water absorption of
an environmentally friendly cement mortar with recycled rubber}},
Journal = {{CONSTRUCTION AND BUILDING MATERIALS}},
Year = {{2017}},
Volume = {{151}},
Pages = {{534-545}},
Month = {{OCT 1}},
Abstract = {{The aim of this study is to analyze the effect of an environmentally
friendly tire rubber content on mechanical and porosity a high-early
strength (HES) cement mortar. These results were also associated with
two distinctive porous morphologies (spheroidal and irregular).
Specimens were produced using recycled tire waste rubber, which is
constituted by a mixture between spheroid and fiber-like rubber
particles. The use of a recycled rubber into a HES is scarce/absent in
literature. A percentage of 30 wt% of the fine tire rubber replaces the
natural sand as fine aggregate. The experimental results after 7 days
show the compressive and tensile flexure strengths, water absorption and
porosity. It is found that the rubber addition both the compressive and
flexural strengths have considerably decreased. Both the control and
rubberized mortars revealed irregular and spheroidal pores associated
with gel/space ratio and air entrapped, respectively. An ettringite
structure associated with gel/space ratio in a control mortar is
observed. Distinctive engineering applications can be used for the
rubberized mortar considering environmental, economical and lightweight
aspects. (C) 2017 Elsevier Ltd. All rights reserved.}},
Publisher = {{ELSEVIER SCI LTD}},

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Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Osorio, WR (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
Technol, BR-13484332 Limeira, SP, Brazil.
  Angelin, Andressa F.; Cecche Lintz, Rosa C.; Gachet-Barbosa, Luisa A.; Osorio,
Wislei R., Univ Estadual Campinas, UNICAMP, Sch Technol, BR-13484332 Limeira, SP,
Brazil.
  Osorio, Wislei R., Univ Estadual Campinas, UNICAMP, Res Grp Mfg Adv Mat CPMMA FCA,
Sch Appl Sci FCA, 1300 Pedro Zaccaria St, BR-13484350 Limeira, SP, Brazil.}},
DOI = {{10.1016/j.conbuildmat.2017.06.061}},
ISSN = {{0950-0618}},
EISSN = {{1879-0526}},
Keywords = {{Ceramic-matrix composites (CMCs); Recycling; Mechanical properties;
  Porosity; Waste rubber; Molding compounds}},
Keywords-Plus = {{HIGH PERFORMANCE CONCRETE; CALCIUM-SILICATE-HYDRATE; TYRE-RUBBER;
  TIRE-RUBBER; HIGH-VOLUME; FLY-ASH; STRENGTH; PARTICLES; DURABILITY;
  COMPOSITES}},
Research-Areas = {{Construction \& Building Technology; Engineering; Materials
Science}},
Web-of-Science-Categories = {{Construction \& Building Technology; Engineering,
Civil; Materials
  Science, Multidisciplinary}},
Author-Email = {{wislei.osorio@fca.unicamp.br}},
ResearcherID-Numbers = {{Gachet Barbosa, Luisa Andreia/R-9595-2018
  LINTZ, ROSA/T-3294-2018
  Osorio, Wislei R*/E-2585-2013
}},
ORCID-Numbers = {{Gachet Barbosa, Luisa Andreia/0000-0002-1661-2605
  Osorio, Wislei Riuper/0000-0002-2754-9584}},
Funding-Acknowledgement = {{FAEPEX/UNICAMP - Fundo de Apoio ao Ensino, a Pesquisa e
  Extensao,
  Universidade Estadual de Campinas; CNPq (The Brazilian Research Council)}},
Funding-Text = {{The authors acknowledge the financial support provided by FAEPEX/
  UNICAMP
  - Fundo de Apoio ao Ensino, a Pesquisa e Extensao, Universidade Estadual
  de Campinas, CNPq (The Brazilian Research Council).}},
Number-of-Cited-References = {{56}},
Times-Cited = {{8}},
Usage-Count-Last-180-days = {{4}},
Usage-Count-Since-2013 = {{39}},
Journal-ISO = {{Constr. Build. Mater.}},
Doc-Delivery-Number = {{FE4KV}},
Unique-ID = {{ISI:000408183700054}},
DA = {{2019-06-24}},
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@article{ ISI:000416492600018,
Author = {Montagner, Cassiana C. and Vidal, Cristiane and Acayaba, Raphael D.},
Title = {{EMERGING CONTAMINANTS IN AQUATIC MATRICES FROM BRAZIL: CURRENT SCENARIO
  AND ANALYTICAL, ECOTOXICOLOGICAL AND LEGISLATIONAL ASPECTS}},
Journal = {{QUIMICA NOVA}},
Year = {{2017}},
Volume = {{40}},
Number = {{9}},
Pages = {{1094-1110}},
Month = {{SEP}},
Abstract = {{Emerging contaminants occur in parts per trillion or less in aquatic
  matrices. The effects related to the exposure of aquatic biota and human
  to them have been identified for different compounds. The knowledge
  about the concentrations of the exposure is the first step to perform
  risk assessments. The present work describes a literature review about
  occurrence in Brazilian aquatic matrices, and a discussion about
  biological effects, legislation and analytical aspects involving the
  presence of emerging compounds. The review includes 58 papers published
  between 1997 and 2016, considering the occurrence of personal care and
  pharmaceutical compounds, illicit drugs, hormones, pesticides and some
  other endocrine disruptors compounds in the matrices sewage, surface,
  ground and drinking waters. The concentrations varied from ng L-1 to mu
  g L-1, depending on the region and the compound. However, the
  contamination scenario was aggravated by the combination of poor
  sanitation status - such as low investment in sewage treatment plants,
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which led to an expressive contamination of the receiving waters with sewage - and the current goods consumption level, which is similar to that of developed countries. These data provide a good insight into the particular levels of contamination and can be used both for further researches and decision making in the regulation area of public policy.}},
 Publisher = {{SOC BRASILEIRA QUIMICA}},
 Address = {{CAIXA POSTAL 26037, 05599-970 SAO PAULO, BRAZIL}},
 Type = {{Review}},
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 Affiliation = {{Montagner, CC (Reprint Author), Univ Estadual Campinas, Inst Quim, BR-13083970 Campinas, SP, Brazil.
 Montagner, Cassiana C.; Vidal, Cristiane, Univ Estadual Campinas, Inst Quim, BR-13083970 Campinas, SP, Brazil.
 Acayaba, Raphael D., Univ Estadual Campinas, Fac Tecnol, BR-13484332 Limeira, SP, Brazil.}},
 DOI = {{10.21577/0100-4042.20170091}},
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 Keywords = {{emerging contaminants; endocrine disruptors compounds; drinking water; surface water; wastewater}},
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 Research-Areas = {{Chemistry}},
 Web-of-Science-Categories = {{Chemistry, Multidisciplinary}},
 Author-Email = {{montagner@iqm.unicamp.br}},
 ResearcherID-Numbers = {{Montagner Raimundo, Cassiana/L-1198-2014
 Acayaba, Raphael/E-1923-2015
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 ORCID-Numbers = {{Acayaba, Raphael/0000-0002-3885-9385
 Montagner, Cassiana Carolina/0000-0002-6475-5969
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@article{ ISI:000414383200001,
 Author = {Frei, R. and Dossing, L. N. and Gaucher, C. and Boggiani, P. C. and Frei, K. M. and Arting, T. Bech and Crowe, S. A. and Freitas, B. T.},
 Title = {{Extensive oxidative weathering in the aftermath of a late Neoproterozoic glaciation - Evidence from trace element and chromium isotope records in the Urucum district (Jacadigo Group) and Puga iron formations (Mato Grosso do Sul, Brazil)}},
 Journal = {{GONDWANA RESEARCH}},
 Year = {{2017}},
 Volume = {{49}},
 Pages = {{1-20}},
 Month = {{SEP}},
 Abstract = {{The massive Fe and Mn deposits of the Urucum district (Banda Alta Formation) and the iron formations from Fazenda Sao Manoel (Puga Formation) in Mato Grosso do Sul, Brazil, are associated with glacialigenic deposits and represent the youngest and largest sedimentary Fe and associated Mn formation (IF;MnF) deposits of Cryogenian age in the world. The Urucum district IFs studied are predominantly composed of pure classical plane-parallel and stratified hematite-chert-iron - and intercalated manganese (cryptomelane) micro- and mesobands, whereas the IFs at Fazenda Sao Manoel are closely associated with diamictites and shales. Although the precise depositional age is unknown, maximum age constraints for the Puga IFs are defined by the youngest detrital zircon with an U-Pb age of 706 +/- 9 Ma (Babinski et al., 2013), a result which we here confirm by a U-Pb age of the youngest zircon of 695 +/- 17 Ma from within shaly beds in the Urucum district IF succession. Redox-sensitive trace element signatures and tendency to hump-shaped Rare Earth Element + Yttrium (REY) patterns with negative Ce- but

without Eu anomalies support the presence of an oxic surface water layer, fertilized by low temperature hydrothermal fluids injected from submarine thermal springs and/or, alternatively, by significant fresh water input directly derived from glacial meltdown. Strongly positively fractionated, authigenic chromium isotope signatures (average delta Cr-53 = 1.10 +/- 0.4 parts per thousand; n = 16; 2 sigma) prevailing throughout the entire stratigraphic section indicate that riverine supply of continentally-derived Cr, remained more or less constant throughout the glacial meltdown and IF depositional period. Cycling across a redoxcline and predominant deposition of the IF in anoxic deeper seawater of the Jacadigo basin is supported by the peculiar presence of subchondritic Y/Ho ratios, by decreased negative Ce anomalies and by shifts of LREE patterns towards higher values in the Urucum district IFs that are independent of detrital contamination. The strongly positively fractionated Cr isotope signatures measured in these iron formations are compatible with those from other iron formations and black shales deposited during the late Neoproterozoic and Precambrian-Cambrian transition worldwide and are in support of prevailing high atmospheric O₂ levels following the late Neoproterozoic glaciations that accompanied the evolution of macroscopic multicellular organisms. (C) 2017 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.}}

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Freitas, B. T., Univ Estadual Campinas, Fac Tecnol, R Paschoal Malmo,1888, BR-13484332 Limeira, Brazil.}},
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Keywords-Plus = {{RARE-EARTH-ELEMENTS; ARROYO DEL-SOLDADO; FERRUGINOUS CONDITIONS; MANGANESE FORMATIONS; ATMOSPHERIC OXYGEN; CORUMBA GROUPS; PARAGUAY BELT; GEOCHEMISTRY; SEAWATER; EVOLUTION}},
Research-Areas = {{Geology}},
Web-of-Science-Categories = {{Geosciences, Multidisciplinary}},
Author-Email = {{robertf@ign.ku.dk}},
ResearcherID-Numbers = {{Freitas, Bernardo Tavares/P-1864-2019
Frei, Robert/N-6798-2014
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ORCID-Numbers = {{Freitas, Bernardo Tavares/0000-0001-6239-0137
Frei, Robert/0000-0001-7708-9881
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Danish National Research Foundation's center of excellence NordCEE (DNRF) {[DNRF53]; CNPq (a research supporting foundation of Brazil) {[312293/2013-5]; FAPESP {[2014/01233-0]}}},
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Technology and Innovation grant number 11-103378 to RF and through the Danish National Research Foundation's center of excellence NordCEE (DNRF grant number DNRF53) is highly appreciated. We also are indebted to CNPq (a research supporting foundation of Brazil), project Proc 312293/2013-5 and to FAPESP through which we received funding under project Proc 2014/01233-0. We are thankful for the thorough, helpful and insightful review by D. Papineau which substantially improved our manuscript.}}

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Silva, E. L. and Varesche, M. B. A.},
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Title = {{Robustness and Microbial Diversity of a Fluidized Bed Reactor Employed
for the Removal and Degradation of an Anionic Surfactant from Laundry
Wastewater}},
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Journal = {{JOURNAL OF ENVIRONMENTAL ENGINEERING}},
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Year = {{2017}},
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Volume = {{143}},
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Abstract = {{A fluidized bed reactor (FBR) was employed to evaluate the removal and
degradation of linear alkylbenzene sulfonate (LAS) from laundry
wastewater without supplementary feeding. After immobilizing the biomass
on the support material, the reactor was operated in two stages: Stage
I, fed with a synthetic substrate, and Stage II, fed with laundry
wastewater with a LAS concentration generally reported as being process
disturbing in anaerobic systems to treat LAS (21.7 +/- 5.3 mg/L) and
sodium bicarbonate as a buffering agent. Despite the low chemical oxygen
demand (COD) in the influent during Stage II (74 +/- 26 mg/L), the
observed proportions of LAS (80 +/- 11%) and COD (91 +/- 9%) removed
were high. The microbiological analysis of samples collected from
different regions of the FBR during Stages I and II suggests that the
composition of the laundry wastewater may have also contributed to the
biomass differentiation and that the environmental conditions in the
different parts of the reactor affected the microbial composition. A
remarkable proportion of genera capable of degrading aromatic compounds,
including LAS, was observed in the upper compartments of the reactor,
which was related to a facultative environment. (C) 2017 American
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Silva, E. L., Univ Fed Sao Carlos, Dept Chem Engn, Rod Washington Luiz, Km 235, SP
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EISSN = {{1943-7870}},
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Keywords = {{Illumina sequencing; Effluent recirculation; Linear alkylbenzene
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Keywords-Plus = {{LINEAR ALKYL BENZENE SULFONATE; ALKYL BENZENE SULFONATES; DEGRADING
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Okada, Dagoberto/C-3461-2012}},
ORCID-Numbers = {{Delforno, Tiago/0000-0002-1705-0763
Okada, Dagoberto/0000-0003-1859-9851}},
Funding-Acknowledgement = {{Laboratorio de Processos Biologicos-LPB/EESC/USP; Sao
Paulo Research
Foundation (FAPESP) {{}}2015/02640-2}; Coordination for the Improvement
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Biologicos-LPB/EESC/USP, the Sao Paulo Research Foundation (FAPESP)
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Higher Level Education Personnel (CAPES) for their financial support.}},
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Author = {Warren, Lucas Verissimo and Quaglio, Fernanda and Simoes, Marcello
Guimaraes and Gaucher, Claudio and Riccomini, Claudio and Poire, Daniel
G. and Freitas, Bernardo Tavares and Boggiani, Paulo C. and Sial,
Alcides Nobrega},
Title = {{Cloudina-Corumbella-Namacalathus association from the Itapucumi Group,
Paraguay: Increasing ecosystem complexity and tiering at the end of the
Ediacaran}},
Journal = {{PRECAMBRIAN RESEARCH}},
Year = {{2017}},
Volume = {{298}},
Pages = {{79-87}},
Month = {{SEP}},
Abstract = {{The intriguing Ediacaran fossil Namacalathus is described from
limestones of the Tagatiya Guazu Formation, Itapucumi Group, Paraguay.
This is the fifth occurrence of the genus in the Ediacaran geological
record. The Paraguayan Namacalathus specimens are preserved as partially
complete spheroidal cups with an opening at the top and thin walled
stems. The remains of this soft-calcified globe-shaped organism occur as
sparse disarticulated parautochthonous fragments within bioclastic
deposits dominated by Cloudina shells with subordinate Corumbella
fragments. The co-occurrence of these three skeletal metazoan species in
the same environmental context attests that the diversity of the
Paraguayan accumulations is ecologically comparable to the typical
skeletal assemblage of the Nama Group. The discovery of new samples of
Namacalathus in the Itapucumi Group also indicates that this genus
presented a broader paleobiogeographic distribution than previously
thought and, in the same way as Cloudina, it represents a low latitude,
shallow water metazoan of the Ediacaran Gondwana. (C) 2017 Elsevier B.V.
All rights reserved.}},
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Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
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Affiliation = {{Warren, LV (Reprint Author), Univ Estadual Paulista, Inst Geociencias
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 Sial, Alcides Nobrega, Univ Fed Pernambuco, Dept Geol, NEG LABISE, Av Acad Helio Ramos, BR-7852 Recife, PE, Brazil.}},
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 Research-Areas = {{Geology}},
 Web-of-Science-Categories = {{Geosciences, Multidisciplinary}},
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 Freitas, Bernardo Tavares/P-1864-2019
 Riccomini, Claudio/G-1764-2010
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 ORCID-Numbers = {{Freitas, Bernardo Tavares/0000-0001-6239-0137
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 Title = {{Mental Models Analysis and Comparison Based on Fuzzy Rules: A Case Study of the Protests of June and July 2013 in Brazil}},
 Journal = {{IEEE TRANSACTIONS ON SYSTEMS MAN CYBERNETICS-SYSTEMS}},
 Year = {{2017}},
 Volume = {{47}},
 Number = {{8}},
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 Month = {{AUG}},
 Abstract = {{Collective decision processes involve a large number of decision makers, demanding the consensus of different points of view about problems of several knowledge areas. The analysis and comparison of these points of view can contribute to this consensus, but they depend on the representation of each decision maker's individual knowledge about the

problem. Mental models (MMs) are diagrammatic artifacts based on natural language which can be used to represent such knowledge. These models comprise logical cause-effect loops that are used to describe a problem as understood by each decision maker. This paper proposes an innovative tool based on a knowledge-based system of fuzzy rules which identifies MMs that best represent the consensus about the causes of a specific problem. Fuzzy rules were created, taking into account both, qualitative and quantitative variables. The tool was applied to the analysis and comparison of MMs of university students to describe the protests that occurred in Brazil between June and July 2013. A comparison of results using Pareto analysis indicated that the tool identifies those MMs that best indicate the probable causes of the protests. Index}},

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Garcia-Nunes, Pedro Ivo; Souza, Romulo M.; da Silva, Ana Estela A., Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, Brazil.}},
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Research-Areas = {{Automation \& Control Systems; Computer Science}},
Web-of-Science-Categories = {{Automation \& Control Systems; Computer Science, Cybernetics}},
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ResearcherID-Numbers = {{Nunes, Pedro Ivo Garcia/I-1928-2014}},
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Author = {da Silva, Celmar G. and Meidanis, Joao and Moura, Arnaldo V. and Souza, Maria Angelica and Viadanna, Jr., Paulo and de Oliveira, Marcello R. and de Oliveira, Mauricio R. and Jardim, Lidianne H. and Costa Lima, Gabriel A. and de Barros, Rafael S. V.},
Title = {{An improved visualization-based approach for project portfolio selection}},
Journal = {{COMPUTERS IN HUMAN BEHAVIOR}},
Year = {{2017}},
Volume = {{73}},
Pages = {{685-696}},
Month = {{AUG}},
Note = {{World Conference on Information Systems and Technologies (WorldCIST), Recife, BRAZIL, MAR 22-24, 2016}},
Abstract = {{We propose a 2-step interactive approach for solving a project portfolio selection problem as a single-criterium optimization problem. Our approach innovates by using two coordinated charts: an interactive project timeline with drag-and-drop functionalities for project reallocation in time; and an interactive cost and risk chart that combines line charts and bar charts in order to present multidimensional time-based datasets. We also use bar charts related to the allocation of man-hour resources. These functionalities enable users to refine the model that is fed into optimization software in order to achieve results that better correspond to their expectations. We discuss results of a heuristic-based usability evaluation of our prototype, its use in real

scenarios, and present preliminary positive feedback from users. (C)
2017 Elsevier Ltd. All rights reserved.}},
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Type = {{Article; Proceedings Paper}},
Language = {{English}},
Affiliation = {{da Silva, CG (Reprint Author), Univ Estadual Campinas, Sch Technol, R
Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
da Silva, Celmar G.; de Oliveira, Mauricio R.; Jardim, Lidianne H., Univ Estadual
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Meidanis, Joao; Moura, Arnaldo V., Univ Estadual Campinas, Inst Comp, Av Albert
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Meidanis, Joao; Souza, Maria Angelica; Viadanna, Paulo, Jr.; de Oliveira, Marcello
R., Scylla Bioinformat, Rua Francisco Otaviano 60,Sala 22, BR-13070056 Campinas, SP,
Brazil.
Costa Lima, Gabriel A., AREMAS, Rua Regente Feijo 121,Sala 92, Campinas, SP, Brazil.
de Barros, Rafael S. V., AES Tiete, Baum, SP, Brazil.}},
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Keywords = {{Information visualization; Interactive displays; Portfolio selection}},
Keywords-Plus = {{DECISION-ANALYSIS}},
Research-Areas = {{Psychology}},
Web-of-Science-Categories = {{Psychology, Multidisciplinary; Psychology,
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Author-Email = {{celmar@ft.unicamp.br}},
Funding-Acknowledgement = {{ANEEL; AES}},
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Author = {De Luca, Antonella and He, Xuexiang and Dionysiou, Dionysios D. and
Dantas, Renato F. and Esplugas, Santiago},
Title = {{Effects of bromide on the degradation of organic contaminants with UV
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Journal = {{CHEMICAL ENGINEERING JOURNAL}},
Year = {{2017}},
Volume = {{318}},
Pages = {{206-213}},
Month = {{JUN 15}},
Abstract = {{The effect of bromide on the degradation of organic contaminants by
advanced oxidation processes (AOPs), especially UV/persulfate (PS)/Fe²⁺,
was investigated in this study. The tested model organic compounds
included an active sunscreen ingredient benzophenone-4 (BZ4), the
pesticide atrazine (ATZ), the antibiotic ampicillin (AMP), benzene
derivatives nitrobenzene (NB) and nitrobenzoic acid (NBA). While most of
them have varied but comparable reactivities with hydroxyl radicals, NB
and NBA barely react with sulfate radicals. The destruction of these
compounds was affected to a different extent by the presence of Br⁻. ATZ
and AMP were the two compounds whose degradation was the most strongly
inhibited, followed by BZ4. On the other hand, direct photolysis,
photochemical degradation and mineralization of NB were enhanced in the
presence of Br⁻ and/or Cl⁻ ions. This study demonstrated the different
reactivity of organic compounds towards UV/PS/Fe²⁺ process in the
presence and absence of halides, providing useful information for water
decontamination. (C) 2016 Elsevier B.V. All rights reserved.}},
Publisher = {{ELSEVIER SCIENCE SA}},
Address = {{PO BOX 564, 1001 LAUSANNE, SWITZERLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{De Luca, A (Reprint Author), Univ Barcelona, Dept Chem Engn, Marti \&
Franques 1, E-08028 Barcelona, Spain.
De Luca, Antonella; Esplugas, Santiago, Univ Barcelona, Dept Chem Engn, Marti \&
Franques 1, E-08028 Barcelona, Spain.

He, Xuexiang; Dionysiou, Dionysios D., Univ Cincinnati, Environm Engrn \& Sci Program, Cincinnati, OH 45221 USA.
Dantas, Renato F., Univ Estadual Campinas, Sch Technol, Paschoal Marmo 1888, BR-13484332 Limeira, Brazil.}},
DOI = {{10.1016/j.cej.2016.06.066}},
ISSN = {{1385-8947}},
EISSN = {{1873-3212}},
Keywords = {{AOPs; UV light; Sulfate radicals; Water treatment; Bromide ions; Competition kinetics}},
Keywords-Plus = {{BETA-LACTAM ANTIBIOTICS; RADICAL-BASED OXIDATION; AQUEOUS-SOLUTION; RATE
CONSTANTS; DRINKING-WATER; PHOTOCHEMICAL DEGRADATION; EMERGING
CONTAMINANTS; HYDROXYL RADICALS; HYDROGEN-PEROXIDE; BROMATE FORMATION}},
Research-Areas = {{Engineering}},
Web-of-Science-Categories = {{Engineering, Environmental; Engineering, Chemical}},
Author-Email = {{antonelladeluca@ub.edu}},
ResearcherID-Numbers = {{Dionysiou, Dionysios D./K-1193-2019
Esplugas, Santiago/D-4652-2014}},
ORCID-Numbers = {{Dionysiou, Dionysios D./0000-0002-6974-9197
Esplugas, Santiago/0000-0002-3693-2948}},
Funding-Acknowledgement = {{Ministry of Science and Innovation of Spain {{
CTQ2011-26258,
CTQ2014-52607-R, CSD2007-00055}}; Spanish Ministry of Economy and
Competitiveness (FPI) {{BES-2012-053177}}; Cyprus Research Promotion
Foundation through Desmi - European Regional Development Fund; Republic
of Cyprus {{NEA YPiODeltaOMH/SigmaTPATH/0308/09}}}},
Funding-Text = {{The authors thank the Ministry of Science and Innovation of Spain
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CSD2007-00055) for their financial support. Authors are also grateful to
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TPATH/0308/09).}},
Number-of-Cited-References = {{59}},
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Usage-Count-Last-180-days = {{13}},
Usage-Count-Since-2013 = {{105}},
Journal-ISO = {{Chem. Eng. J.}},
Doc-Delivery-Number = {{ES9BT}},
Unique-ID = {{ISI:000399851600024}},
DA = {{2019-06-24}},
}

@article{ ISI:000405200600051,
Author = {Vida, Talita A. and Freitas, Emmanuelle S. and Cheung, Noe and Garcia,
Amauri and Osorio, Wislei R.},
Title = {{Electrochemical Corrosion Behavior of as-cast Zn-rich Zn-Mg Alloys in a
0.06M NaCl Solution}},
Journal = {{INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE}},
Year = {{2017}},
Volume = {{12}},
Number = {{6}},
Pages = {{5264-5283}},
Month = {{JUN}},
Abstract = {{The electrochemical corrosion behavior of as-cast samples of Zn- 1.2
wt.\% and Zn- 2.0 wt.\% Mg alloys, solidified under similar cooling
rates, is investigated in the present study. A stagnant and naturally
aerated 0.06 M NaCl solution at 25 degrees C was used in the corrosion
tests. In order to evaluate the corrosion resistance, electrochemical
impedance spectroscopy (EIS) plots, potentiodynamic polarization curves
and an equivalent circuit are used. It is found that the increase in the
alloy Mg content (from 1.2wt.\% to 2.0wt.\%) refines both the Zn-rich
dendritic matrix and the eutectic mixture and decreases the volume
fraction of the Zn-rich phase. Consequently, this is shown to affect the
cathode-to-anode area ratio, which decreases affecting the corrosion
behavior. The experimental corrosion parameters demonstrated that the Mg
content is associated with susceptibility to pitting corrosion.}},
Publisher = {{ESG}},
Address = {{BORIVOJA STEVANOVIĆA 25-7, BELGRADE, 11000, SERBIA}},

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Type = {{Article}},
Language = {{English}},
Affiliation = {{Osorio, WR (Reprint Author), Univ Estadual Campinas, Sch Appl Sci FCA,
Res Grp Mfg Adv Mat, UNICAMP, Limeira, SP, Brazil.
Osorio, WR (Reprint Author), Univ Estadual Campinas, Sch Technol, UNICAMP,
BR-13484332 Limeira, SP, Brazil.
Vida, Talita A.; Freitas, Emmanuelle S.; Cheung, Noe; Garcia, Amauri, Univ Estadual
Campinas, Dept Mfg \& Mat Engn, UNICAMP, BR-13083860 Campinas, SP, Brazil.
Osorio, Wislei R., Univ Estadual Campinas, Sch Appl Sci FCA, Res Grp Mfg Adv Mat,
UNICAMP, Limeira, SP, Brazil.
Osorio, Wislei R., Univ Estadual Campinas, Sch Technol, UNICAMP, BR-13484332
Limeira, SP, Brazil.}},
DOI = {{10.20964/2017.06.37}},
ISSN = {{1452-3981}},
Keywords = {{Zn-Mg alloys; solidification; microstructure; impedance; polarization}},
Keywords-Plus = {{AZ91D MAGNESIUM ALLOY; MECHANICAL-PROPERTIES; RESISTIVITY
DISTRIBUTIONS;
BIOABSORBABLE STENTS; INTERMETALLIC PHASES; CATHODIC ACTIVITY;
ALUMINUM-ALLOYS; MICROSTRUCTURE; ZINC; PARAMETERS}},
Research-Areas = {{Electrochemistry}},
Web-of-Science-Categories = {{Electrochemistry}},
Author-Email = {{wislei.osorio@fca.unicamp.br}},
ResearcherID-Numbers = {{Cheung, Noe/E-9806-2012
Garcia, Amauri/C-6916-2012
Vida, Talita A./L-9426-2013
Osorio, Wislei R*/E-2585-2013
Freitas, Emmanuelle/O-1833-2019
}},
ORCID-Numbers = {{Cheung, Noe/0000-0003-1120-8926
Garcia, Amauri/0000-0002-3834-3258
Freitas, Emmanuelle/0000-0002-6526-3878
Osorio, Wislei Riuper/0000-0002-2754-9584}},
Funding-Acknowledgement = {{FAEPEX-UNICAMP; CNPq - The Brazilian Research Council;
FAPESP- Sao Paulo
Research Foundation {{2013/23396-7, 2014/50502-5}}; CNPEM; LNNano}},
Funding-Text = {{The authors acknowledge the financial support provided by
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LNNano for the use of the X-Ray Diffraction (XRD) equipment.}},
Number-of-Cited-References = {{48}},
Times-Cited = {{3}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{8}},
Journal-ISO = {{Int. J. Electrochem. Sci.}},
Doc-Delivery-Number = {{FALLI}},
Unique-ID = {{ISI:000405200600051}},
OA = {{Bronze}},
DA = {{2019-06-24}},
}
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@article{ ISI:000399845800041,
Author = {Delforno, T. P. and Lacerda, Jr., G. V. and Sierra-Garcia, I. N. and
Okada, D. Y. and Macedo, T. Z. and Varesche, M. B. A. and Oliveira, V.
M.},
Title = {{Metagenomic analysis of the microbiome in three different bioreactor
configurations applied to commercial laundry wastewater treatment}},
Journal = {{SCIENCE OF THE TOTAL ENVIRONMENT}},
Year = {{2017}},
Volume = {{587}},
Pages = {{389-398}},
Month = {{JUN 1}},
Abstract = {{The taxonomic and functional diversity of three different biological
reactors (fluidized bed reactor, FBR; up-flow anaerobic sludge blanket
reactor, UASB; and expanded granular sludge bed reactor, EGSB) used for
commercial laundry wastewater treatment was investigated using
metagenome shotgun sequencing. Metagenomes were sequenced on the
Illumina Hiseq platform and were analyzed using MG-RAST, STAMP and PAST
software. The EGSB and UASB reactors were more closely related based on
taxonomic and functional profiles, likely due to similar granular sludge
and procedures adopted to ensure anaerobic conditions. The EGSB and UASB
reactors showed a predominance of methanogens and genes related to
methanogenesis, with a prevalence of the acetoclastic pathway, in
```

addition to the peripheral and central O-2-independent pathways for aromatic compound degradation. By contrast, FBR showed a dominance of aerobic microbiota and pathways for O-2-dependent aromatic compound degradation. Therefore, although the reactors showed similar surfactant removal levels, the microbial composition, functional diversity and aromatic compound degradation pathways were significantly distinct. (C) 2017 Elsevier B.V. All rights reserved.}},

Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Delforno, TP (Reprint Author), Campinas Univ, Microbial Resources Div, Res Ctr Chem Biol \& Agr CPQBA, UNICAMP, BR-13081970 Campinas, SP, Brazil.
Delforno, T. P.; Lacerda, G. V., Jr.; Sierra-Garcia, I. N.; Oliveira, V. M., Campinas Univ, Microbial Resources Div, Res Ctr Chem Biol \& Agr CPQBA, UNICAMP, BR-13081970 Campinas, SP, Brazil.
Okada, D. Y., Campinas Univ, UNICAMP, Div Technol Environm Sanitat, Sch Technol, BR-13484332 Limeira, SP, Brazil.
Macedo, T. Z.; Varesche, M. B. A., Univ Sao Paulo, Engrn Sch Sao Carlos, Lab Biol Proc, Dept Hydraul \& Sanitat, EESC, Campus 2, BR-13563120 Sao Carlos, SP, Brazil.}},
DOI = {{10.1016/j.scitotenv.2017.02.170}},
ISSN = {{0048-9697}},
EISSN = {{1879-1026}},
Keywords = {{Linear alkylbenzene sulfonate (LAS); Aromatic compound degradation pathways; Illumine sequencing, genetic potential}},
Keywords-Plus = {{LINEAR ALKYL BENZENE SULFONATE; FLUIDIZED-BED REACTOR; AROMATIC-HYDROCARBON DEGRADATION; ANIONIC SURFACTANT; ANAEROBIC DEGRADATION; PROCESS STABILITY; SUPPORT MATERIALS; UASB REACTORS; SP NOV.; SLUDGE}},
Research-Areas = {{Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Environmental Sciences}},
Author-Email = {{palladino@sc.usp.br
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ResearcherID-Numbers = {{Varesche, Maria Bernadete/K-6127-2012
Junior, Gileno V Lacerda/E-8321-2017
Okada, Dagoberto/C-3461-2012
Sierra-Garcia, Isabel Natalia/Y-7477-2018
Delforno, Tiago/D-8331-2012}},
ORCID-Numbers = {{Junior, Gileno V Lacerda/0000-0003-4493-0755
Okada, Dagoberto/0000-0003-1859-9851
Sierra-Garcia, Isabel Natalia/0000-0001-6373-2901
Delforno, Tiago/0000-0002-1705-0763}},
Funding-Acknowledgement = {{Fundacao de Amparo a Pesquisa do Estado de sao Paulo (FAPESP)
{{2014/16426-0}}},
Funding-Text = {{This study was funded by the Fundacao de Amparo a Pesquisa do Estado de
sao Paulo (FAPESP), Process no. 2014/16426-0.}},
Number-of-Cited-References = {{46}},
Times-Cited = {{7}},
Usage-Count-Last-180-days = {{4}},
Usage-Count-Since-2013 = {{52}},
Journal-ISO = {{Sci. Total Environ.}},
Doc-Delivery-Number = {{ES8ZN}},
Unique-ID = {{ISI:000399845800041}},
DA = {{2019-06-24}},
}

@article{ ISI:000401896000001,
Author = {Farias, Ricardo L. S. and Timteo, Varese S. and Avancini, Sidney S. and Pinto, Marcus B. and Krein, Gasto},
Title = {{Thermo-magnetic effects in quark matter: Nambu-Jona-Lasinio model constrained by lattice QCD}},
Journal = {{EUROPEAN PHYSICAL JOURNAL A}},
Year = {{2017}},
Volume = {{53}},
Number = {{5}},

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Month = {{MAY 19}},
Abstract = {{The phenomenon of inverse magnetic catalysis of chiral symmetry in QCD
predicted by lattice simulations can be reproduced within the
Nambu-Jona-Lasinio model if the coupling G of the model decreases with
the strength B of the magnetic field and temperature T. The
thermo-magnetic dependence of G(B, T) is obtained by fitting recent
lattice QCD predictions for the chiral transition order parameter.
Different thermodynamic quantities of magnetized quark matter evaluated
with G(B, T) are compared with the ones obtained at constant coupling,
G. The model with G(B, T) predicts a more dramatic chiral transition as
the field intensity increases. In addition, the pressure and
magnetization always increase with B for a given temperature. Being
parametrized by four magnetic-field-dependent coefficients and having a
rather simple exponential thermal dependence our accurate ansatz for the
coupling constant can be easily implemented to improve typical model
applications to magnetized quark matter.}},
Publisher = {{SPRINGER}},
Address = {{233 SPRING ST, NEW YORK, NY 10013 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Farias, RLS (Reprint Author), Univ Fed Santa Maria, Dept Fis,
BR-97105900 Santa Maria, RS, Brazil.
Farias, RLS (Reprint Author), Kent State Univ, Phys Dept, Kent, OH 44242 USA.
Farias, Ricardo L. S., Univ Fed Santa Maria, Dept Fis, BR-97105900 Santa Maria, RS,
Brazil.
Farias, Ricardo L. S., Kent State Univ, Phys Dept, Kent, OH 44242 USA.
Timteo, Varese S., Univ Estadual Campinas UNICAMP, Fac Technol, Grp Opt \&
Modelagem Numer GOMNI, BR-13484332 Limeira, SP, Brazil.
Avancini, Sidney S.; Pinto, Marcus B., Univ Fed Santa Catarina, Dept Fis,
BR-88040900 Florianopolis, SC, Brazil.
Krein, Gasto, Univ Estadual Paulista, Inst Fis Teor, Rua Dr Bento Teobaldo Ferraz
271,Bloco 2, Sao Paulo, SP, Brazil.}},
DOI = {{10.1140/epja/i2017-12320-8}},
Article-Number = {{101}},
ISSN = {{1434-6001}},
EISSN = {{1434-601X}},
Keywords-Plus = {{QUANTUM CHROMODYNAMICS; FIELD; CATALYSIS; CORE}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Nuclear; Physics, Particles \& Fields}},
Author-Email = {{ricardosonegofarias@gmail.com}},
ResearcherID-Numbers = {{Krein, Gastao/C-1204-2012
Pinto, Marcus Benghi/O-3487-2019
avancini, sidney/V-4953-2017
Pinto, Marcus/D-9598-2013
Farias, Ricardo L S/G-3896-2012}},
ORCID-Numbers = {{Krein, Gastao/0000-0003-1713-8578
Pinto, Marcus Benghi/0000-0002-6630-1653
Pinto, Marcus/0000-0002-6630-1653
Farias, Ricardo L S/0000-0003-4461-7494}},
Funding-Acknowledgement = {{CNPq {{[]475110/2013-7, 232766/2014-2, 308828/2013-5,
306195/2015-1,
307458/2013-0, 303592/2013-3, 305894/2009-9}}; FAPESP {{[]2013/01907-0,
2016/07061-3}}; FAEPEX {{[]3284/16}}}},
Funding-Text = {{We thank G. Endrodi for discussions and also for providing the lattice
data of the up and down quark condensates, and A. Ayala for useful
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to ES Fraga for useful comments. This work was supported by CNPq grants
475110/2013-7, 232766/2014-2, 308828/2013-5 (RLSF), 306195/2015-1 (VST),
307458/2013-0 (SSA), 303592/2013-3 (MBP), 305894/2009-9 (GK), FAPESP
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Research at Kent State University, where part of this work has been
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Number-of-Cited-References = {{75}},
Times-Cited = {{17}},
Usage-Count-Last-180-days = {{2}},
Usage-Count-Since-2013 = {{6}},
Journal-ISO = {{Eur. Phys. J. A}},
Doc-Delivery-Number = {{EV6QN}},
Unique-ID = {{ISI:000401896000001}},
DA = {{2019-06-24}},
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@article{ ISI:000399624000052,
Author = {Rosado, Lais Peixoto and Vitale, Pierluca and Pentead, Carmenlucia
Santos G. and Arena, Umberto},
Title = {{Life cycle assessment of natural and mixed recycled aggregate production
in Brazil}},
Journal = {{JOURNAL OF CLEANER PRODUCTION}},
Year = {{2017}},
Volume = {{151}},
Pages = {{634-642}},
Month = {{MAY 10}},
Abstract = {{The natural and mixed recycled aggregate production for use as road base
and subbase have been compared through an attributional life cycle
assessment. The primary data have been collected in a basalt natural
aggregate production facility and in a recycling facility of mixed
aggregate, both located in Southeast Brazil. The topic is important
since there is a local increasing demand for aggregate use in road
construction and there are no studies related to the environmental
aspects of the production of natural and mixed recycled aggregate, and
no suitable, site-specific data are available to develop a reliable life
cycle investigation. The potential environmental impacts related to the
two production processes have been estimated by using the Impact 2002+
methodology. The results show that the production of recycled aggregates
is preferable to that of natural materials for the impact categories of
`respiratory inorganics{}`, `terrestrial ecotoxicity{}`, `land
occupation{}`, `global warming{}` and `non-renewable energy{}`. A
specific sensitivity analysis suggests that the mixed recycled aggregate
is a better option for all the environmentally impact categories if the
distance of the recycling facility from the consumer is up to 20 tkm
longer than the distance of the natural aggregate production facility
from the consumer of this product. These results, and those of the
detailed life cycle inventory and impact assessment, may support the
decision making process in the same field as well as the development of
similar life cycle assessment studies, provided that both be
appropriately adapted to the specific conditions of the system under
analysis. (C) 2017 Elsevier Ltd. All rights reserved.}},
Publisher = {{ELSEVIER SCI LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Pentead, CSG (Reprint Author), Univ Estadual Campinas, Sch Technol,
Rua Paschoal Marino 1888, BR-13484332 Limeira, SP, Brazil.
Rosado, Lais Peixoto; Pentead, Carmenlucia Santos G., Univ Estadual Campinas, Sch
Technol, Rua Paschoal Marino 1888, BR-13484332 Limeira, SP, Brazil.
Vitale, Pierluca; Arena, Umberto, Univ Campania Luigi Vanvitelli, Dept Environm
Biol Pharmaceut Sci \& Technol, Via Vivaldi 43, I-81100 Caserta, Italy.}},
DOI = {{10.1016/j.jclepro.2017.03.068}},
ISSN = {{0959-6526}},
EISSN = {{1879-1786}},
Keywords = {{Recycled aggregate; Natural aggregate; Life cycle assessment;
Construction and demolition waste}},
Keywords-Plus = {{DEMOLITION WASTE MANAGEMENT; ENVIRONMENTAL-ANALYSIS; IMPACT
ASSESSMENT;
CONSTRUCTION; CONCRETE; LCA; PORTUGAL; SYSTEMS; CHINA; PLANT}},
Research-Areas = {{Science \& Technology - Other Topics; Engineering; Environmental
Sciences \& Ecology}},
Web-of-Science-Categories = {{Green \& Sustainable Science \& Technology;
Engineering, Environmental;
Environmental Sciences}},
Author-Email = {{carmenlucia@ft.unicamp.br}},
ORCID-Numbers = {{Peixoto Rosado, Lais/0000-0002-5978-8408
Pentead, Carmenlucia/0000-0001-5731-7947
Arena, Umberto/0000-0001-6635-2568}},
Funding-Acknowledgement = {{Coordination for the Improvement of Higher Education
Personnel;
Internationalization Program of the University of Campinas - Brazil
{{}}GR030/2014}},
Funding-Text = {{The authors wish to acknowledge the financial support from the
Coordination for the Improvement of Higher Education Personnel for
providing a PhD scholarship, and the Internationalization Program of the
University of Campinas - Brazil (Res. GR030/2014) for providing the
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```



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Pharmaceutical Science and Technologies of the University of Campania
`Luigi Vanvitelli{'}, Italy. Likewise, they are grateful to the CDW
recycling facility and to the natural aggregate facility for providing
the data that form large part of the inventory table.}},
Number-of-Cited-References = {{48}},
Times-Cited = {{23}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{17}},
Journal-ISO = {{J. Clean Prod.}},
Doc-Delivery-Number = {{ES5ZA}},
Unique-ID = {{ISI:000399624000052}},
DA = {{2019-06-24}},
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@article{ ISI:000396057300032,
Author = {Satizabal, Luz Myrian and Costa, Diego and Hainick, Guilherme Ottamr and
Moura, Diego Rodrigo and Bortolozo, Ausdinir Danilo and Osorio, Wislei
Riuper},
Title = {{Microstructural and Hardness Evaluations of a Centrifuged Sn-22Pb
Casting Alloy Compared with a Lead-Free SnAg Alloy}},
Journal = {{METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND
MATERIALS SCIENCE}},
Year = {{2017}},
Volume = {{48A}},
Number = {{4}},
Pages = {{1880-1892}},
Month = {{APR}},
Abstract = {{A great preoccupation with replacing the traditional Sn-Pb alloy with a
Pb-free alloy ({}green alloy{}) is recognized. There are industrial
sectors that demand metallurgical improvements to attain certain
unsoundness and adequate properties as a function of imposed operational
parameters. In this experimental investigation, two distinctive
centrifuged casting alloys (i.e., Sn-2 wt pct Ag and Sn-22 wt pct Pb)
are compared. It is found that centrifuged castings have similar
microstructure constituents, although distinctive cooling rates and
solute contents are considered. It is also found that Ag3Sn
intermetallic particles are responsible for attaining similar tensile
strength, since more dislocations between Ag3Sn particles and the
Sn-rich phase are provided. In order to replace the Sn-Pb alloys with a
successor alloy containing sustainability and environmental aspects
associated with castability and to guarantee the desired properties, it
seems that a green alloy (Pb free) with intermetallic particles finely
and homogeneously distributed provides an interesting benefit to various
industrial applications.}},
Publisher = {{SPRINGER}},
Address = {{233 SPRING ST, NEW YORK, NY 10013 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Osorio, WR (Reprint Author), Univ Campinas UNICAMP, Sch Appl Sci FCA,
Res Grp Mfg Adv Mat, BR-13484350 Limeira, SP, Brazil.
Satizabal, Luz Myrian; Costa, Diego, Univ Campinas UNICAMP, Sch Technol,
BR-13484332 Limeira, SP, Brazil.
Hainick, Guilherme Ottamr; Moura, Diego Rodrigo; Bortolozo, Ausdinir Danilo;
Osorio, Wislei Riuper, Univ Campinas UNICAMP, Sch Appl Sci FCA, Res Grp Mfg Adv Mat,
BR-13484350 Limeira, SP, Brazil.}},
DOI = {{10.1007/s11661-016-3945-1}},
ISSN = {{1073-5623}},
EISSN = {{1543-1940}},
Keywords-Plus = {{MECHANICAL-PROPERTIES; FREE SOLDER; ZN SOLDER; AG; BEHAVIOR; CU;
DEFORMATION; MORPHOLOGY; SUBSTRATE; SILVER}},
Research-Areas = {{Materials Science; Metallurgy \& Metallurgical Engineering}},
Web-of-Science-Categories = {{Materials Science, Multidisciplinary; Metallurgy \&
Metallurgical
Engineering}},
Author-Email = {{wislei.osorio@fca.unicamp.br}},
ResearcherID-Numbers = {{Osorio, Wislei R*/E-2585-2013
}},
ORCID-Numbers = {{Osorio, Wislei Riuper/0000-0002-2754-9584}},
Funding-Acknowledgement = {{FAEPEX-UNICAMP; CNPq (The Brazilian Research Council) {{}}
446797/2014-6}}},
Funding-Text = {{The authors acknowledge the financial support provided by FAEPEX-
UNICAMP
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and CNPq (The Brazilian Research Council, Grant No. 446797/2014-6). The
authors also recognize the contributions provided by Mr. Luiz Antonio
Garcia in metalography and tensile testings procedures.}},
Number-of-Cited-References = {{35}},
Times-Cited = {{7}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{4}},
Journal-ISO = {{Metall. Mater. Trans. A-Phys. Metall. Mater. Sci.}},
Doc-Delivery-Number = {{EN5PF}},
Unique-ID = {{ISI:000396057300032}},
DA = {{2019-06-24}},
}

@article{ ISI:000397906400006,
Author = {Bertini Junior, Joao Roberto and Nicoletti, Maria do Carmo},
Title = {{Enhancing classification performance using attribute-oriented
functionally expanded data}},
Journal = {{PATTERN RECOGNITION LETTERS}},
Year = {{2017}},
Volume = {{89}},
Pages = {{39-45}},
Month = {{APR 1}},
Abstract = {{There are many data pre-processing techniques that aim at enhancing the
quality of classifiers induced by machine learning algorithms.
Functional expansions (FE) are one of such techniques, which has been
originally proposed to aid neural network based classification. Despite
of being successfully employed, works reported in the literature use the
same functional expansion, with the same expansion size (ES), applied to
each attribute that describes the training data. In this paper it is
argued that FE and ES can be attribute-oriented and, by choosing the
most suitable FE-SE pair for each attribute, the input data
representation improves and, as a consequence, learning algorithms can
induce better classifiers. This paper proposes, as a pre-processing step
to learning algorithms, a method that uses a genetic algorithm for
searching for a suitable FE-SE pair for each data attribute, aiming at
producing functionally extended training data. Experimental results
using functionally expanded training sets, considering four
classification algorithms, KNN, CART, SVM and RBNN, have confirmed the
hypothesis; the proposed method for searching for FE-SE pairs through an
attribute-oriented fashion has yielded statistically significant better
results than learning from the original data or by considering the
result from the best FE-SE pair for all attributes. (C) 2017 Elsevier
B.V. All rights reserved.}},
Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Bertini, JR (Reprint Author), Univ Estadual Campinas, Sch Technol, Rua
Paschoal Marmo,1888 Jd Nova Italia, BR-13484332 Limeira, SP, Brazil.
Bertini Junior, Joao Roberto, Univ Estadual Campinas, Sch Technol, Rua Paschoal
Marmo,1888 Jd Nova Italia, BR-13484332 Limeira, SP, Brazil.
Nicoletti, Maria do Carmo, Univ Fed Sao Carlos, Dept Comp Sci, Rod Washington Luis
Km 235,POB 676, BR-13565905 Sao Carlos, SP, Brazil.
Nicoletti, Maria do Carmo, FACCAMP, R Guatemala 167, BR-13231230 Campo Limpo
Paulista, SP, Brazil.}},
DOI = {{10.1016/j.patrec.2017.02.003}},
ISSN = {{0167-8655}},
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Keywords = {{Improving classification performance; Functional expansion; Genetic
algorithm}},
Keywords-Plus = {{ARTIFICIAL NEURAL-NETWORK}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Artificial Intelligence}},
Author-Email = {{bertini@ft.unicamp.br}},
ResearcherID-Numbers = {{Junior, Joao Roberto Bertini/I-5568-2012}},
Funding-Acknowledgement = {{CAPES; CNPq}},
Funding-Text = {{The authors thank CAPES and CNPq for the research grant received.}},
Number-of-Cited-References = {{22}},
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Usage-Count-Last-180-days = {{2}},
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Journal-ISO = {{Pattern Recognit. Lett.}},
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Author = {Fagnani, Enelton and Guimaraes, Jose Roberto},
Title = {{Waste management plan for higher education institutions in developing
countries: The Continuous Improvement Cycle model}},
Journal = {{JOURNAL OF CLEANER PRODUCTION}},
Year = {{2017}},
Volume = {{147}},
Pages = {{108-118}},
Month = {{MAR 20}},
Abstract = {{Waste management in higher education institutions is generally a complex
and multidisciplinary activity, which demands experienced managers. This
work discusses the implementation of a Waste Management Plan based on
Continuous Improvement Cycle at higher education institutions in
developing countries. Proposed method is simpler than other iterative
techniques as life cycle assessment, providing a higher probability of
success for inexperienced managers, even in a scenario of financial
resources scarcity. The results show three different scenarios: before
implementation of the plan; after implementation of the plan; and after
waste minimization awareness campaign. Percentages of recyclable
material wasted were 60.0, 23.2, and 15.3, respectively. Paper was the
most important generated waste in terms of quantities, and the
percentages obtained were 50.5, 15.3, and 9.4, respectively. In
addition, chemical waste and construction waste stored over many years
could be managed. Environmental awareness aspects, difficulties found
and the respective solutions are discussed as well. Proposed methodology
is perfectly suitable for developing countries with high efficiency and
low cost, leading to greener universities. (C) 2017 Elsevier Ltd. All
rights reserved.}},
Publisher = {{ELSEVIER SCI LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Fagnani, E (Reprint Author), Univ Estadual Campinas, Sch Technol, Rua
Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Fagnani, Enelton, Univ Estadual Campinas, Sch Technol, Rua Paschoal Marmo 1888,
BR-13484332 Limeira, SP, Brazil.
Guimaraes, Jose Roberto, Univ Estadual Campinas, Sch Civil Engn Architecture \&
Urban Design, Rua Saturnino de Brito,224,POB 6143, BR-13083889 Campinas, SP, Brazil.}},
DOI = {{10.1016/j.jclepro.2017.01.080}},
ISSN = {{0959-6526}},
EISSN = {{1879-1786}},
Keywords = {{Selective waste collection; Chemical waste; Solid waste management;
Low-cost implementation; Environmental awareness}},
Keywords-Plus = {{SUSTAINABLE DEVELOPMENT; UNIVERSITIES; IMPLEMENTATION}},
Research-Areas = {{Science \& Technology - Other Topics; Engineering; Environmental
Sciences \& Ecology}},
Web-of-Science-Categories = {{Green \& Sustainable Science \& Technology;
Engineering, Environmental;
Environmental Sciences}},
Author-Email = {{enelton@ft.unicamp.br
jorober@fec.unicamp.br}},
ORCID-Numbers = {{Fagnani, Enelton/0000-0002-2409-5070}},
Number-of-Cited-References = {{31}},
Times-Cited = {{8}},
Usage-Count-Last-180-days = {{4}},
Usage-Count-Since-2013 = {{32}},
Journal-ISO = {{J. Clean Prod.}},
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DA = {{2019-06-24}},
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@article{ ISI:000396115200005,
Author = {Timoteo, V. S. and Ruiz Arriola, E. and Szpigel, S.},
Title = {{Phase Transition in the SRG Flow of Nuclear Interactions}},
Journal = {{FEW-BODY SYSTEMS}},
Year = {{2017}},
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Volume = {{58}},
 Number = {{2}},
 Month = {{MAR}},
 Note = {{23rd European Conference on Few-Body Problems in Physics, Aarhus, DENMARK, AUG 08-12, 2016}},
 Abstract = {{We use a chiral interaction at N3LO in the (1)S0 channel of the nucleon-nucleon interaction in order to investigate the on-shell transition along the similarity renormalization group flow towards the infrared limit. We find a crossover at a scale that depends on the number of grid points used to discretise the momentum space. One of the most appealing features of nature is universality. Some phenomena disguise themselves across many different areas where physical systems are described by sometimes unrelated theories or models. Yet they appear recurrently in some form. An excellent example is the phase transition resulting from a broken symmetry. It is observed in magnetism when the temperature of a spin chain in a two-dimensional Ising model crosses a critical value [1]. It appears in nuclear physics when observing rotational spectra of deformed nuclei [2] and it is also present in hadron physics when the coupling between quarks in a two-flavour NJL model exceeds a critical value [3]. In both magnetism and nuclear physics the phase transition results from the breaking of the rotational symmetry and the corresponding Goldstone bosons are spin waves and nuclear rotation. In hadron physics the phase transition results from the chiral symmetry breaking and the corresponding Goldstone boson is the pion. This phenomenon is shown in Fig. 1 for both two-dimensional Ising model (left) and two-flavour NJL model (right). In this work we report on a similar and remarkable phase transition observed in the similarity renormalization group flow, which is used to change and calibrate the resolution scale of nuclear interactions to their natural values in different applications. The evolution of an NN interaction with the SRG [4] is performed by numerically integrating the Wegner renormalization group flow equation for the potential matrix [GRAPHICS]},
 Publisher = {{SPRINGER WIEN}},
 Address = {{SACHSENPLATZ 4-6, PO BOX 89, A-1201 WIEN, AUSTRIA}},
 Type = {{Article; Proceedings Paper}},
 Language = {{English}},
 Affiliation = {{Timoteo, VS (Reprint Author), Univ Estadual Campinas UNICAMP, Fac Tecnol, BR-13484332 Limeira, SP, Brazil. Timoteo, V. S., Univ Estadual Campinas UNICAMP, Fac Tecnol, BR-13484332 Limeira, SP, Brazil. Ruiz Arriola, E., Univ Granada, Dept Fis Atom Mol \& Nucl, E-18071 Granada, Spain. Ruiz Arriola, E., Univ Granada, Inst Carlos Fis Teor \& Computac 1, E-18071 Granada, Spain. Szpigel, S., Univ Presbiteriana Mackenzie, Ctr Radioastron \& Astrofis, BR-01302907 Sao Paulo, SP, Brazil.}},
 DOI = {{10.1007/s00601-017-1223-4}},
 ISSN = {{0177-7963}},
 EISSN = {{1432-5411}},
 Keywords-Plus = {{MODEL}},
 Research-Areas = {{Physics}},
 Web-of-Science-Categories = {{Physics, Multidisciplinary}},
 Author-Email = {{varese@ft.unicamp.br}},
 ResearcherID-Numbers = {{Ruiz Arriola, Enrique/A-9388-2015 Szpigel, Sergio/F-5349-2012}},
 ORCID-Numbers = {{Ruiz Arriola, Enrique/0000-0002-9570-2552 Szpigel, Sergio/0000-0003-2529-2225}},
 Funding-Acknowledgement = {{Spanish Mineco [FIS2014-59386-P]; Junta de Andalucia [FQM225]; CNPq [306195/2015-1]; FAPESP [2016/07061-3, 2016/05554-2]; FAEPEX [3284/2016]}},
 Funding-Text = {{We would like to thank Spanish Mineco (FIS2014-59386-P), Junta de Andalucia (FQM225), CNPq (306195/2015-1), FAPESP (2016/07061-3 and 2016/05554-2) and FAEPEX (3284/2016).}},
 Number-of-Cited-References = {{10}},
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 Journal-ISO = {{Few-Body Syst.}},

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Unique-ID = {{ISI:000396115200005}},
DA = {{2019-06-24}},
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@article{ ISI:000395409800006,
Author = {de Souza, Diego C. and Coluci, Vitor R.},
Title = {{The motion of a ball moving down a circular path}},
Journal = {{AMERICAN JOURNAL OF PHYSICS}},
Year = {{2017}},
Volume = {{85}},
Number = {{2}},
Pages = {{124-129}},
Month = {{FEB}},
Abstract = {{The problem of a body slipping down a frictionless hemisphere is very
common in physics and engineering textbooks. In this type of problem,
students are normally asked to find the angle at which the body flies
off the surface. In this work, we have constructed an apparatus to
determine the angle at which a ball flies off a circular track, and to
study the motion of the ball (rolling and slipping) along the surface.
The apparatus is comprised of two parallel rails that form a quarter
circle. The angular position and velocity of a steel ball are measured
using a moveable arm equipped with a photodetector. Two methods are used
to determine the angle the ball loses contact with the track. Both
methods provide values in agreement with a model for rolling followed by
slipping. (C) 2017 American Association of Physics Teachers.}},
Publisher = {{AMER ASSOC PHYSICS TEACHERS}},
Address = {{ONE PHYSICS ELLIPSE, COLLEGE PARK, MD 20740-3845 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Coluci, VR (Reprint Author), Univ Estadual Campinas, Sch Technol,
BR-13484332 Limeira, SP, Brazil.
de Souza, Diego C.; Coluci, Vitor R., Univ Estadual Campinas, Sch Technol,
BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1119/1.4972177}},
ISSN = {{0002-9505}},
EISSN = {{1943-2909}},
Keywords-Plus = {{FRICTION; SPHERE; COEFFICIENT}},
Research-Areas = {{Education \& Educational Research; Physics}},
Web-of-Science-Categories = {{Education, Scientific Disciplines; Physics,
Multidisciplinary}},
Author-Email = {{vitor@ft.unicamp.br}},
ResearcherID-Numbers = {{Coluci, Vitor Rafael/E-1079-2012}},
ORCID-Numbers = {{Coluci, Vitor Rafael/0000-0001-5179-6182}},
Funding-Acknowledgement = {{SAE/UNICAMP; UNICAMP}},
Funding-Text = {{The authors thank Rodrigo L. Ximenez and Joao F. Viana for helping us
with the photodetector setup and with the electrical conductivity of the
circular track. The authors also thank Cesar D. Bazana from Pro-metal
Industrial Ltda for building the aluminum rails and Professor Ivan de
Oliveira for helpful discussions. D.C.S. acknowledges the scholarship
from the SAE/UNICAMP. The financial support from UNICAMP is also
acknowledged.}},
Number-of-Cited-References = {{13}},
Times-Cited = {{0}},
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Journal-ISO = {{Am. J. Phys.}},
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@inproceedings{ ISI:000427768604120,
Author = {Diorio, Rafael F. and Timoteo, Varese S.},
Editor = {{Chan, V and Dambrogio, A and Zacharewicz, G and Mustafee, N}},
Title = {{MULTIMEDIA CONTENT PREDICTION USING THE KALMAN FILTER}},
Booktitle = {{2017 WINTER SIMULATION CONFERENCE (WSC)}},
Series = {{Winter Simulation Conference Proceedings}},
Year = {{2017}},
Pages = {{4574-4575}},
Note = {{Winter Simulation Conference (WSC), Las Vegas, NV, DEC 03-06, 2017}},
Organization = {{AnyLogic Co; OLD DOMIN UNIV; IDEA FUS; Modelling Simulat \& Visualizat
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Engn; Simio; FlexSim; sas; Operat Res Soc, *Journal of Simulat*; Springer; Assoc Comp Machinery - Special Interest Grp Simulat; Amer Statist Assoc; Arbeitsgemeinschaft Simulat; Inst Elect \& Elect Engn, Syst Man \& Cybernet Soc; Inst Ind \& Syst Engineers; Inst Operat Res \& Management Sci - Simulat Soc; Natl Inst Standards \& Technol; Soc Modeling \& Simulat Int}},

Abstract = {{In this work, we explore a prediction method, based on the Kalman filter, for multimedia content delivery purposes. In summary, we predict the multimedia content based on their respective multimedia content identifier, such as by means unique identifiers in the network layer (using the DSCP field in an IP network, for example) or in the application layer (using application content tags, for example). A computational environment, simulating four multimedia services, is used to obtain experimental results. The obtained results show that the proposed method can be used to perform the multimedia content prediction based on their multimedia content identifiers. This approach is important to improve the multimedia content delivery and to increase the user-perceived Quality of Experience (QoE).}},

Publisher = {{IEEE}},

Address = {{345 E 47TH ST, NEW YORK, NY 10017 USA}},

Type = {{Proceedings Paper}},

Language = {{English}},

Affiliation = {{Diorio, RF (Reprint Author), Univ Estadual Campinas UNICAMP, Fac Tecnol, Grp Opt \& Modelagem Numer GOMNI, Rua Paschoal Marino 1888, BR-13484332 Limeira, SP, Brazil.
Diorio, Rafael F.; Timoteo, Varese S., Univ Estadual Campinas UNICAMP, Fac Tecnol, Grp Opt \& Modelagem Numer GOMNI, Rua Paschoal Marino 1888, BR-13484332 Limeira, SP, Brazil.}},

ISSN = {{0891-7736}},

ISBN = {{978-1-5386-3428-8}},

Research-Areas = {{Computer Science; Engineering}},

Web-of-Science-Categories = {{Computer Science, Theory \& Methods; Engineering, Electrical \& Electronic}},

Number-of-Cited-References = {{4}},

Times-Cited = {{0}},

Usage-Count-Last-180-days = {{0}},

Usage-Count-Since-2013 = {{0}},

Doc-Delivery-Number = {{BJ7WX}},

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@inproceedings{ ISI:000428685400029,
Author = {Bueno, Andres and Coelho, Guilherme Palermo and Bertini, Jr., Joao Roberto},
Book-Group-Author = {{IEEE}},
Title = {{Online Sequential Learning based on Extreme Learning Machines for Particulate Matter Forecasting}},
Booktitle = {{2017 6TH BRAZILIAN CONFERENCE ON INTELLIGENT SYSTEMS (BRACIS)}},
Year = {{2017}},
Pages = {{169-174}},
Note = {{6th Brazilian Conference on Intelligent Systems (BRACIS), Uberlandia, BRAZIL, OCT 02-05, 2017}},
Organization = {{Sociedade Brasileira Computacao; Brazilian Comp Soc; Univ Fed Uberlandia, Faculdade Computacao; CAPES; CNPq; Fapemig; NVIDIA; Banco Itau; Algar Telecom; Google; IBM Res; Neppo; SEBRAE; Click Performance; Sankhya}},
Abstract = {{Microscopically small solid particles and liquid droplets suspended in the air, known as particulate matter (PM), may significantly affect not only human health but also urban, natural and agricultural systems. Therefore, it is imperative to keep the concentration levels of these pollutants below harmful thresholds. Forecasting tools based on machine learning have been used to estimate the concentration of PM and other pollutants in the atmosphere. However, PM data are uninterruptedly collected over time, thus producing a stream of data whose distribution may evolve over time. As traditional machine learning techniques do not have mechanisms to handle changes on data distribution at running time, they usually present limited prediction accuracy when facing such scenario. The overall goal of this work is to evaluate whether online sequential learning can improve the estimation accuracy of PM forecasting. To do so, online and offline algorithms based on Extreme

Learning Machines (ELM) were compared, in order to evaluate their performance when applied to forecast hourly concentrations of PM. The experiments were performed using real-world data streams of PM concentration from different cities of the State of Sao Paulo, Brazil. The obtained results show not only that online sequential learning approaches lead to smaller mean squared errors but also that the stability of the results is enhanced when such approaches are combined in ensembles.}}

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Address = {{10662 LOS VAQUEROS CIRCLE, PO BOX 3014, LOS ALAMITOS, CA 90720-1264 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Bueno, A (Reprint Author), Univ Campinas Unicamp, Sch Technol FT, Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Bueno, Andres; Coelho, Guilherme Palermo; Bertini, Joao Roberto, Jr., Univ Campinas Unicamp, Sch Technol FT, Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1109/BRACIS.2017.25}},
ISBN = {{978-1-5386-2407-4}},
Keywords = {{Particulate Matter; Machine Learning; Extreme Learning Machines; Data Streams}},
Keywords-Plus = {{ENSEMBLE; MODELS}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Artificial Intelligence; Computer Science, Information Systems}},
Author-Email = {{andresbueno@gmail.com
guilherme@ft.unicamp.br
bertini@ft.unicamp.br}},
ResearcherID-Numbers = {{Junior, Joao Roberto Bertini/I-5568-2012
Coelho, Guilherme Palermo/E-8795-2012}},
ORCID-Numbers = {{Coelho, Guilherme Palermo/0000-0002-4641-0684}},
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Author = {Angelin, Andressa Fernanda and Cecche Lintz, Rosa Cristina and Gachet Barbosa, Luisa Andreia},
Title = {{Use of expanded clay and silica fume in improvement of mechanical, physical and thermal performances of structural lightweight concretes}},
Journal = {{MATERIA-RIO DE JANEIRO}},
Year = {{2017}},
Volume = {{22}},
Number = {{1}},
Abstract = {{The search for sustainable materials in civil construction, which presents a lower specific mass, better thermal performance and maintenance of mechanical resistance, represents a great challenge in the production and evaluation of structural lightweight concrete (SLC), which emerges as an alternative material to conventional concrete. In this study an investigation was carried out for the construction of concretes with high strength, low density and excellent thermal properties, in order to execute energy-efficient constructions. SLC were studied using two different granulometries of expanded clay (C-05 and C-15), where the coarse aggregate was replaced by C-15 at 0, 25, 50, 75 and 100%. To promote the maintenance of consistency and resistance, superplasticizer (SPA) and silica fume (SF) were used in the mixtures. Based on the methodology used, the concretes were physically and mechanically characterized, in accordance with current national and international standards. The density of the concretes, in the hardened state, ranged from 1,787 to 2,400 kg/m(3) and, for compressive strength, ranged from 26 to 53 MPa at 7 days of age. The thermal conductivity test, using the protected hot plate method, was performed according to EN 12667, where was observed a variation of 0.61 to 1.00 W/mK. Microstructural information of the interfacial transition zone (ITZ) between aggregate and cement matrix were obtained with the purpose of analyzing the relationship with mechanical resistance. The investigation revealed that, with the addition of expanded clay (C-05 and C-15) and SF
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    in the concretes, there was reduction of the density and the mechanical
    resistance, while the thermal characteristics were improved.}},
  Publisher = {{UNIV FED RIO DE JANEIRO, LAB HIDROGENIO}},
  Address = {{CIDADE UNIV, ILHA DO FUNDAO, BLOCO I 2000, S L I 146, RIO DE JANEIRO RJ,
    CEP21941-972, BRAZIL}},
  Type = {{Article}},
  Language = {{Portuguese}},
  Affiliation = {{Angelin, AF (Reprint Author), Univ Estadual Campinas, Fac Tecnol, Rua
    Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
    Angelin, Andressa Fernanda; Cecche Lintz, Rosa Cristina; Gachet Barbosa, Luisa
    Andreia, Univ Estadual Campinas, Fac Tecnol, Rua Paschoal Marmo 1888, BR-13484332
    Limeira, SP, Brazil.}},
  DOI = {{10.1590/S1517-707620170005.0276}},
  Article-Number = {{UNSP e-11940}},
  ISSN = {{1517-7076}},
  Keywords = {{alternative materials; structural lightweight concrete; density;
    mechanical strength; thermal conductivity}},
  Keywords-Plus = {{AGGREGATE CONCRETE; MICROSTRUCTURE; CEMENT; BRICK}},
  Research-Areas = {{Materials Science}},
  Web-of-Science-Categories = {{Materials Science, Multidisciplinary}},
  Author-Email = {{andressaangelin@yahoo.com.br
    rosacclintz@ft.unicamp.br
    gachet@ft.unicamp.br}},
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  Author = {Angelin, Andressa Fernanda and Cecche Lintz, Rosa Cristina and Gachet
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  Title = {{Use of expanded clay and silica fume for the improvement of mechanical,
    physical and thermal performances of structural lightweight concretes}},
  Journal = {{MATERIA-RIO DE JANEIRO}},
  Year = {{2017}},
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  Number = {{1}},
  Abstract = {{In this study an investigation was carried out for the execution of
    concretes with high strength, low density and excellent thermal
    properties, in order to execute energy-efficient constructions.
    Structural Lightweight Concretes were studied using two different
    granulometries of expanded clay (C-05 and C-15), where the coarse
    aggregate was replaced by 0, 25, 50, 75 and 100%. To promote the
    maintenance of consistency and resistance, superplasticizer and silica
    fume were used in the mixtures. Based on the methodology used, the
    concretes were physically and mechanically characterized, in accordance
    with current national and international standards. The density of the
    concretes, in the hardened state, ranged from 1,787 to 2,400 kg/m(3)
    and, for compressive strength, ranged from 26 to 53 MPa at 7 days of
    age. The thermal conductivity test, using the protected hot plate
    method, was performed according to EN 12667, where was observed a
    variation of 0.61 to 1.00 W/mK. Microstructural information of the
    interfacial transition zone between aggregate and cement matrix were
    obtained with the purpose of analyzing the relationship with mechanical
    resistance. The investigation revealed that, with the addition of
    expanded clay (C-05 and C-15) and silica fume in the concretes, there
    was reduction of the density and the mechanical resistance, while the
    thermal characteristics improved.}},
  Publisher = {{UNIV FED RIO DE JANEIRO, LAB HIDROGENIO}},
  Address = {{CIDADE UNIV, ILHA DO FUNDAO, BLOCO I 2000, S L I 146, RIO DE JANEIRO RJ,
    CEP21941-972, BRAZIL}},
  Type = {{Article}},
  Language = {{Portuguese}},
  Affiliation = {{Angelin, AF (Reprint Author), Univ Estadual Campinas, Fac Technol, Rua
    Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.

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  Andreia, Univ Estadual Campinas, Fac Technol, Rua Paschoal Marmo 1888, BR-13484332
  Limeira, SP, Brazil.}},
  DOI = {{10.1590/S1517-707620170005.0274}},
  Article-Number = {{UNSP e-11938}},
  ISSN = {{1517-7076}},
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  Research-Areas = {{Materials Science}},
  Web-of-Science-Categories = {{Materials Science, Multidisciplinary}},
  Author-Email = {{andressaangelin@yahoo.com.br
  rosacclintz@ft.unicamp.br
  gachet@ft.unicamp.br}},
  ResearcherID-Numbers = {{Gachet Barbosa, Luisa Andreia/R-9595-2018
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@incollection{ ISI:000414556600003,
  Author = {Umbuzeiro, Gisela De Aragao and Heringa, Minne and Zeiger, Errol},
  Editor = {{Reifferscheid, G and Buchinger, S}},
  Title = {{In Vitro Genotoxicity Testing: Significance and Use in Environmental
  Monitoring}},
  Booktitle = {{IN VITRO ENVIRONMENTAL TOXICOLOGY - CONCEPTS, APPLICATION AND
  ASSESSMENT}},
  Series = {{Advances in Biochemical Engineering-Biotechnology}},
  Year = {{2017}},
  Volume = {{157}},
  Pages = {{59-80}},
  Abstract = {{There is ongoing concern about the consequences of mutations in humans
  and biota arising from environmental exposures to industrial and other
  chemicals. Genetic toxicity tests have been used to analyze chemicals,
  foods, drugs, and environmental matrices such as air, water, soil, and
  wastewaters. This is because the mutagenicity of a substance is highly
  correlated with its carcinogenicity. However, no less important are the
  germ cell mutations, because the adverse outcome is related not only to
  an individual but also to population levels. For environmental analysis
  the most common choices are in vitro assays, and among them the most
  widely used is the Ames test (Salmonella/microsome assay). There are
  several protocols and methodological approaches to be applied when
  environmental samples are tested and these are discussed in this
  chapter, along with the meaning and relevance of the obtained responses.
  Two case studies illustrate the utility of in vitro mutagenicity tests
  such as the Ames test. It is clear that, although it is not possible to
  use the outcome of the test directly in risk assessment, the application
  of the assays provides a great opportunity to monitor the exposure of
  humans and biota to mutagenic substances for the purpose of reducing or
  quantifying that exposure.}},
  Publisher = {{SPRINGER INTERNATIONAL PUBLISHING AG}},
  Address = {{GEWERBESTRASSE 11, CHAM, CH-6330, SWITZERLAND}},
  Type = {{Article; Book Chapter}},
  Language = {{English}},
  Affiliation = {{Umbuzeiro, GD (Reprint Author), Univ Estadual Campinas, Sch Technol,
  Rua Dr Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
  Umbuzeiro, Gisela De Aragao, Univ Estadual Campinas, Sch Technol, Rua Dr Paschoal
  Marmo 1888, BR-13484332 Limeira, SP, Brazil.
  Heringa, Minne, Natl Inst Publ Hlth & Environm RIVM, POB 1, NL-3720 BA Bilthoven,
  Netherlands.
  Zeiger, Errol, Errol Zeiger Consulting, 800 Indian Springs Rd, Chapel Hill, NC
  27514 USA.}},
  DOI = {{10.1007/10_2015_5018}},
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ISSN = {{0724-6145}},
EISSN = {{1616-8542}},
ISBN = {{978-3-319-45908-0; 978-3-319-45906-6}},
Keywords = {{Ames test; Cancer; Environmental testing; Germ cell mutations;
  Mutagenicity}},
Keywords-Plus = {{DISINFECTION BY-PRODUCTS; PREDICTING RODENT CARCINOGENICITY;
  EFFECT-DIRECTED ANALYSIS; SALMONELLA MUTAGENICITY ASSAY; TOXICOLOGICAL
  CONCERN TTC; GENETIC TOXICITY TESTS; DRINKING-WATER; SAMPLE PREPARATION;
  DIESEL EXHAUST; TEST SYSTEM}},
Research-Areas = {{Biochemistry \& Molecular Biology; Environmental Sciences \&
  Ecology;
  Toxicology}},
Web-of-Science-Categories = {{Biochemical Research Methods; Environmental Sciences;
  Toxicology}},
Author-Email = {{giselau@ft.unicamp.br}},
ResearcherID-Numbers = {{Umbuzeiro, Gisela A./H-4603-2011}},
ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200}},
Number-of-Cited-References = {{93}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{6}},
Usage-Count-Since-2013 = {{12}},
Journal-ISO = {{Adv. Biochem. Eng. Biotechnol.}},
Doc-Delivery-Number = {{BI7PB}},
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DA = {{2019-06-24}},
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@article{ ISI:000399116000002,
  Author = {da Silva, Fabiana Maria and Vaz, Viviane Visnardi and Gachet Barbosa,
    Luisa Andrea and Cecche Lintz, Rosa Cristina},
  Title = {{Evaluation of mechanical strength of sustainable concrete paving blocks
    (SCPB)}},
  Journal = {{MATERIA-RIO DE JANEIRO}},
  Year = {{2017}},
  Volume = {{22}},
  Number = {{1}},
  Abstract = {{The waste tire is a material of difficult degradation, its inadequate
    accumulation or disposal cause serious environmental impacts. Stacked
    tires are subject to fires due to thermal capacity which have, besides
    being prone environments for proliferation of vectors transmitting
    diseases. The use of tire rubber waste in the production of paving
    blocks has been a viable alternative to environmentally proper disposal
    of this waste and to reduce the consumption of natural resources,
    contributing to sustainable construction. This work evaluates the
    behavior of the concrete with addition of tire rubber waste in the
    production of paving blocks. The fine aggregate was substituted by
    rubber waste in proportions of 2.5, 5.0, 7.5, 10, 20 and 50%. Portland
    cement, fine aggregate, coarse aggregate, rubber waste and superplastic
    additive were used in the concrete. Compression strength tests were
    performed in interlocking floor parts at 7 and 28 days. The graphical
    analysis was using values of resistance and rubber content, and the
    results showed that for a given range of proportion of substitution of
    fine aggregate by rubber waste, there was an improvement in the
    compression strength of concrete paving blocks, and with substitution of
    up to 10% of sand by rubber waste is possible to use this concrete to
    produce interlocking floor for heavy traffic, according to the
    recommendations of the Brazilian standard.}},
  Publisher = {{UNIV FED RIO DE JANEIRO, LAB HIDROGENIO}},
  Address = {{CIDADE UNIV, ILHA DO FUNDÃO, BLOCO I 2000, S L I 146, RIO DE JANEIRO RJ,
    CEP21941-972, BRAZIL}},
  Type = {{Article}},
  Language = {{Portuguese}},
  Affiliation = {{da Silva, FM (Reprint Author), Univ Estadual Campinas, Fac Tecnol, Rua
    Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
    da Silva, Fabiana Maria; Vaz, Viviane Visnardi; Gachet Barbosa, Luisa Andrea;
    Cecche Lintz, Rosa Cristina, Univ Estadual Campinas, Fac Tecnol, Rua Paschoal Marmo
    1888, BR-13484332 Limeira, SP, Brazil.}},
  DOI = {{10.1590/S1517-707620170001.0110}},
  Article-Number = {{UNSP e11778}},
  ISSN = {{1517-7076}},
  Keywords = {{Alternative materials; Construction materials; paver interlocked with
    rubber}},
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Research-Areas = {{Materials Science}},
Web-of-Science-Categories = {{Materials Science, Multidisciplinary}},
Author-Email = {{fabiana.silva@pos.ft.unicamp.br
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rosacclintz@ft.unicamp.br}},
ResearcherID-Numbers = {{Gachet Barbosa, Luisa Andreia/R-9595-2018
LINTZ, ROSA/T-3294-2018}},
ORCID-Numbers = {{Gachet Barbosa, Luisa Andreia/0000-0002-1661-2605
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Number-of-Cited-References = {{13}},
Times-Cited = {{0}},
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Usage-Count-Since-2013 = {{17}},
Journal-ISO = {{Materia}},
Doc-Delivery-Number = {{ER9AU}},
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OA = {{DOAJ Gold}},
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Author = {dos Santos, Tuane Cristina and Zocolo, Guilherme Juliao and Morales,
Daniel Alexandre and Umbuzeiro, Gisela de Aragao and Boldrin Zanoni,
Maria Valnice},
Title = {{Assessment of the breakdown products of solar/UV induced photolytic
degradation of food dye tartrazine (vol 68, pg 307, 2014)}},
Journal = {{FOOD AND CHEMICAL TOXICOLOGY}},
Year = {{2017}},
Volume = {{99}},
Pages = {{241}},
Month = {{JAN}},
Publisher = {{PERGAMON-ELSEVIER SCIENCE LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND}},
Type = {{Correction}},
Language = {{English}},
Affiliation = {{dos Santos, TC (Reprint Author), Unesp, Inst Chem, Dept Analyt Chem,
Rua Francisco Degni 55, BR-14800900 Araraquara, Brazil.
dos Santos, Tuane Cristina; Zocolo, Guilherme Juliao; Boldrin Zanoni, Maria
Valnice, Unesp, Inst Chem, Dept Analyt Chem, Rua Francisco Degni 55, BR-14800900
Araraquara, Brazil.
Morales, Daniel Alexandre; Umbuzeiro, Gisela de Aragao, Univ Estadual Campinas,
Inst Technol, Rua Paschoal Marmo 1888, BR-13484332 Limeira, Brazil.}},
DOI = {{10.1016/j.fct.2016.11.026}},
ISSN = {{0278-6915}},
EISSN = {{1873-6351}},
Research-Areas = {{Food Science & Technology; Toxicology}},
Web-of-Science-Categories = {{Food Science & Technology; Toxicology}},
Author-Email = {{Snts.tuane@gmail.com}},
ResearcherID-Numbers = {{boldrin zanoni, maria valnice/D-4251-2013
Umbuzeiro, Gisela A./H-4603-2011}},
ORCID-Numbers = {{boldrin zanoni, maria valnice/0000-0002-2296-1393
Umbuzeiro, Gisela A./0000-0002-8623-5200}},
Number-of-Cited-References = {{1}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{12}},
Journal-ISO = {{Food Chem. Toxicol.}},
Doc-Delivery-Number = {{EI8WV}},
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DA = {{2019-06-24}},
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@article{ ISI:000390251700007,
Author = {Bertini Junior, Joao Roberto and Nicoletti, Maria do Carmo and Zhao,
Liang},
Title = {{Attribute-based Decision Graphs: A framework for multiclass data
classification}},
Journal = {{NEURAL NETWORKS}},
Year = {{2017}},
Volume = {{85}},
Pages = {{69-84}},
}
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Month = {{JAN}},
Abstract = {{Graph-based algorithms have been successfully applied in machine
learning and data mining tasks. A simple but, widely used, approach to
build graphs from vector-based data is to consider each data instance as
a vertex and connecting pairs of it using a similarity measure. Although
this abstraction presents some advantages, such as arbitrary shape
representation of the original data, it is still tied to some drawbacks,
for example, it is dependent on the choice of a pre-defined distance
metric and is biased by the local information among data instances.
Aiming at exploring alternative ways to build graphs from data, this
paper proposes an algorithm for constructing a new type of graph, called
Attribute-based Decision Graph - AbDG. Given a vector-based data set, an
AbDG is built by partitioning each data attribute range into disjoint
intervals and representing each interval as a vertex. The edges are then
established between vertices from different attributes according to a
pre-defined pattern. Classification is performed through a matching
process among the attribute values of the new instance and AbDG.
Moreover, AbDG provides an inner mechanism to handle missing attribute
values, which contributes for expanding its applicability. Results of
classification tasks have shown that AbDG is a competitive approach when
compared to well-known multiclass algorithms. The main contribution of
the proposed framework is the combination of the advantages of
attribute-based and graph-based techniques to perform robust pattern
matching data classification, while permitting the analysis the input
data considering only a subset of its attributes. (C) 2016 Elsevier Ltd.
All rights reserved.}},
Publisher = {{PERGAMON-ELSEVIER SCIENCE LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Bertini, JR (Reprint Author), Univ Estadual Campinas, Sch Technol, R
Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Bertini Junior, Joao Roberto; Nicoletti, Maria do Carmo, Univ Estadual Campinas,
Sch Technol, R Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Nicoletti, Maria do Carmo, FACCAMP, R Guatemala 167, BR-13231230 Campo Limpo
Paulista, SP, Brazil.
Zhao, Liang, Univ Sao Paulo, Sch Philosophy Sci \& Literature Ribeirao Preto, Dept
Comp Sci \& Math, Ave Bandeirantes 3900, BR-14040901 Ribeirao Preto, SP, Brazil.}},
DOI = {{10.1016/j.neunet.2016.09.008}},
ISSN = {{0893-6080}},
EISSN = {{1879-2782}},
Keywords = {{Data-graph construction; Graph-based classification; Multiclass
classification; Attribute-based Decision Graphs; Missing attribute
values}},
Keywords-Plus = {{DIMENSIONALITY REDUCTION; MISSING-DATA; CONSTRUCTION; IMPUTATION;
NETWORK; TREES}},
Research-Areas = {{Computer Science; Neurosciences \& Neurology}},
Web-of-Science-Categories = {{Computer Science, Artificial Intelligence;
Neurosciences}},
Author-Email = {{bertini@ft.unicamp.br
caro@dc.ufscar.br
zhao@usp.br}},
ResearcherID-Numbers = {{Junior, Joao Roberto Bertini/I-5568-2012
Cepid, CeMEAI/J-2417-2015
Zhao, Liang/D-5131-2011}},
ORCID-Numbers = {{Zhao, Liang/0000-0002-1502-6604}},
Funding-Acknowledgement = {{FAPESP {[}2012/00544-8]; CNPq {[}302754/2015-6,
303012/2015-3]}},
Funding-Text = {{This work is supported in part by the Brazilian agencies FAPESP Grant
Number: 2012/00544-8 and CNPq Grant Numbers: 302754/2015-6 and
303012/2015-3.}},
Number-of-Cited-References = {{52}},
Times-Cited = {{1}},
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Journal-ISO = {{Neural Netw.}},
Doc-Delivery-Number = {{EF3VA}},
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DA = {{2019-06-24}},
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@article{ ISI:000390373400131,
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Author = {Lopez-Doval, Julio C. and Montagner, Cassiana C. and de Albuquerque, Anjaina Fernandes and Moschini-Carlos, Viviane and Umbuzeiro, Gisela and Pompeo, Marcelo},
Title = {{Nutrients, emerging pollutants and pesticides in a tropical urban reservoir: Spatial distributions and risk assessment}},
Journal = {{SCIENCE OF THE TOTAL ENVIRONMENT}},
Year = {{2017}},
Volume = {{575}},
Pages = {{1307-1324}},
Month = {{JAN 1}},
Abstract = {{Reservoirs located in urban areas suffer specific pressures related to human activities. Their monitoring, management, and protection requirements differ from reservoirs situated in non-urbanized areas. The objectives of this study were: (a) to determine the concentrations of select pesticides and emerging pollutants (EPs) present in an urban reservoir; (b) to describe their possible spatial distributions; and (c) to quantify the risks for aquatic life and safeguard drinking water supplies. For this purpose, the Guarapiranga reservoir was studied as an example of a multi-stressed urban reservoir in a tropical region. A total of 31 organic compounds (including pesticides, illicit drugs, pharmaceuticals, and endocrine disruptors) were analyzed twice over a period of one year, together with classical indicators of water quality. The physical and chemical data were treated using principal component analysis (PCA) to identify possible temporal or spatial patterns. Risk assessment was performed for biota and drinking water use, comparing maximum environmental concentrations (MECs) with the predicted no-effect concentrations (PNECs) or drinking water quality criteria (DWC), respectively. The results demonstrated the presence of pesticides and EPs, as well as pollution by high levels of nutrients and Chlorophyll a (Chl. a), during the study period. The nutrients and Trophic State Index (TSI) showed gradients in the reservoir and regional distributions, while the pesticides and EPs only clearly showed this pattern in the dry season. The concentrations and distributions of the pesticides and EPs therefore showed seasonality. These findings suggested that the two groups of pollutants (EPs+ pesticides and nutrients) possessed different sources and behavior and were not always correlated in the reservoir studied. In the studied period, no risk was observed in raw water for drinking water use, but carbendazim, imidacloprid, and BPA showed risks for the biota in the reservoir. (C) 2016 Elsevier B.V. All rights reserved.}},
Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Lopez-Doval, JC (Reprint Author), Univ Sao Paulo, Inst Biosci, Dept Ecol, Rua MataoTravessa 14 321, BR-05508090 Butanta, SP, Brazil.
Lopez-Doval, Julio C.; Pompeo, Marcelo, Univ Sao Paulo, Inst Biosci, Dept Ecol, Rua MataoTravessa 14 321, BR-05508090 Butanta, SP, Brazil.
Lopez-Doval, Julio C., Univ Barcelona, Dept Evolutionary Biol Ecol & Environm Sci, Avinguda Diagonal 643, E-08028 Barcelona, Spain.
Montagner, Cassiana C., Univ Estadual Campinas, Inst Chem, POB 6154, BR-13084971 Campinas, SP, Brazil.
de Albuquerque, Anjaina Fernandes, Univ Estadual Campinas, Sch Technol, Rua Paschoal Marmo 1888, BR-13484332 Limeira, Brazil.
Moschini-Carlos, Viviane, Sao Paulo State Univ UNESP, Environm Sci Program, Ave Tres Marco 511, BR-18087180 Sorocaba, SP, Brazil.}},
DOI = {{10.1016/j.scitotenv.2016.09.210}},
ISSN = {{0048-9697}},
EISSN = {{1879-1026}},
Keywords = {{Urban reservoir; Tropical region; Emerging pollutants; Risk assessment; Chemical quality}},
Keywords-Plus = {{SAO-PAULO STATE; FRESH-WATER; ORGANIC CONTAMINANTS; ILLICIT DRUGS; GUARAPIRANGA RESERVOIR; MEDITERRANEAN RIVER; CHEMICAL-POLLUTANTS; DRINKING-WATER; SURFACE WATERS; GUADIANA BASIN}},
Research-Areas = {{Environmental Sciences & Ecology}},
Web-of-Science-Categories = {{Environmental Sciences}},
Author-Email = {{jclopezdoval@usp.br}},
ResearcherID-Numbers = {{Umbuzeiro, Gisela A./H-4603-2011
Fernandes de Albuquerque, Anjaina/G-6841-2016
Montagner Raimundo, Cassiana/L-1198-2014
Moschini, Viviane Moschini Carlos/O-3996-2019
Pompeo, Marcelo/F-8795-2019}}

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ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200
Fernandes de Albuquerque, Anjaina/0000-0003-3028-0288
Moschini, Viviane Moschini Carlos/0000-0002-5832-912X
Lopez-Doval, Julio C./0000-0002-0090-8532
Montagner, Cassiana Carolina/0000-0002-6475-5969}},
Funding-Acknowledgement = {{Sao Paulo State Research Foundation (FAPESP) {{
2012/16420-6,
2012/11890-4, 2014/22581-0, 2014/24740-6}}}},
Funding-Text = {{This research was funded by the Sao Paulo State Research Foundation
(FAPESP, projects 2012/16420-6, 2012/11890-4, 2014/22581-0, and
2014/24740-6). Special thanks to Philippe Riskalla Leal, Bruno De Paes,
Geison Castro, Sheila Cardoso-Silva and Frederico Beghelli who
collaborated in sampling campaigns and sample analysis. Thanks to three
anonymous reviewers who improved this article with their suggestions and
comments.}},
Number-of-Cited-References = {{142}},
Times-Cited = {{18}},
Usage-Count-Last-180-days = {{3}},
Usage-Count-Since-2013 = {{57}},
Journal-ISO = {{Sci. Total Environ.}},
Doc-Delivery-Number = {{EF5MD}},
Unique-ID = {{ISI:000390373400131}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000463335100048,
Author = {Duarte, Kaue T. N. and de Carvalho, Marco A. G. and Martins, Paulo S.},
Editor = {{BlancTalon, J and Penne, R and Philips, W and Popescu, D and Scheunders,
P}},
Title = {{Adding GLCM Texture Analysis to a Combined Watershed Transform and Graph
Cut Model for Image Segmentation}},
Booktitle = {{ADVANCED CONCEPTS FOR INTELLIGENT VISION SYSTEMS (ACIVS 2017)}},
Series = {{Lecture Notes in Computer Science}},
Year = {{2017}},
Volume = {{10617}},
Pages = {{569-580}},
Note = {{18th International Conference on Advanced Concepts for Intelligent
Vision Systems (ACIVS), Antwerp, BELGIUM, SEP 18-21, 2017}},
Organization = {{Antwerp Univ; Commonwealth Sci \& Ind Res Org; Ghent Univ}},
Abstract = {{Texture analysis is an important step in pattern recognition, image
processing and computer vision systems. This work proposes an
unsupervised approach to segment digital images combining the Watershed
Transform and Normalized Cut in graphs (NCut) using texture information
obtained from the Gray-Level Co-occurrence Matrix (GLCM). We corroborate
the enhancement of image segmentation by means of the addition of
texture analysis through several experiments carried out using the
BSDS500 Berkeley dataset. For example, an improvement of 7\% and 12\%
was found in relation to the Combined Watershed+NCut and Quadtree
techniques, respectively. The overall performance of the proposed
approach was indicated by the F-Measure through comparisons against
other important segmentation methods.}},
Publisher = {{SPRINGER INTERNATIONAL PUBLISHING AG}},
Address = {{GEWERBESTRASSE 11, CHAM, CH-6330, SWITZERLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Duarte, KTN (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
Technol, R Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Duarte, Kaue T. N.; de Carvalho, Marco A. G.; Martins, Paulo S., Univ Estadual
Campinas, UNICAMP, Sch Technol, R Paschoal Marmo 1888, BR-13484332 Limeira, SP,
Brazil.}},
DOI = {{10.1007/978-3-319-70353-4_48}},
ISSN = {{0302-9743}},
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ISBN = {{978-3-319-70353-4; 978-3-319-70352-7}},
Keywords = {{Gray-Level Co-occurrence Matrix; Normalized Cut; Watershed; Texture
analysis; Image segmentation}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Artificial Intelligence; Computer
Science, Theory \&
Methods}},
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ResearcherID-Numbers = {{, Kaue/E-3831-2015}},
ORCID-Numbers = {{, Kaue/0000-0002-4074-3672}},
Funding-Acknowledgement = {{FAPESP (Sao Paulo Research Agency) {{2013/00575-3}}}},
Funding-Text = {{The authors thank FAPESP (Sao Paulo Research Agency) grant
2013/00575-3.}},
Number-of-Cited-References = {{19}},
Times-Cited = {{0}},
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Doc-Delivery-Number = {{BM4HP}},
Unique-ID = {{ISI:000463335100048}},
DA = {{2019-06-24}},
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@article{ ISI:000390071000048,
Author = {da Silva, Lucas de Melo and Cavalcante, Rodrigo Pereira and Cunha,
Rebeca Fabbro and Gozzi, Fabio and Dantas, Renato Falcao and de
Oliveira, Silvio Cesar and Machulek Junior, Amilcar},
Title = {{Tolfenamic acid degradation by direct photolysis and the UV-ABC/H2O2
process: factorial design, kinetics, identification of intermediates,
and toxicity evaluation}},
Journal = {{SCIENCE OF THE TOTAL ENVIRONMENT}},
Year = {{2016}},
Volume = {{573}},
Pages = {{518-531}},
Month = {{DEC 15}},
Abstract = {{This study employed direct UV-ABC photolysis and the UV-ABC/H2O2 process
to investigate the degradation of tolfenamic add (TA), a common
anti-inflammatory drug used in both human and veterinary medicine. A 23
factorial design with added center point was used to evaluate the effect
of three independent variables namely, H2O2 concentration ({{H2O2}}), TA
concentration ({{TA}}), and experiment time (time) on TA degradation and
H2O2 photolysis during UV-ABC/H2O2 treatment using a high-pressure
mercury vapor lamp (photon flux of 2.6307 x 10(4) J s(-1)) as the UV
irradiation source. The responses yielded similar values, revealing a
linear behavior, with correlation coefficients R = 0.9968 and R-adj =
0.9921 for TA degradation and R = 0.9828 and Radj = 0.9570 for H2O2
photolysis. The most efficient combination of variables was {{H2O2}} =
255 mg L-1 and {{TA}} = 25 mg L-1, resulting in 100% TA degradation and
98.87% H2O2 photolysis by 90 min of treatment. Additionally, the second
order kinetic constant of the reaction between TA and HO center dot was
determined using a competitive kinetic model, employing
2,4-dichlorophenoxyacetic acid (2,4D) as the reference compound. The
kinetic constant was 1.9 x 1010 l s-1 in alkaline medium. TA degradation
by direct photolysis generated quinone imines as by products,
responsible for the formation of a dark red `internal filter{'}` that
increased the value of acute toxicity to Artemia saline. The UV-ABC/H2O2
process did not promote formation of quinone imines by 90 min of
treatment and therefore did not increase acute toxicity values. Several
by-products generated during TA degradation were identified and possible
degradation pathways for the UV-ABC and UV-ABC/H2O2 processes were
proposed. (C) 2016 Elsevier B.V. All rights reserved.}},
Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Machulek, A (Reprint Author), Univ Fed Mato Grosso do Sul, Inst Chem,
Av Senador Filinto Muller 1555,CP 549, BR-79074460 Campo Grande, MS, Brazil.
da Silva, Lucas de Melo; Cavalcante, Rodrigo Pereira; Cunha, Rebeca Fabbro; Gozzi,
Fabio; de Oliveira, Silvio Cesar; Machulek Junior, Amilcar, Univ Fed Mato Grosso do
Sul, Inst Chem, Av Senador Filinto Muller 1555,CP 549, BR-79074460 Campo Grande, MS,
Brazil.
Dantas, Renato Falcao, Univ Estadual Campinas, Sch Technol, Rua Paschoal Marmo
1888, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1016/j.scitotenv.2016.08.139}},
ISSN = {{0048-9697}},
EISSN = {{1879-1026}},
Keywords = {{UV-ABC/H2O2 process; direct photolysis; tolfenamic add; second-order
kinetic constant; acute toxicity; degradation}},
Keywords-Plus = {{ADVANCED OXIDATION PROCESSES; ZEBRAFISH DANIO-RERIO; AQUEOUS-
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SOLUTIONS;
  WATER-TREATMENT; TOXICOLOGICAL EVALUATION; H2O2/UV PROCESS;
  MEFENAMIC-ACID; UV-IRRADIATION; WASTE-WATER; BY-PRODUCTS}},
Research-Areas = {{Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Environmental Sciences}},
Author-Email = {{machulekjr@gmail.com}},
ResearcherID-Numbers = {{de Oliveira, Silvio/A-5441-2017
  Gozzi, Fabio/L-1318-2013
  Junior, Amilcar/A-3569-2010
}},
ORCID-Numbers = {{de Oliveira, Silvio/0000-0002-2820-932X
  Gozzi, Fabio/0000-0002-4993-7166
  Machulek Junior, Amilcar/0000-0002-4632-4647}},
Funding-Acknowledgement = {{Brazilian funding agency Conselho Nacional de
Desenvolvimento Cientifico
e Tecnologico (CNPq); Brazilian funding agency Coordenacao de
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agency Fundacao de Apoio ao Desenvolvimento do Ensino, Ciencia e
Tecnologia do Estado de Mato Grosso do Sul (Fundect)}},
Funding-Text = {{The authors wish to thank the Brazilian funding agencies Conselho
Nacional de Desenvolvimento Cientifico e Tecnologico (CNPq), Coordenacao
de Aperfeicoamento de Pessoal de Nivel Superior (Capes), and Fundacao de
Apoio ao Desenvolvimento do Ensino, Ciencia e Tecnologia do Estado de
Mato Grosso do Sul (Fundect).}},
Number-of-Cited-References = {{67}},
Times-Cited = {{10}},
Usage-Count-Last-180-days = {{2}},
Usage-Count-Since-2013 = {{22}},
Journal-ISO = {{Sci. Total Environ.}},
Doc-Delivery-Number = {{EF1FP}},
Unique-ID = {{ISI:000390071000048}},
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Author = {Delforno, T. P. and Okada, D. Y. and Faria, C. V. and Varesche, M. B. A.},
Title = {{Evaluation of anionic surfactant removal in anaerobic reactor with
Fe(III) supplementation}},
Journal = {{JOURNAL OF ENVIRONMENTAL MANAGEMENT}},
Year = {{2016}},
Volume = {{183}},
Number = {{3}},
Pages = {{687-693}},
Month = {{DEC 1}},
Abstract = {{The objective of this study was to evaluate the removal of linear
alkylbenzene sulfonate (LAS) associated with Fe(III) supplementation
using an expanded granular sludge bed (EGSB) reactor. The reactor was
inoculated with a granular sludge and fed with synthetic wastewater
containing a specific LAS load rate (SLLR) of 1.5 mg gVS(-1) d(-1)
(similar to 16.4 mgLAS L-1 influent) and supplied with 7276 mu Mol L-1
of Fe(III). The biomasses from the inoculum and at the end of the
EGSB-Fe operation (127 days) were characterized using 16S rRNA Ion Tag
sequencing. An increase of 20% in the removal efficiency was observed
compared to reactors without Fe(III) supplementation that was reported
in the literature, and the LAS removal was approximately 84%. The
Fe(III) reduction was dissimilatory (the total iron concentration in the
influent and effluent were similar) and reached approximately 64%. The
higher Fe(III) reduction and LAS removal were corroborated by the
enrichment of genera, such as Shewanella (only EGSB-Fe - 0.5%) and
Geobacter (1% - inoculum; 18% - EGSB-Fe). Furthermore, the enrichment
of genera that degrade LAS and/or aromatic compounds (3.8% - inoculum;
29.6% - EGSB-Fe of relative abundance) was observed for a total of 20
different genera. (C) 2016 Elsevier Ltd. All rights reserved.}},
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Type = {{Article}},
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Affiliation = {{Delforno, TP (Reprint Author), Univ Estadual Campinas, UNICAMP,
Microbial Resources Div, Res Ctr Chem Biol \& Agr CPQBA, CP 6171, BR-13081970
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Delforno, T. P., Univ Estadual Campinas, UNICAMP, Microbial Resources Div, Res Ctr
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Okada, D. Y., Univ Estadual Campinas, UNICAMP, Sch Technol, Div Technol Environm Sanitat, BR-13484332 Limeira, SP, Brazil.

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DOI = {{10.1016/j.jenvman.2016.09.026}},

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Keywords = {{Linear alkylbenzene sulfonate; 16S rRNA ion tag sequencing; Fe-reducing microorganisms; Expanded granular sludge bed - EGSB}},

Keywords-Plus = {{LINEAR ALKYL BENZENE SULFONATE; LAUNDRY WASTE-WATER; FLUIDIZED-BED REACTOR; NOV SP-NOV; MICROBIAL CHARACTERIZATION; IRON; DEGRADATION; REDUCTION; LAS; OXIDATION}},

Research-Areas = {{Environmental Sciences & Ecology}},

Web-of-Science-Categories = {{Environmental Sciences}},

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Okada, Dagoberto/0000-0003-1859-9851}},

Funding-Acknowledgement = {{Fundacao de Amparo a Pesquisa do Estado de Sao Paulo (FAPESP)

{{2011/06783-1, 2014/16426-0}},

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@article{ ISI:000382351000005,

Author = {Varejao, Filipe Giovanini and Warren, Lucas Verissimo and de Jesus

Perinotto, Jose Alexandre and Neumann, Virginio Henrique and Freitas,

Bernardo Tavares and de Almeida, Renato Paes and Assine, Mario Luis},

Title = {{Upper Aptian mixed carbonate-siliciclastic sequences from Tucano Basin, Northeastern Brazil: Implications for paleogeographic reconstructions following Gondwana break-up}},

Journal = {{CRETACEOUS RESEARCH}},

Year = {{2016}},

Volume = {{67}},

Pages = {{44-58}},

Month = {{DEC 1}},

Abstract = {{The evolution of the Cretaceous basins of the Brazilian northeastern hinterland was associated with the Gondwana rifting and opening of the South Atlantic Ocean. The first marine incursion in northeastern Brazil occurred in the late Aptian and was recorded as the Santana Group of the Araripe Basin, which is currently an isolated basin, located hundreds of kilometers away from the Brazilian marginal basins. Below the first upper Aptian marine deposits, an important section of fossiliferous limestone (Lagerstätte) was deposited and preserved in the Crato Formation transitioning upward into evaporites of the Ipubi Formation. The direction of the marine incursion is controversial, with several possibilities being suggested, mainly due to the absence of other areas of upper Aptian marine sections within the hinterland. Serra do Tona is a sedimentary mesa with scarped edges where the upper part of the Marizal Formation crops out, displaying laminated limestones, litho- and chrono-correlated with those of the Crato Formation, is preserved. Therefore, this mixed upper Aptian section, at the North Tucano Basin (Serra do Tona), is a unique occurrence of utmost importance to the definition of sedimentary events and paleogeographical reconstruction of northeastern Brazil during the late Aptian. A detailed stratigraphic analysis allowed the definition and characterization of two upper Aptian

depositional sequences bounded by regional disconformities. Both sequences are dominantly transgressive and carbonatesiliciclastic in composition. The lower sequence comprises the basal portion of the Marizal Formation and consists of a succession of fluvial sandstones, ending on a laterally continuous thin interval (<15 m) of interbedded shales and limestones bearing exposure features and paleosols on the top. The limestones show a diversity of microfacies, including microbialites, organized in high-frequency deepening-upward cycles. The recognized sequence stratigraphic architecture resembles the lower part of the Barbalha Formation in the Araripe Basin, positioned in the same palynological zone, suggesting the correlation of the shale-carbonate interval in the Serra Tona with the Batateira Beds in the Araripe Basin. The upper sequence also exhibits a fining upward pattern, with a vertical succession starting with sandstones and shales deposited in fluvial and deltaic environments, culminating upward in laminated limestones and lacustrine shales. The stratigraphic succession is very similar to the upper portion of the Barbalha Formation in the Araripe Basin, and the laminated limestones are lithostratigraphically classified as the Crato Formation. These limestones also comprise several microfacies, organized in a transgressive regressive cycle with the maximum flooding surface positioned on relatively deep-water carbonates. Fluvial paleocurrent directions, which are similar to those of the Araripe Basin, suggest that both basins were part of the same continental paleodrainage, flowing to the south, where the South Atlantic proto-ocean was located. Fish fossils found in shales of the Marizal Formation, further south in the Central Tucano Basin and in the same stratigraphic interval of those of the lower sequence, were interpreted as marine forms. Indeed, some of them were considered to have Tethyan affinity, probably coming from an incipient Equatorial Atlantic gateway, supporting the interpretation based on the paleocurrents.

The limestones at the top of the Serra do Tona, which are also found in inselbergs in the Jatoba Basin, are relicts of a once extensive cover of Aptian carbonate deposits, now restricted because of uplifting and erosion events from the Late Cretaceous to the Cenozoic. (C) 2016

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Affiliation = {{Varejao, FG (Reprint Author), Univ Estadual Paulista, Inst Geociencias \& Ciencias Exatas, Ave 24A,1515, BR-13506900 Rio Claro, SP, Brazil.

Varejao, Filipe Giovanini; Warren, Lucas Verissimo; de Jesus Perinotto, Jose Alexandre; Assine, Mario Luis, Univ Estadual Paulista, Inst Geociencias \& Ciencias Exatas, Ave 24A,1515, BR-13506900 Rio Claro, SP, Brazil.

Neumann, Virginio Henrique, Univ Fed Pernambuco, Dept Geol, Lab Geol Sedimentar \& Ambiental LAGESE, BR-50670000 Recife, PE, Brazil.

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Keywords = {{Serra do Tona; Marizal Formation; Crato Formation; Cretaceous paleogeography; Microbialites}},

Keywords-Plus = {{EARLY CRETACEOUS PALEOGEOGRAPHY; CRATO FORMATION; SOUTH ATLANTIC; PALEONTOLOGICAL PERSPECTIVE; CONTINENTAL-MARGIN; MARIZAL FORMATION; ARARIPE BASIN; LATE MIOCENE; SE SPAIN; STRATIGRAPHY}},

Research-Areas = {{Geology; Paleontology}},

Web-of-Science-Categories = {{Geology; Paleontology}},

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Assine, Mario/C-1154-2013

Almeida, Renato/G-2567-2013


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    Assine, Mario/0000-0002-3097-5832
    Almeida, Renato/0000-0003-3664-1558
    Freitas, Bernardo Tavares/0000-0001-6239-0137}},
Funding-Acknowledgement = {{Petrobras {{0050.0023165.06.4, 46.00321584}}; Sao Paulo
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    Foundation (FAPESP) {{2004/15786-0, 2014/16739-8, 2010/51559-0}}; CNPq
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Number-of-Cited-References = {{85}},
Times-Cited = {{5}},
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@article{ ISI:000386645700011,
Author = {de Almeida, Renato Paes and Galeazzi, Cristiano Padalino and Freitas,
    Bernardo Tavares and Janikian, Liliane and Lanniruberto, Marco and
    Marconato, Andre},
Title = {{Large barchanoid dunes in the Amazon River and the rock record:
    Implications for interpreting large river systems}},
Journal = {{EARTH AND PLANETARY SCIENCE LETTERS}},
Year = {{2016}},
Volume = {{454}},
Pages = {{92-102}},
Month = {{NOV 15}},
Abstract = {{The interpretation of large river deposits from the rock record is
    hampered by the scarcity of direct observations of active large river
    systems. That is particularly true for deep-channel environments, where
    tens of meters deep flows dominate. These conditions are extremely
    different from what is found in smaller systems, from which current
    facies models were derived. MBES and shallow seismic surveys in a
    selected area of the Upper Amazonas River in Northern Brazil revealed
    the presence of large compound barchanoid dunes along the channel
    thalweg. The dunes are characterized by V-shaped, concave-downstream
    crest lines and convex-up longitudinal profiles, hundreds of meters
    wide, up to 300 m in wavelength and several meters high. Based on the
    morphology of compound dunes, expected preserved sedimentary structures
    are broad, large-scale, low-angle, concave up and downstream cross
    strata, passing laterally and downstream to inclined cosets. Examples of
    such structures from large river deposits in the rock record are
    described in the Silurian Serra Grande Group and the Cretaceous Sao
    Sebastiao and Marizal formations in Northeastern Brazil, as well as in
    Triassic Hawkesbury Sandstone in Southeastern Australia and the
    Plio-Pleistocene Ica Formation in the western Amazon. All these
    sedimentary structures are found near channel base surfaces and are
    somewhat coarser than the overlying fluvial deposits, favoring the
    interpretation of thalweg depositional settings. The recognition of
    large barchanoid dunes as bedforms restricted to river thalwegs and
    probably to large river systems brings the possibility of establishing
    new criteria for the interpretation of fluvial system scale in the rock
    record. Sedimentary structures compatible with the morphological

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characteristics of these bedforms seem to be relatively common in large river deposits, given their initial recognition in five different fluvial successions in Brazil and Australia, potentially enabling substantial improvements in facies models for large rivers. (C) 2016 Elsevier B.V. All rights reserved.}},

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Affiliation = {{de Almeida, RP (Reprint Author), Univ Sao Paulo, Inst Geociencias, Rua Lago 562,Cidade Univ, BR-05508080 Sao Paulo, SP, Brazil.
de Almeida, Renato Paes; Galeazzi, Cristiano Padalino; Marconato, Andre, Univ Sao Paulo, Inst Geociencias, Rua Lago 562,Cidade Univ, BR-05508900 Sao Paulo, SP, Brazil.
de Almeida, Renato Paes, Univ Sao Paulo, Inst Energia & Ambiente, Ave Prof Luciano Gualberto 1289, BR-05508900 Sao Paulo, SP, Brazil.
Freitas, Bernardo Tavares, Univ Estadual Campinas, Fac Tecnol, R Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
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Lanniruberto, Marco, Univ Brasilia, Inst Geociencias, Campus Univ Darcy Ribeiro, BR-71900000 Brasilia, DF, Brazil.
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Keywords = {{large rivers; thalweg bedforms; sedimentary structures; Multibeam Echosounder}},
Keywords-Plus = {{WESTERN AMAZONIA; INLET CHANNEL; CROSS-STRATA; DEPOSITS; BEDFORMS; SEDIMENT; MORPHOLOGY; DYNAMICS; FLOW; SEA}},
Research-Areas = {{Geochemistry & Geophysics}},
Web-of-Science-Categories = {{Geochemistry & Geophysics}},
Author-Email = {{rpalmeid@usp.br}},
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Ianniruberto, Marco/W-9704-2018
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Ianniruberto, Marco/0000-0002-9056-9668
Marconato, Andre/0000-0002-3723-6274
Freitas, Bernardo Tavares/0000-0001-6239-0137
Janikian, Liliane/0000-0002-3025-3207}},
Funding-Acknowledgement = {{Sao Paulo Research Foundation (FAPESP) {{2010/51103-6, 2010/51559-0, 2013/02114-3, 2014/09800-2}; FAPESP-NSF-NASA Biota/Dimensions of Biodiversity {{2013/01825-3, 2014/16739-8, 12/50260-6}; CAPES {{PROEX-558/2011}; PRFH-PETROBRAS; CNPq {{302905/2015-4, 301775/2012-5}}}},
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@article{ ISI:000389115300003,
Author = {Alegretti, Lucas and Umbuzeiro, Gisela de A. and Flynn, Maurea N.},
Title = {{POPULATION DYNAMICS OF PARHYALE HAWAIENSIS (DANA, 1853) (AMPHIPODA:
HYALIDAE) ASSOCIATED WITH AN INTERTIDAL ALGAL BELT IN SOUTHEASTERN
BRAZIL}},
Journal = {{JOURNAL OF CRUSTACEAN BIOLOGY}},
Year = {{2016}},
Volume = {{36}},
Number = {{6}},
Pages = {{785-791}},
Month = {{NOV}},
Abstract = {{Static life tables were used to establish demographic parameters such as
size-class structure, abundance trends, sex ratio, net reproductive
rate, generation time, and per capita rate of population growth for a
population of the amphipod Parahyale hawaiiensis (Dana, 1853) (Hyalidae)
from the intertidal belt of a red alga Bryocladia trysigera (J. Agardh)
F. Schmitz in southeastern Brazil. Collections were taken monthly from
December 2012 to November 2013. There were two reproductive peaks, a
higher one, May to July, and a second throughout the warmer months,
October to January. The continuous reproduction results in the
overlapping of generations. A sex ratio biased in favor of females was
recorded in all sampling dates, a common pattern in epifaunal species.
The estimated net reproductive rate was 1.45 +/- 1.01 young per female,
the generation time 3.51 +/- 1.31 months, and the population growth rate
0.06 +/- 0.17 per capita per month. The logistic growth model indicates
that an initial population of 10 individuals would reach the carrying
capacity for the species in a natural environment in 35 to 40
generations time, a period equivalent to 130 to 150 months. As a result
of extinction model application, no possibility of extinction was
predicted for the local population. The estimated parameters can be used
as endpoints in ecotoxicological tests.}},
Publisher = {{OXFORD UNIV PRESS}},
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Type = {{Article}},
Language = {{English}},
Affiliation = {{Alegretti, L (Reprint Author), Univ Estadual Campinas, Sch Technol FT
UNICAMP, Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Alegretti, Lucas; Umbuzeiro, Gisela de A.; Flynn, Maurea N., Univ Estadual
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Brazil.}},
DOI = {{10.1163/1937240X-00002480}},
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Keywords = {{coastal region; life strategy; population ecology; population
parameters}},
Keywords-Plus = {{LIFE-HISTORY; REPRODUCTION; RESPONSES; PATTERNS; BIOLOGY; GROWTH;
CYCLE}},
Research-Areas = {{Marine \& Freshwater Biology; Zoology}},
Web-of-Science-Categories = {{Marine \& Freshwater Biology; Zoology}},
Author-Email = {{lucas.alegretti@gmail.com}},
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ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200}},
Funding-Acknowledgement = {{Coordenacao de Aperfeicoamento de Pessoal de Nivel
Superior (CAPES)}},
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Number-of-Cited-References = {{46}},
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Doc-Delivery-Number = {{ED8IN}},
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@article{ ISI:000377827300014,
Author = {Cavalcante, Rodrigo Pereira and Dantas, Renato Falcao and Bayarri,

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Bernardi and Gonzalez, Oscar and Gimenez, Jaime and Esplugas, Santiago and Machulek Junior, Amilcar},
Title = {{Photocatalytic mechanism of metoprolol oxidation by photocatalysts TiO₂ and TiO₂ doped with 5% B: Primary active species and intermediates}},
Journal = {{APPLIED CATALYSIS B-ENVIRONMENTAL}},
Year = {{2016}},
Volume = {{194}},
Pages = {{111-122}},
Month = {{OCT 5}},
Abstract = {{In photocatalysis, controversy still exists over as whether oxidation proceeds via primary oxidants, such as HO center dot radicals, positive holes, electrons, O-2(center dot)-radicals in the photodegradation process. The contribution of the main active species to the photocatalytic degradation of metoprolol (MET) using a solar simulator with Xenon lamp as irradiation source was examined by using different specific scavengers (formic acid, tert-butyl alcohol, rho-benzoquinone and oxygen). According to this, we also compared the effect on the generation of active species, in the MET degradation, of two types of TiO₂ catalyst having different physical and chemical properties: pure TiO₂ and TiO₂ doped with 5% B (w/w), both synthesized by sol-gel method. The scavenger study indicates that HO center dot radicals are the dominant reactive species, contributing around 80% and to a lesser extent by the contribution of O-2(center dot)- radicals and holes in systems using TiO₂ doped with 5% B (w/w). However, when pure TiO₂ was used as catalyst, experiments carried out in rho-benzoquinone demonstrate that O-2(center dot)-radicals did not participate in the degradation mechanism of MET. Oxygen seems to play an important role during the observed degradation of MET. Additionally, the relation between the intermediates formed during the photocatalytic degradation with TiO₂ doped 5% B (w/w) as catalyst, with addition of specific scavengers, was investigated and distinct degradation pathways have been proposed for each active species involved. By-products studies in the presence of scavengers were used as a diagnostic tool for the analysis of the photocatalytic mechanism and it was possible to prove that there is change in the reactions of the degradation process of MET when change the role of any active species generated on the surface of the catalyst. (C) 2016 Elsevier B.V. All rights reserved.}},
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Affiliation = {{Gimenez, J (Reprint Author), Univ Barcelona, Dept Chem Engn, C Marti Franques 1, E-08028 Barcelona, Spain.
Cavalcante, Rodrigo Pereira; Machulek Junior, Amilcar, Univ Fed Mato Grosso do Sul, Inst Chem, Av Senador Filinto Muller 1555,CP 549, BR-79074460 Campo Grande, MS, Brazil.
Dantas, Renato Falcao, Univ Estadual Campinas, Sch Technol, Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Bayarri, Bernardi; Gonzalez, Oscar; Gimenez, Jaime; Esplugas, Santiago, Univ Barcelona, Dept Chem Engn, C Marti Franques 1, E-08028 Barcelona, Spain.}},
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Keywords = {{TiO₂ and TiO₂/5% B(w/w) photocatalytic process; Metoprolol; Scavengers; Mechanism}},
Keywords-Plus = {{AQUEOUS SUSPENSION; VISIBLE-LIGHT; ENVIRONMENTAL PHARMACEUTICALS; BACTERIAL DISINFECTION; DEGRADATION KINETICS; METHYL-ORANGE; PHOTO-FENTON; WASTE-WATER; SOLAR; PHOTODEGRADATION}},
Research-Areas = {{Chemistry; Engineering}},
Web-of-Science-Categories = {{Chemistry, Physical; Engineering, Environmental; Engineering, Chemical}},
Author-Email = {{j.gimenez.fa@ub.edu}},
ResearcherID-Numbers = {{Junior, Amilcar/A-3569-2010
Esplugas, Santiago/D-4652-2014
Gimenez, Jaime/K-4571-2014
}},
ORCID-Numbers = {{Esplugas, Santiago/0000-0002-3693-2948
Gimenez, Jaime/0000-0002-2213-9041
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Funding-Acknowledgement = {{Brazilian funding agency CNPq (Conselho Nacional de Desenvolvimento Cientifico e Tecnologico); Brazilian funding agency CAPES (Coordenacao de Aperfeicoamento de Pessoal de Nivel Superior); Brazilian funding

agency FUNDECT (Fundacao de Apoio ao Desenvolvimento do Ensino, Ciencia e Tecnologia do Estado de Mato Grosso do Sul); Brazilian funding agency INCT-EMA (Institute Nacional de Ciencia e Tecnologia de Estudos do Meio Ambiente); Ministry of Science and Innovation of Spain {{CTQ2011-26258, CSD2007-00055}}; AGAUR-Generalitat de Catalunya {{2009SGR 1466}}},
 Funding-Text = {{The authors wish to thank the Brazilian funding agencies CNPq (Conselho Nacional de Desenvolvimento Cientifico e Tecnologico), CAPES (Coordenacao de Aperfeicoamento de Pessoal de Nivel Superior), FUNDECT (Fundacao de Apoio ao Desenvolvimento do Ensino, Ciencia e Tecnologia do Estado de Mato Grosso do Sul) and INCT-EMA (Institute Nacional de Ciencia e Tecnologia de Estudos do Meio Ambiente). The authors also thank the Ministry of Science and Innovation of Spain (projects CTQ2011-26258 and NOVEDAR 2010 CSD2007-00055) and AGAUR-Generalitat de Catalunya (project 2009SGR 1466) for funds received to carry out this work.}},
 Number-of-Cited-References = {{71}},
 Times-Cited = {{39}},
 Usage-Count-Last-180-days = {{12}},
 Usage-Count-Since-2013 = {{185}},
 Journal-ISO = {{Appl. Catal. B-Environ.}},
 Doc-Delivery-Number = {{DO5MN}},
 Unique-ID = {{ISI:000377827300014}},
 DA = {{2019-06-24}},
 }
 @article{ ISI:000385498300006,
 Author = {Giordano Penteado, Carmenlucia Santos and Rosado, Lais Peixoto},
 Title = {{Comparison of scenarios for the integrated management of construction and demolition waste by life cycle assessment: A case study in Brazil}},
 Journal = {{WASTE MANAGEMENT & RESEARCH}},
 Year = {{2016}},
 Volume = {{34}},
 Number = {{10}},
 Pages = {{1026-1035}},
 Month = {{OCT}},
 Abstract = {{Brazil, as a result of economic development and strengthening of the construction industry in recent years, is generating an increasing amount of construction and demolition waste (CDW). Hence, environmental assessment of the management systems is vital. A life cycle assessment (LCA) is presented of CDW management in a medium-sized municipality located in the southeast region of Brazil, where the impacts of leaching were not considered due to absence of consistent data. Six different proposed scenarios for the current CDW management situation have been considered. These scenarios comprised the combined use of landfilling, sorting, and recycling, and the use of CDW as paving material for landfill roads, in different percentages. Considering 0.8 ton of waste as the functional unit, the life cycle inventory was performed using primary data obtained from field survey and secondary data from the database Ecoinvent version 3.1, and from the literature. The method CML 2 baseline 2001 was used for environmental impacts evaluation. The results highlight that recycling is beneficial when efficient CDW sorting takes place at construction sites, avoiding the transport of refuse to sorting and recycling facilities, and the distance between the generation source and the recycling unit is within 30 km. Thus, our results are helpful to ensure that the decision-making processes are based on environmental and technical aspects, and not only on economic and political factors, and also provide data and support for other LCA studies on CDW.}},
 Publisher = {{SAGE PUBLICATIONS LTD}},
 Address = {{1 OLIVERS YARD, 55 CITY ROAD, LONDON EC1Y 1SP, ENGLAND}},
 Type = {{Article}},
 Language = {{English}},
 Affiliation = {{Penteado, CSG (Reprint Author), Univ Estadual Campinas, Sch Technol, 1888 Paschoal Marmo St, BR-13484332 Limeira, SP, Brazil.
 Giordano Penteado, Carmenlucia Santos; Rosado, Lais Peixoto, Univ Estadual Campinas, Sch Technol, Campinas, SP, Brazil.}},
 DOI = {{10.1177/0734242X16657605}},
 ISSN = {{0734-242X}},
 EISSN = {{1096-3669}},
 Keywords = {{Construction and demolition waste; construction waste management; life cycle assessment; life cycle inventory; CDW recycling}},

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Keywords-Plus = {{SYSTEMS; PORTUGAL; OPTIONS}},
Research-Areas = {{Engineering; Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Engineering, Environmental; Environmental Sciences}},
Author-Email = {{carmenlucia@ft.unicamp.br}},
ORCID-Numbers = {{Penteado, Carmenlucia/0000-0001-5731-7947
Peixoto Rosado, Lais/0000-0002-5978-8408}},
Funding-Acknowledgement = {{CAPES (Brazilian Higher Education Personnel Training
Coordination)
through the masters' scholarship grant}},
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the
research, authorship, and/or publication of this article: This research
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Coordination) through the masters' scholarship grant.}},
Number-of-Cited-References = {{47}},
Times-Cited = {{15}},
Usage-Count-Last-180-days = {{6}},
Usage-Count-Since-2013 = {{36}},
Journal-ISO = {{Waste Manage. Res.}},
Doc-Delivery-Number = {{DZ0AG}},
Unique-ID = {{ISI:000385498300006}},
DA = {{2019-06-24}},
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@article{ ISI:000378206300086,

Author = {Goncalves, Suely Patricia C. and Strauss, Mathias and Delite, Fabricio S. and Clemente, Zaira and Castro, Vera L. and Martinez, Diego Stefani T.},

Title = {{Activated carbon from pyrolysed sugarcane bagasse: Silver nanoparticle modification and ecotoxicity assessment}},

Journal = {{SCIENCE OF THE TOTAL ENVIRONMENT}},

Year = {{2016}},

Volume = {{565}},

Pages = {{833-840}},

Month = {{SEP 15}},

Abstract = {{Activated carbon from pyrolysed sugarcane bagasse (ACPB) presented pore size ranges from 1.0 to 3.5 nm, and surface area between 1200 and 1400 m² g⁻¹ that is higher than commonly observed to commercial activated carbon. The ACPB material was successfully loaded with of silver nanoparticles with diameter around 35 nm (0.81 wt.%). X-ray photoelectron spectroscopy (XPS) analyses showed that the material surface contains metallic/Ag⁰ (93.60 wt.%) and ionic/Ag⁺ states (6.40 wt.%). The adsorption capacity of organic model molecules (i.e. methylene blue and phenol) was very efficient to ACPB and ACPB loaded with silver nanoparticles (ACPB-AgNP), indicating that the material modification with silver nanoparticles has not altered its adsorption capacity. ACPB-AgNP inhibited bacteria growth (Escherichia coli), it is a promising advantage for the use of these materials in wastewater treatment and water purification processes. However, ACPB-AgNP showed environmental risks, with toxic effect to the aquatic organism Hydra attenuata (i.e. LC50 value of 1.94 mg L⁻¹), and it suppressed root development of Lycopersicon esculentum plant (tomato). Finally, this work draw attention for the environmental implications of activated carbon materials modified with silver nanoparticles. (C) 2016 Elsevier B.V. All rights reserved.}},

Publisher = {{ELSEVIER SCIENCE BV}},

Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},

Type = {{Article}},

Language = {{English}},

Affiliation = {{Goncalves, SPC; Martinez, DST (Reprint Author), Brazilian Ctr Res Energy \& Mat CNPEM, Brazilian Nanotechnol Natl Lab LNNano, BR-13083970 Campinas, SP, Brazil.

Goncalves, Suely Patricia C.; Strauss, Mathias; Delite, Fabricio S.; Clemente, Zaira; Martinez, Diego Stefani T., Brazilian Ctr Res Energy \& Mat CNPEM, Brazilian Nanotechnol Natl Lab LNNano, BR-13083970 Campinas, SP, Brazil.

Clemente, Zaira; Castro, Vera L., EMBRAPA, Lab Ecotoxicol \& Biosafety, BR-13820000 Jaguariuna, SP, Brazil.

Martinez, Diego Stefani T., Univ Campinas UNICAMP, Sch Technol, BR-13484332

Limeira, SP, Brazil.}},

DOI = {{10.1016/j.scitotenv.2016.03.041}},

ISSN = {{0048-9697}},

EISSN = {{1879-1026}},


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Keywords = {{Nanomaterials; Metallic nanoparticles; Porous carbon; Functionalization;
Econanotoxicology}},
Keywords-Plus = {{ENGINEERED NANOPARTICLES; WASTE; RESPONSES; PLANTS; AGENT; MODEL}},
Research-Areas = {{Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Environmental Sciences}},
Author-Email = {{suely.goncalves@lnnano.cnpem.br
diego.martinez@lnnano.cnpem.br}},
ResearcherID-Numbers = {{Clemente, Zaira/B-6540-2014
Castro, Vera Lucia/J-9931-2013
Martinez, Diego/K-8310-2012}},
ORCID-Numbers = {{Clemente, Zaira/0000-0003-4490-1380
Castro, Vera Lucia/0000-0002-5045-4540
Martinez, Diego/0000-0002-0086-3055}},
Number-of-Cited-References = {{34}},
Times-Cited = {{11}},
Usage-Count-Last-180-days = {{4}},
Usage-Count-Since-2013 = {{81}},
Journal-ISO = {{Sci. Total Environ.}},
Doc-Delivery-Number = {{DP0UV}},
Unique-ID = {{ISI:000378206300086}},
DA = {{2019-06-24}},
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@article{ ISI:000385480300008,
Author = {Bueno-Soler, Juliana and Carnielli, Walter},
Title = {{Paraconsistent Probabilities: Consistency, Contradictions and Bayes'
Theorem}},
Journal = {{ENTROPY}},
Year = {{2016}},
Volume = {{18}},
Number = {{9}},
Month = {{SEP}},
Abstract = {{This paper represents the first steps towards constructing a
paraconsistent theory of probability based on the Logics of Formal
Inconsistency (LFIs). We show that LFIs encode very naturally an
extension of the notion of probability able to express sophisticated
probabilistic reasoning under contradictions employing appropriate
notions of conditional probability and paraconsistent updating, via a
version of Bayes' theorem for conditionalization. We argue that the
dissimilarity between the notions of inconsistency and contradiction,
one of the pillars of LFIs, plays a central role in our extended notion
of probability. Some critical historical and conceptual points about
probability theory are also reviewed.}},
Publisher = {{MDPI AG}},
Address = {{ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Carnielli, W (Reprint Author), State Univ Campinas UNICAMP, Ctr Log
Epistemol \& Hist Sci, BR-13083859 Campinas, SP, Brazil.
Carnielli, W (Reprint Author), State Univ Campinas UNICAMP, Dept Philosophy,
BR-13083859 Campinas, SP, Brazil.
Bueno-Soler, Juliana, State Univ Campinas UNICAMP, Fac Technol, BR-13484332
Campinas, SP, Brazil.
Carnielli, Walter, State Univ Campinas UNICAMP, Ctr Log Epistemol \& Hist Sci,
BR-13083859 Campinas, SP, Brazil.
Carnielli, Walter, State Univ Campinas UNICAMP, Dept Philosophy, BR-13083859
Campinas, SP, Brazil.}},
DOI = {{10.3390/e18090325}},
Article-Number = {{325}},
ISSN = {{1099-4300}},
Keywords = {{paraconsistency; probability; contradiction; consistency; logics of
formal inconsistency}},
Keywords-Plus = {{BELIEF}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Multidisciplinary}},
Author-Email = {{juliana@ft.unicamp.br
walter.carnielli@cle.unicamp.br}},
ResearcherID-Numbers = {{Carnielli, Walter A./M-9934-2013}},
Funding-Acknowledgement = {{FAPESP-Sao Paulo Research Foundation, Brazil {{LogCons
2010/51038-0}};
National Council for Scientific and Technological Development (CNPq),
Brazil}},
}

```

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the participants of the research seminars held on different occasions at IHPST-Institut d'Histoire et de Ohilosophie des Sciences et des Techniques, Paris, at the University of Barcelona and at the IST-Instituto Superior Tecnico, Lisbon for criticisms, suggestions and encouragement. Both authors acknowledge support from FAPESP-Sao Paulo Research Foundation, Thematic Project LogCons 2010/51038-0, Brazil, and the second author thanks a research grant from the National Council for Scientific and Technological Development (CNPq), Brazil.}},

Number-of-Cited-References = {{43}},

Times-Cited = {{2}},

Usage-Count-Last-180-days = {{1}},

Usage-Count-Since-2013 = {{7}},

Journal-ISO = {{Entropy}},

Doc-Delivery-Number = {{DY9UJ}},

Unique-ID = {{ISI:000385480300008}},

OA = {{DOAJ Gold}},

DA = {{2019-06-24}},

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@article{ ISI:000383392700008,

Author = {Satizabal, Luz M. and Poloni, Erik and Bortolozo, Ausdinir D. and Osorio, Wislei R.},

Title = {{Immersion Corrosion of Sn-Ag and Sn-Bi Alloys as Successors to Sn-Pb Alloy with Electronic and Jewelry Applications}},

Journal = {{CORROSION}},

Year = {{2016}},

Volume = {{72}},

Number = {{8}},

Pages = {{1064-1080}},

Month = {{AUG}},

Abstract = {{A comparative investigation on the degradation in two distinctive corrosive media (NaCl and ethanol) of Sn-2 wt% Ag, Sn-10 wt% Bi, and Sn-22 wt% Pb alloys and the traditional Sn-40 wt% Pb alloys is performed. The deterioration is represented by both weight variation and corrosion rate in both 0.9% NaCl solution and anhydrous ethanol. It is shown that both uncoated and gold-plated samples are more susceptible to deterioration in NaCl than ethanol medium. A mechanical-to-corrosion (M/C) ratio is determined for each examined alloy. Considering the relative weights and costs associated with both M/C ratio and environmentally-friendly aspects, the Sn-Bi alloy is a potential successor for the traditional Sn-Pb alloys.}},

Publisher = {{NATL ASSOC CORROSION ENG}},

Address = {{1440 SOUTH CREEK DRIVE, HOUSTON, TX 77084-4906 USA}},

Type = {{Article}},

Language = {{English}},

Affiliation = {{Osorio, WR (Reprint Author), Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, SP, Brazil.

Osorio, WR (Reprint Author), Univ Estadual Campinas, Res Grp Mfg Adv Mat, Sch Appl Sci FCA, Campus Limeira,1300,Pedro Zaccaria St, BR-13484350 Limeira, SP, Brazil.

Satizabal, Luz M.; Osorio, Wislei R., Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, SP, Brazil.

Poloni, Erik; Bortolozo, Ausdinir D.; Osorio, Wislei R., Univ Estadual Campinas, Res Grp Mfg Adv Mat, Sch Appl Sci FCA, Campus Limeira,1300,Pedro Zaccaria St, BR-13484350 Limeira, SP, Brazil.}},

DOI = {{10.5006/2039}},

ISSN = {{0010-9312}},

EISSN = {{1938-159X}},

Keywords = {{gold plating; green alloys; immersion corrosion; lead-free alloys; Sn-Ag alloys; Sn-Bi alloys}},

Keywords-Plus = {{LEAD-FREE SOLDER; PERCENT NACL SOLUTION; MECHANICAL-PROPERTIES; ELECTROCHEMICAL CORROSION; TIN-LEAD; BEHAVIOR; CU; MICROSTRUCTURE; ETHANOL; METALS}},

Research-Areas = {{Materials Science; Metallurgy \& Metallurgical Engineering}},

Web-of-Science-Categories = {{Materials Science, Multidisciplinary; Metallurgy \& Metallurgical

Engineering}},

Author-Email = {{wislei.osorio@fca.unicamp.br}},

ResearcherID-Numbers = {{Bortolozo, Ausdinir/G-3421-2012

Osorio, Wislei R*/E-2585-2013

Poloni, Erik/C-3764-2015

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  ORCID-Numbers = {{Osorio, Wislei Riuper/0000-0002-2754-9584}},
  Number-of-Cited-References = {{49}},
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  Usage-Count-Since-2013 = {{17}},
  Journal-ISO = {{Corrosion}},
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@article{ ISI:000381775900021,
  Author = {Ruiz Arriola, E. and Szpigel, S. and Timoteo, V. S.},
  Title = {{Fixed points of the SRG evolution and the on-shell limit of the nuclear
  force}},
  Journal = {{ANNALS OF PHYSICS}},
  Year = {{2016}},
  Volume = {{371}},
  Pages = {{398-436}},
  Month = {{AUG}},
  Abstract = {{We study the infrared limit of the similarity renormalization group
  (SRG) using a simple toy model for the nuclear force aiming to
  investigate the fixed points of the SRG evolution with both the Wilson
  and the Wegner generators. We show how a fully diagonal interaction at
  the similarity cutoff  $\lambda \rightarrow 0$  may be obtained from the eigenvalues
  of the Hamiltonian and quantify the diagonalness by means of operator
  norms. While the fixed points for both generators are equivalent when no
  bound-states are allowed by the interaction, the differences arising
  from the presence of the Deuteron bound-state can be disentangled very
  clearly by analyzing the evolved interactions in the infrared limit
   $\lambda \rightarrow 0$  on a finite momentum grid. Another issue we investigate is
  the location on the diagonal of the Hamiltonian in momentum-space where
  the SRG evolution places the Deuteron bound-state eigenvalue once it
  reaches the fixed point. This finite momentum grid setup provides an
  alternative derivation of the celebrated trace identities, as a by
  product. The different effects due to either the Wilson or the Wegner
  generators on the binding energies of  $A = 2, 3, 4$  systems are
  investigated and related to the occurrence of a Tjon-line which emerges
  as the minimum of an avoided crossing between  $E_{\alpha} = 4E(t) - 3E(d)$ 
  and  $E_{\alpha} = 2E(t)$ . All infrared features of the flow equations are
  illustrated using the toy model for the two-nucleon S-waves. (C) 2016
  Elsevier Inc. All rights reserved.}},
  Publisher = {{ACADEMIC PRESS INC ELSEVIER SCIENCE}},
  Address = {{525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA}},
  Type = {{Article}},
  Language = {{English}},
  Affiliation = {{Timoteo, VS (Reprint Author), Univ Estadual Campinas, UNICAMP, Fac
  Technol, Grp Opt \& Modelagem Numer GOMNI, BR-13484332 Limeira, SP, Brazil.
  Ruiz Arriola, E., Univ Granada, Dept Fis Atom Mol \& Nucl, E-18071 Granada, Spain.
  Ruiz Arriola, E., Univ Granada, Inst Carlos I Fis Teor \& Computac, E-18071
  Granada, Spain.
  Szpigel, S., Univ Presbiteriana Mackenzie, Ctr Radioastron \& Astrofis Mackenzie,
  Escola Engr, BR-01302907 Sao Paulo, SP, Brazil.
  Timoteo, V. S., Univ Estadual Campinas, UNICAMP, Fac Technol, Grp Opt \& Modelagem
  Numer GOMNI, BR-13484332 Limeira, SP, Brazil.}},
  DOI = {{10.1016/j.aop.2016.06.002}},
  ISSN = {{0003-4916}},
  EISSN = {{1096-035X}},
  Keywords = {{Nuclear force; Similarity renormalization group; Binding energies}},
  Keywords-Plus = {{RENORMALIZATION-GROUP; EXPLICIT RENORMALIZATION; BORN SERIES;
  HAMILTONIANS; SCATTERING; DISCRETE; IMPLICIT; THEOREM; MODEL}},
  Research-Areas = {{Physics}},
  Web-of-Science-Categories = {{Physics, Multidisciplinary}},
  Author-Email = {{varese@ft.unicamp.br}},
  ResearcherID-Numbers = {{Szpigel, Sergio/F-5349-2012
  Ruiz Arriola, Enrique/A-9388-2015}},
  ORCID-Numbers = {{Szpigel, Sergio/0000-0003-2529-2225
  Ruiz Arriola, Enrique/0000-0002-9570-2552}},
  Funding-Acknowledgement = {{Spanish Mineco [{}FIS2014-59386-P]; Junta de Andalucia [{}
  FQM225];
  FAPESP [{}2014/04975-9]; FAEPEX [{}1165/2014]; CNPq [{}310980/2012-7]}},

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Funding-Text = {{E.R.A. would like to thank the Spanish Mineco (Grant FIS2014-59386-P) and Junta de Andalucia (grant FQM225). S.S. and V.S.T. are supported by FAPESP (grant 2014/04975-9). V.S.T. also thanks FAEPEX (grant 1165/2014) and CNPq (grant 310980/2012-7) for financial support.}},

Number-of-Cited-References = {{64}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{3}},
Journal-ISO = {{Ann. Phys.}},
Doc-Delivery-Number = {{DT8WH}},
Unique-ID = {{ISI:000381775900021}},
DA = {{2019-06-24}},
}

@article{ ISI:000376805300030,

Author = {Turini Claro, Elis Marina and Bidoia, Ederio Dino and de Moraes, Peterson Bueno},

Title = {{A high-performance doped photocatalysts for inactivation of total coliforms in superficial waters using different sources of radiation}},

Journal = {{JOURNAL OF ENVIRONMENTAL MANAGEMENT}},

Year = {{2016}},

Volume = {{177}},

Pages = {{264-270}},

Month = {{JUL 15}},

Abstract = {{Photocatalytic water treatment has a currently elevated electricity demand and maintenance costs, but the photocatalytic water treatment may also assist in overcoming the limitations and drawbacks of conventional water treatment processes. Among the Advanced Oxidation Processes, heterogeneous photocatalysis is one of the most widely and efficiently used processes to degrade and/or remove a wide range of polluting compounds. The goal of this work was to find out a highly efficient photocatalytic disinfection process in superficial water with different doped photocatalysts and using three sources of radiation: mercury vapor lamp, solar simulator and UV-A LED. Three doped photocatalysts were prepared, SiZnO, N-SiZnO and F-N-SiZnO. The inactivation efficiency of each synthesized photocatalysts was compared to a TiO₂ P25 (Degussa (R)) 0.5 g L⁻¹ control. Photolysis inactivation efficiency was 85% with UV-A LED, which is considered very high, demanding low electricity consumption in the process, whereas mercury vapor lamp and solar simulator yielded 19% and 13% inactivation efficiency, respectively. The best conditions were found with photocatalysts SiZnO, F N SiZnO and N SiZnO irradiated with UV-A LED, where efficiency exceeded 95% that matched inactivation of coliforms using the same irradiation and photocatalyst TiO₂. All photocatalysts showed photocatalytic activity with all three radiation sources able to inactivate total coliforms from river water. The use of UV-A LED as the light source without photocatalyst is very promising, allowing the creation of cost-effective and highly efficient water treatment plants. (C) 2016 Elsevier Ltd. All rights reserved.}},

Publisher = {{ACADEMIC PRESS LTD- ELSEVIER SCIENCE LTD}},

Address = {{24-28 OVAL RD, LONDON NW1 7DX, ENGLAND}},

Type = {{Article}},

Language = {{English}},

Affiliation = {{Bidoia, ED (Reprint Author), Sao Paulo State Univ UNESP, Dept Biochem & Microbiol, Av 24 A,1515, BR-13506900 Rio Claro, SP, Brazil.

Turini Claro, Elis Marina; de Moraes, Peterson Bueno, Univ Campinas UNICAMP, Dept Technol Environm Sanitat, Fac Technol, R Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.

Turini Claro, Elis Marina; Bidoia, Ederio Dino, Sao Paulo State Univ UNESP, Dept Biochem & Microbiol, Av 24 A,1515, BR-13506900 Rio Claro, SP, Brazil.}},

DOI = {{10.1016/j.jenvman.2016.04.033}},

ISSN = {{0301-4797}},

EISSN = {{1095-8630}},

Keywords = {{Superficial water treatment; Heterogeneous photocatalysis; UV-A LED; Disinfection; Si-doped; N-doped}},

Keywords-Plus = {{ESCHERICHIA-COLI; TiO₂ PHOTOCATALYSIS; TITANIUM-DIOXIDE; BACTERIAL-SPORES; ANATASE TiO₂; UV-A; DISINFECTION; STERILIZATION; ULTRAVIOLET; NANOCOMPOSITES}},

Research-Areas = {{Environmental Sciences & Ecology}},

Web-of-Science-Categories = {{Environmental Sciences}},

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ederio@rc.unesp.br

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peterson@ft.unicamp.br}},
ResearcherID-Numbers = {{Claro, Elis Marina/J-2202-2017
}},
ORCID-Numbers = {{Claro, Elis Marina/0000-0003-4209-1898
Bidola, Ederio/0000-0001-7040-1983}},
Funding-Acknowledgement = {{CAPES; FAPESP}},
Funding-Text = {{The authors would like to acknowledge the CAPES and FAPESP for the
financial support.}},
Number-of-Cited-References = {{54}},
Times-Cited = {{3}},
Usage-Count-Last-180-days = {{2}},
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Journal-ISO = {{J. Environ. Manage.}},
Doc-Delivery-Number = {{DN1DA}},
Unique-ID = {{ISI:000376805300030}},
DA = {{2019-06-24}},
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@article{ ISI:000376449100013,
Author = {Peixoto, Leandro C. and Bortolozo, Ausdinir D. and Garcia, Amauri and
Osorio, Wislei R.},
Title = {{Performance of New Pb-Bi Alloys for Pb-Acid Battery Applications: EIS
and Polarization Study}},
Journal = {{JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE}},
Year = {{2016}},
Volume = {{25}},
Number = {{6}},
Pages = {{2211-2221}},
Month = {{JUN}},
Abstract = {{The present investigation is focused on the evaluation of
electrochemical impedance spectroscopy (EIS) and potentiodynamic
polarization results, associated with resulting microstructural features
of two distinct as-cast Pb-Bi alloys (i.e., 1 and 2.5 wt.% Bi). EIS,
potentiodynamic polarization curves, and equivalent circuits are used to
analyze the corrosion behavior. The electrochemical parameters show that
the corrosion resistance increases when the matrix microstructure is
characterized by coarser cells when compared with finer ones. However,
when a coarse cellular array is associated with increase in Bi content
caused by macrosegregation during casting, the corrosion resistance
decreases significantly. Bismuth modifies the anode/cathode area ratio
increasing drastically the corrosion action.}},
Publisher = {{SPRINGER}},
Address = {{233 SPRING ST, NEW YORK, NY 10013 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Osorio, WR (Reprint Author), Univ Estadual Campinas, Dept Mfg \& Mat
Engn, BR-13083860 Campinas, SP, Brazil.
Osorio, WR (Reprint Author), Univ Estadual Campinas, Res Grp Mfg Adv Mat, Sch Appl
Sci FCA, 1300 Pedro Zaccaria St, BR-13484350 Limeira, SP, Brazil.
Osorio, WR (Reprint Author), Univ Estadual Campinas, Sch Technol, BR-13484332
Limeira, SP, Brazil.
Peixoto, Leandro C.; Garcia, Amauri; Osorio, Wislei R., Univ Estadual Campinas,
Dept Mfg \& Mat Engn, BR-13083860 Campinas, SP, Brazil.
Bortolozo, Ausdinir D.; Osorio, Wislei R., Univ Estadual Campinas, Res Grp Mfg Adv
Mat, Sch Appl Sci FCA, 1300 Pedro Zaccaria St, BR-13484350 Limeira, SP, Brazil.
Osorio, Wislei R., Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, SP,
Brazil.}},
DOI = {{10.1007/s11665-016-2059-7}},
ISSN = {{1059-9495}},
EISSN = {{1544-1024}},
Keywords = {{EIS; electrochemical techniques; microstructure; polarization;
solidification}},
Keywords-Plus = {{CORROSION-RESISTANCE; SULFURIC-ACID; CASTING ALLOYS;
ELECTROCHEMICAL-BEHAVIOR; MECHANICAL-PROPERTIES; H2SO4 CONCENTRATION;
LEAD ALLOYS; SN ALLOY; BISMUTH; COMPONENTS}},
Research-Areas = {{Materials Science}},
Web-of-Science-Categories = {{Materials Science, Multidisciplinary}},
Author-Email = {{wislei@fem.unicamp.br}},
ResearcherID-Numbers = {{Osorio, Wislei R*/E-2585-2013
Bortolozo, Ausdinir/G-3421-2012
Garcia, Amauri/C-6916-2012
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}
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ORCID-Numbers = {{Garcia, Amauri/0000-0002-3834-3258
  Osorio, Wislei Riuper/0000-0002-2754-9584}},
Funding-Acknowledgement = {{CNPq (The Brazilian Research Council) {[446797/2014-6];
FAEPEX-UNICAMP;
  FAPESP}},
Funding-Text = {{The financial support provided by CNPq (The Brazilian Research
Council;
  Grants \# 446797/2014-6), FAEPEX-UNICAMP, and FAPESP are acknowledged.}},
Number-of-Cited-References = {{33}},
Times-Cited = {{5}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{26}},
Journal-ISO = {{J. Mater. Eng. Perform.}},
Doc-Delivery-Number = {{DM6GQ}},
Unique-ID = {{ISI:000376449100013}},
DA = {{2019-06-24}},
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@article{ ISI:000371099700063,
Author = {Leite, Lais da Silva and Maselli, Bianca de Souza and Umbuzeiro, Gisela
  de Aragao and Pupo Nogueira, Raquel F.},
Title = {{Monitoring ecotoxicity of disperse red 1 dye during photo-Fenton
  degradation}},
Journal = {{CHEMOSPHERE}},
Year = {{2016}},
Volume = {{148}},
Pages = {{511-517}},
Month = {{APR}},
Abstract = {{The present work assessed the ecotoxicity of the commercially available
  form of the azo dye Disperse Red 1 (DR1) and the main degradation
  products generated during photo-Fenton degradation. The acute toxicity
  tests with the microcrustacean Daphnia similis showed that toxicity
  increased after 10 min of treatment, when 35% of the original
  concentration of the dye has been degraded but without decrease in total
  organic carbon concentration (TOC). The increase of toxicity was a
  consequence of generation of degradation products of higher toxicity
  than DR1, which achieved maximum concentration after 10 min reaction.
  The structures identified using LC/MS indicated that most of the
  intermediates were formed after addition of hydroxyl radical to benzenic
  ring but the cleavage of azo bond was also observed. The intermediates
  were further degraded and toxicity was then reduced to non toxic levels
  after 45 min experiment, when 98% of the initial concentration of DR1
  was degraded and mineralization achieved 55%. The results of this study
  showed that the textile dye DR1 can be degraded by photo-Fenton process
  with removal of acute toxicity to D. similis even with incomplete
  mineralization. (C) 2016 Elsevier Ltd. All rights reserved.}},
Publisher = {{PERGAMON-ELSEVIER SCIENCE LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Nogueira, RFP (Reprint Author), Univ Estadual Paulista, UNESP, Inst
  Quim Araraquara, Dept Quim Analit, BR-14801970 Araraquara, SP, Brazil.
  Leite, Lais da Silva; Pupo Nogueira, Raquel F., Univ Estadual Paulista, UNESP, Inst
  Quim Araraquara, Dept Quim Analit, BR-14801970 Araraquara, SP, Brazil.
  Maselli, Bianca de Souza, Univ Sao Paulo, USP SP, Fac Ciencias Farmaceut,
  BR-05434070 Sao Paulo, SP, Brazil.
  Maselli, Bianca de Souza; Umbuzeiro, Gisela de Aragao, Univ Estadual Campinas, FT
  UNICAMP, Fac Tecnol, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1016/j.chemosphere.2016.01.053}},
ISSN = {{0045-6535}},
EISSN = {{1879-1298}},
Keywords = {{Textile dye; Disperse dyes; Daphnia similis; Degradation products}},
Keywords-Plus = {{ADVANCED OXIDATION PROCESSES; WASTE-WATER; AZO-DYE; MUTAGENIC-
ACTIVITY;
  TOXICITY; EFFLUENT}},
Research-Areas = {{Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Environmental Sciences}},
Author-Email = {{nogueira@iq.unesp.br}},
ResearcherID-Numbers = {{Nogueira, Raquel/B-3732-2013
  Umbuzeiro, Gisela A./H-4603-2011}},
ORCID-Numbers = {{Nogueira, Raquel/0000-0003-1237-4571
  Umbuzeiro, Gisela A./0000-0002-8623-5200}},
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Funding-Acknowledgement = {{FAPESP {{[]2008/10449-7}}; CNPq}},
Funding-Text = {{The authors thank FAPESP (grant number 2008/10449-7) for support of
this
work, and CNPq for a scholarship awarded to L.S. Leite. The authors
thank also Dr. B. F. Silva for LC-MS analysis.}},
Number-of-Cited-References = {{32}},
Times-Cited = {{13}},
Usage-Count-Last-180-days = {{2}},
Usage-Count-Since-2013 = {{41}},
Journal-ISO = {{Chemosphere}},
Doc-Delivery-Number = {{DF1KX}},
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DA = {{2019-06-24}},
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@article{ ISI:000372316700021,
Author = {Gozzi, Fabio and Oliveira, Silvio C. and Dantas, Renato F. and Silva,
Volnir O. and Quina, Frank H. and Machulek, Jr., Amilcar},
Title = {{Kinetic studies of the reaction between pesticides and hydroxyl radical
generated by laser flash photolysis}},
Journal = {{JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE}},
Year = {{2016}},
Volume = {{96}},
Number = {{5}},
Pages = {{1580-1584}},
Month = {{MAR 30}},
Abstract = {{BACKGROUND: Due to contamination of the environment by pesticides and
their mishandling, there is the need for treatment of contaminated sites
and correct disposal of materials containing them. Thus, studies with
advanced oxidation processes are expanding and can determine the rate
constant of the hydroxyl radical with organic compounds of great
importance in environmental contamination. In this context, the use of
laser flash photolysis has been shown to be viable for the determination
of these constants.
RESULTS: The reaction rate constants of different pesticides with HO
center dot in degassed acetonitrile have been determined. They were 1.6
x 10(9) M-1 s(-1), 0.6 x 10(9) M-1 s(-1), 1.2 x 10(9) M-1 s(-1), 2.4 x
10(9) M-1 s(-1) and 2.2 x 10(9) M-1 s(-1) for the pesticides carbaryl,
propoxur, fenoxycarb, ethoxysulfuron and chlorimuron-ethyl,
respectively. These values are about an order of magnitude smaller than
the diffusion controlled rate and correlate with the relative rates of
disappearance of the pesticides in the photo-Fenton reaction in water.
CONCLUSION: The correlation of the relative rate constants determined by
laser flash photolysis with the relative rates of photo-Fenton
degradation of the pesticides is compelling evidence for the
participation of the hydroxyl radical in the degradation of these
pesticides in the latter system. (C) 2015 Society of Chemical Industry}},
Publisher = {{WILEY-BLACKWELL}},
Address = {{111 RIVER ST, HOBOKEN 07030-5774, NJ USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Machulek, A (Reprint Author), Univ Fed Mato Grosso do Sul, Inst Chem,
Av Senador Filinto Muller 1555,CP 549, BR-79074460 Campo Grande, MS, Brazil.
Gozzi, Fabio; Oliveira, Silvio C.; Machulek, Amilcar, Jr., Univ Fed Mato Grosso do
Sul, Inst Chem, Av Senador Filinto Muller 1555,CP 549, BR-79074460 Campo Grande, MS,
Brazil.
Dantas, Renato F., Univ Campinas UNICAMP, Sch Technol, Paschoal Marmo 188,
BR-13484332 Limeira, SP, Brazil.
Silva, Volnir O.; Quina, Frank H., Univ Sao Paulo, Inst Chem, Av Prof Lineu Prestes
748,CP 26077, BR-05573970 Sao Paulo, SP, Brazil.}},
DOI = {{10.1002/jsfa.7258}},
ISSN = {{0022-5142}},
EISSN = {{1097-0010}},
Keywords = {{advanced oxidation processes; hydroxyl radical; laser flash photolysis;
pesticides; kinetics; photo-Fenton}},
Keywords-Plus = {{ADVANCED OXIDATION PROCESSES; FENTON REACTION; DEGRADATION; WATER;
PHOTODEGRADATION; PHOTOCATALYSIS; OZONATION; ANIONS; ACID}},
Research-Areas = {{Agriculture; Chemistry; Food Science \& Technology}},
Web-of-Science-Categories = {{Agriculture, Multidisciplinary; Chemistry, Applied;
Food Science \&
Technology}},
Author-Email = {{machulekjr@gmail.com}},
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ResearcherID-Numbers = {{USP, Dept. of Chemistry Institute of Chemistry -/B-8988-2012
  Junior, Amilcar/A-3569-2010
  de Oliveira, Silvio/A-5441-2017
  Quina, Frank/H-2255-2012
  Gozzi, Fabio/L-1318-2013
}},
ORCID-Numbers = {{de Oliveira, Silvio/0000-0002-2820-932X
  Quina, Frank/0000-0003-2981-3390
  Gozzi, Fabio/0000-0002-4993-7166
  Machulek Junior, Amilcar/0000-0002-4632-4647
  Silva, Volnir/0000-0001-9892-6300}},
Funding-Acknowledgement = {{CNPq (Conselho Nacional de Desenvolvimento Cientifico e
Tecnologico);
  CAPES (Coordenacao de Aperfeicoamento de Pessoal de Nivel Superior);
  FUNDECT (Fundacao de Apoio ao Desenvolvimento do Ensino, Ciencia e
  Tecnologia do Estado de Mato Grosso do Sul)}}},
Funding-Text = {{The authors thank the Brazilian funding agencies CNPq (Conselho
Nacional
  de Desenvolvimento Cientifico e Tecnologico), CAPES (Coordenacao de
  Aperfeicoamento de Pessoal de Nivel Superior) and FUNDECT (Fundacao de
  Apoio ao Desenvolvimento do Ensino, Ciencia e Tecnologia do Estado de
  Mato Grosso do Sul) for financial support. A.M.Jr is associated with
  INCT-EMA (Instituto Nacional de Ciencia e Tecnologia de Estudos do Meio
  Ambiente), A.MJr and FHQ with NAP-PhotoTech, the USP Research Consortium
  for Photochemical Technology, and FHQ with INCT-Catalysis.}},
Number-of-Cited-References = {{29}},
Times-Cited = {{3}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{58}},
Journal-ISO = {{J. Sci. Food Agric.}},
Doc-Delivery-Number = {{DG8EX}},
Unique-ID = {{ISI:000372316700021}},
DA = {{2019-06-24}},
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@article{ ISI:000372466500013,
  Author = {Stropa, Jusinei M. and Herrero, Aline S. and Oliveira, Silvio C. and
  Cavalheiro, Alberto A. and Dantas, Renato F. and Oliveira, Samuel L. and
  Machulek, Jr., Amilcar and Oliveira, Lincoln C. S.},
  Title = {{Use of Natural Rubber Membranes as Support for Powder TiO2 and Ag/TiO2
  Photocatalysts}},
  Journal = {{JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY}},
  Year = {{2016}},
  Volume = {{27}},
  Number = {{3}},
  Pages = {{575-583}},
  Month = {{MAR}},
  Abstract = {{The purpose of this study was to synthesize TiO2-polymer composites able
  to act as photocatalyst membranes. TiO2 catalysts were prepared using
  the sol-gel method to contain 0.0, 0.5, 1.0, and 2.0 wt.% of embedded
  Ag particles, subsequently incorporated into natural rubber latex at a
  weight fraction of 15%. Samples of these ceramic powders were suspended
  in a latex emulsion (natural rubber), cast in Petri dishes and slowly
  dried in an oven. The resulting materials were evaluated by X-ray
  diffraction, scanning electron microscopy, energy-dispersive X-ray,
  diffuse reflectance spectroscopy, differential scanning calorimetry,
  thermogravimetry, and photocatalytic assaying using methylene blue as an
  organic pollutant reference. All composite membranes exhibited good
  photoactivity conferred by TiO2 powder, with 98% dye fading after 300
  min of ultraviolet irradiation.}},
  Publisher = {{SOC BRASILEIRA QUIMICA}},
  Address = {{CAIXA POSTAL 26037, 05599-970 SAO PAULO, BRAZIL}},
  Type = {{Article}},
  Language = {{English}},
  Affiliation = {{Machulek, A (Reprint Author), Univ Fed Mato Grosso do Sul, Inst Quim,
  BR-79074460 Campo Grande, MS, Brazil.
  Stropa, Jusinei M.; Herrero, Aline S.; Oliveira, Silvio C.; Machulek, Amilcar, Jr.;
  Oliveira, Lincoln C. S., Univ Fed Mato Grosso do Sul, Inst Quim, BR-79074460 Campo
  Grande, MS, Brazil.
  Oliveira, Samuel L., Univ Fed Mato Grosso do Sul, Inst Fis, BR-79074460 Campo
  Grande, MS, Brazil.
  Cavalheiro, Alberto A., Univ Estadual Mato Grosso Sul, CPTREN, BR-79950000 Navirai,
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MS, Brazil.
  Dantas, Renato F., Univ Estadual Campinas, UNICAMP, Escola Tecnol, Paschoal Marmo
  1888, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.5935/0103-5053.20150293}},
ISSN = {{0103-5053}},
EISSN = {{1678-4790}},
Keywords = {{titanium dioxide; silver; membrane; natural rubber; heterogeneous
  photocatalysis}},
Keywords-Plus = {{METHYLENE-BLUE; THIN-FILMS; PHOTO-FENTON; DEGRADATION; AG;
  DECOMPOSITION; REMOVAL; WATER; CO; NANOCOMPOSITES}},
Research-Areas = {{Chemistry}},
Web-of-Science-Categories = {{Chemistry, Multidisciplinary}},
Author-Email = {{machulekjr@gmail.com}},
ResearcherID-Numbers = {{Oliveira, Lincoln CS/K-8026-2012
  Oliveira, Samuel L/A-9259-2008
  de Oliveira, Silvio/A-5441-2017
  Junior, Amilcar/A-3569-2010
  }},
ORCID-Numbers = {{Oliveira, Lincoln CS/0000-0003-1281-3431
  Oliveira, Samuel L/0000-0002-8616-772X
  de Oliveira, Silvio/0000-0002-2820-932X
  Machulek Junior, Amilcar/0000-0002-4632-4647}},
Funding-Acknowledgement = {{Conselho Nacional de Desenvolvimento Cientifico e
  Tecnologico (CNPq);
  Coordenacao de Aperfeicoamento de Pessoal de Nivel Superior (CAPES);
  Fundacao de Apoio ao Desenvolvimento do Ensino, Ciencia e Tecnologia do
  Estado de Mato Grosso do Sul (Fundect)}},
Funding-Text = {{The authors wish to thank the Brazilian funding agencies Conselho
  Nacional de Desenvolvimento Cientifico e Tecnologico (CNPq), Coordenacao
  de Aperfeicoamento de Pessoal de Nivel Superior (CAPES), and Fundacao de
  Apoio ao Desenvolvimento do Ensino, Ciencia e Tecnologia do Estado de
  Mato Grosso do Sul (Fundect) for their financial support. A. M. Jr. is
  associated with the Universidade de Sao Paulo Research Consortium for
  Photochemical Technology (NAP-Photo Tech) and the Instituto Nacional de
  Ciencia e Tecnologia de Estudos do Meio Ambiente (INCT-EMA).}},
Number-of-Cited-References = {{65}},
Times-Cited = {{2}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{48}},
Journal-ISO = {{J. Braz. Chem. Soc.}},
Doc-Delivery-Number = {{DH0ID}},
Unique-ID = {{ISI:000372466500013}},
OA = {{DOAJ Gold, Green Published}},
DA = {{2019-06-24}},
}

@article{ ISI:000368206700053,
Author = {Giordano Penteado, Carmenlucia Santos and de Carvalho, Eduardo Viviani
  and Cecche Lintz, Rosa Cristina},
Title = {{Reusing ceramic tile polishing waste in paving block manufacturing}},
Journal = {{JOURNAL OF CLEANER PRODUCTION}},
Year = {{2016}},
Volume = {{112}},
Number = {{1}},
Pages = {{514-520}},
Month = {{JAN 20}},
Abstract = {{Ceramic companies worldwide produce large amounts of polishing tile
  waste, which are piled up in the open air or disposed of in landfills.
  These wastes have such characteristics that make them potential
  substitutes for cement and sand in the manufacturing of concrete
  products. This paper investigates the use of ceramic tile polishing
  waste as a partial substitute for cement and sand in the manufacturer of
  concrete paving blocks. A concrete mix design was defined and then the
  sand was replaced with wastes from three production lines (porcelain
  tile, porous tile and stoneware tile) of a Brazilian ceramic tile
  industry in the percentages of 5%, 10%, 15%, 20%, 25% and 30%.
  Another group of concrete was produced with porcelain tile waste
  replacing the cement. The concretes were characterized using a slump
  test. Paving blocks were produced and subjected to compression strength,
  water absorption and porosity tests. Compression strength values were
  compared to Brazilian Standards for paving blocks. A reduction in slump
  was observed for all concretes as the percentage of waste addition
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increased, in relation to the control concrete. The compression strength values were higher for concrete cured for 28 days, and all blocks met the standard requirement of 35 MPa for light vehicle traffic at a curing age of 7 days. The strength values obtained when the porcelain tile waste replaced sand were higher than when this waste replaced cement, and those values were even higher than the control concrete, and met the standard requirement of 50 MPa for heavy vehicle traffic. Water absorption values tended to decrease as sand was replaced by ceramic tile wastes, due to the filler effect. These results show that it is possible to replace 30% of fine aggregate or 20% of cement with ceramic tile wastes and produce paving blocks suitable for use in heavy vehicle traffic. Thus, this research demonstrates that the use of ceramic tile waste as a component of concrete for paving blocks manufacturing is technically feasible. (C) 2015 Elsevier Ltd. All rights reserved.}}

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Publisher = {{ELSEVIER SCI LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Penteado, CSG (Reprint Author), Univ Estadual Campinas, Sch Technol, Div Technol Environm Sanitat, Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Giordano Penteado, Carmenlucia Santos, Univ Estadual Campinas, Sch Technol, Div Technol Environm Sanitat, BR-13484332 Limeira, SP, Brazil.
de Carvalho, Eduardo Viviani, Univ Estadual Campinas, Sch Technol, Grad Program Technol, BR-13484332 Limeira, SP, Brazil.
Cecche Lintz, Rosa Cristina, Univ Estadual Campinas, Sch Technol, Div Technol Construct, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1016/j.jclepro.2015.06.142}},
ISSN = {{0959-6526}},
EISSN = {{1879-1786}},
Keywords = {{Ceramic tile waste; Ceramic polishing waste; Ceramic waste recycling; Concrete paving block}},
Keywords-Plus = {{CONCRETE; AGGREGATE}},
Research-Areas = {{Science \& Technology - Other Topics; Engineering; Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Green \& Sustainable Science \& Technology; Engineering, Environmental; Environmental Sciences}},
Author-Email = {{carmenlucia@ft.unicamp.br
eduardo.ua@gmail.com
rosacclintz@ft.unicamp.br}},
ResearcherID-Numbers = {{LINTZ, ROSA/T-3294-2018
}},
ORCID-Numbers = {{Penteado, Carmenlucia/0000-0001-5731-7947}},
Funding-Acknowledgement = {{CAPES - Coordination for the Improvement of Higher Education Personnel, Brazil}},
Funding-Text = {{The authors would like to acknowledge CAPES - Coordination for the Improvement of Higher Education Personnel, Brazil for providing a Master's Scholarship for one of the authors (Carvalho, E.V.); the Laboratory of Materials (School of Technology, University of Campinas), for providing all the materials and equipment used in the research; Professor Lisandro Pavie Cardoso and Msc Guilherme A. Calligaris from the Laboratory of Materials Preparation and Characterization (Institute of Physics Gleb Wataghin - IFGW, University of Campinas) for the DRX analysis; Melanie Eldridge for English reviewing and Errol Zeiger for scientific English editing.}},
Number-of-Cited-References = {{47}},
Times-Cited = {{14}},
Usage-Count-Last-180-days = {{5}},
Usage-Count-Since-2013 = {{38}},
Journal-ISO = {{J. Clean Prod.}},
Doc-Delivery-Number = {{DB00F}},
Unique-ID = {{ISI:000368206700053}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000405582400113,
Author = {Diorio, Rafael Fernando and Timoteo, Varese Salvador},
Editor = {{Arabnia, HR and Deligiannidis, L and Yang, M}},
Title = {{Multimedia Content Delivery in OpenFlow SDN: An Approach Based on a Multimedia Gateway}},

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Booktitle = {{2016 INTERNATIONAL CONFERENCE ON COMPUTATIONAL SCIENCE \& COMPUTATIONAL
INTELLIGENCE (CSCI)}},
Year = {{2016}},
Pages = {{612-617}},
Note = {{International Conference on Computational Science and Computational
Intelligence (CSIC), Las Vegas, NV, DEC 15-17, 2016}},
Organization = {{Amer Council Sci \& Educ}},
Abstract = {{Day after day, multimedia applications and services are becoming more
and more popular, making the network traffic more detailed and complex.
In this scenario, the multimedia content delivery is challenging and a
proper method to increase the distribution efficiency is nearly
mandatory. In this paper, we explore a multimedia gateway to enhance the
multimedia content delivery in an OpenFlow Software-Defined Network
(SDN) environment. On the network, the multimedia gateway acts as a
complementary component of the OpenFlow controller and as a network
gateway for the end-systems. The interactions with the OpenFlow
controller occur via its northbound API. Through these interactions,
with global information of the network, multimedia traffic flows can be
routed and delivered differently from the other flows. Our evaluation
experiments show that the multimedia gateway is able to identify and
classify multiple multimedia traffic flows according to their service
type (e.g., audio, voice, video or data), forward each traffic flow to
the destination system according to specific flow rules, with different
configurations of bandwidth allocation and of priority, and provide a
caching service for the end-systems. These resources are important to
improve the multimedia content delivery and distribution and to increase
the user-perceived Quality of Experience (QoE).}},
Publisher = {{IEEE}},
Address = {{345 E 47TH ST, NEW YORK, NY 10017 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Diorio, RF (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
Technol FT, Grp Opt \& Modelagem Numer GOMNI, BR-13484332 Limeira, SP, Brazil.
Diorio, Rafael Fernando; Timoteo, Varese Salvador, Univ Estadual Campinas, UNICAMP,
Sch Technol FT, Grp Opt \& Modelagem Numer GOMNI, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1109/CSCI.2016.120}},
ISBN = {{978-1-5090-5510-4}},
Keywords = {{Multimedia Gateway; Multimedia delivery; Software-Defined Network (SDN)}},
Keywords-Plus = {{SOFTWARE-DEFINED NETWORKING}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Artificial Intelligence; Computer
Science, Theory \&
Methods}},
Author-Email = {{rafael@diorio.com.br
varese@ft.unicamp.br}},
Funding-Acknowledgement = {{CAPES; CNPq}},
Funding-Text = {{The authors would like to thank the CAPES and CNPq for financial
support.}},
Number-of-Cited-References = {{15}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{0}},
Doc-Delivery-Number = {{B11DD}},
Unique-ID = {{ISI:000405582400113}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000405582400114,
Author = {Diorio, Rafael Fernando and de Oliveira Moraes, Regina Lucia and
Timoteo, Varese Salvador},
Editor = {{Arabnia, HR and Deligiannidis, L and Yang, M}},
Title = {{Delay and Packet Loss in Radio Access Networks: A Fault Injection
Approach}},
Booktitle = {{2016 INTERNATIONAL CONFERENCE ON COMPUTATIONAL SCIENCE \& COMPUTATIONAL
INTELLIGENCE (CSCI)}},
Year = {{2016}},
Pages = {{618-622}},
Note = {{International Conference on Computational Science and Computational
Intelligence (CSIC), Las Vegas, NV, DEC 15-17, 2016}},
Organization = {{Amer Council Sci \& Educ}},
Abstract = {{Dependability evaluation is relevant in the context of Radio Access
Networks (RAN). Both packet loss and delays in delivering the messages

```


are common problems that may impact the correct functioning of the network. This work presents the results of a series of experiments based on fault injection. Packet loss and delivery delays are present on 3G/4G radio access networks, wired broadband access networks and local area networks. The experiments evaluate the behavior of traffic flows focused on both fault types for each network environment. The results show that in broadband access and local area networks the times measured in the tests were consistent with the times configured for each delay. However the RAN scenario has a completely different result since the mean time obtained in all cases are not proportional to the delays injected in the traffic flow. Also, it is bigger, as expected, but it is up to 20 and 898 times bigger than in the wired broadband and local area connection respectively.}}

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Publisher = {{IEEE}},
Address = {{345 E 47TH ST, NEW YORK, NY 10017 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Diorio, RF (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
Technol FT, Grp Opt \& Modelagem Numer GOMNI, BR-13484332 Limeira, SP, Brazil.
Diorio, Rafael Fernando; de Oliveira Moraes, Regina Lucia; Timoteo, Varese
Salvador, Univ Estadual Campinas, UNICAMP, Sch Technol FT, Grp Opt \& Modelagem Numer
GOMNI, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1109/CSCI.2016.121}},
ISBN = {{978-1-5090-5510-4}},
Keywords = {{Reliability; Mobile Network; Fault Injection}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Artificial Intelligence; Computer
Science, Theory \&
Methods}},
Author-Email = {{rafael@diorio.com.br
regina@ft.unicamp.br
varese@ft.unicamp.br}},
Funding-Acknowledgement = {{FAPESP {{{2013/17823-0}}}; CAPES; CNPq}},
Funding-Text = {{The authors would like to thank the FAPESP 2013/17823-0 grant, CAPES
and
CNPq for financial support.}},
Number-of-Cited-References = {{4}},
Times-Cited = {{0}},
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Doc-Delivery-Number = {{B11DD}},
Unique-ID = {{ISI:000405582400114}},
DA = {{2019-06-24}},
}

@inproceedings{ ISI:000403403900084,
Author = {Oliveira, W. D. and Pires, M. S. G. and Canno, L. M. and Ribeiro, L. C.
L. J.},
Editor = {{Vagenas, EC and Vlachos, DS}},
Title = {{Flow study in channel with the use computational fluid dynamics (CFD)}},
Booktitle = {{5TH INTERNATIONAL CONFERENCE ON MATHEMATICAL MODELING IN PHYSICAL
SCIENCES (IC-MSQUARE 2016)}},
Series = {{Journal of Physics Conference Series}},
Year = {{2016}},
Volume = {{738}},
Note = {{5th International Conference on Mathematical Modeling in Physical
Sciences (IC-MSquare), Athens, GREECE, MAY 23-26, 2016}},
Abstract = {{The Computational Fluid Dynamics (CFD) is a tool used to numerically
simulate fluid flow behavior, and all the laws that govern the study of
fluids is the mass transfer and energy, chemical reactions, hydraulic
behaviors, among others applications. This tool mathematical equation
solves the problem in a specific manner over a region of interest, with
predetermined boundary conditions on this region. This work is to study
the flow channel through the CFD technique.}},
Publisher = {{IOP PUBLISHING LTD}},
Address = {{DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Oliveira, WD (Reprint Author), Univ Estadual Campinas, Unicamp, Coll
Technol, R Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Oliveira, W. D.; Pires, M. S. G.; Canno, L. M.; Ribeiro, L. C. L. J., Univ Estadual
Campinas, Unicamp, Coll Technol, R Paschoal Marmo 1888, BR-13484332 Limeira, SP,

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Brazil.}},
DOI = {{10.1088/1742-6596/738/1/012084}},
Article-Number = {{UNSP 012084}},
ISSN = {{1742-6588}},
Research-Areas = {{Mathematics; Physics}},
Web-of-Science-Categories = {{Mathematics, Applied; Physics, Mathematical}},
Author-Email = {{wesleydias96@gmail.com
marta@ft.unicamp.br
laura@ft.unicamp.br
lubienka.ft@gmail.com}},
Funding-Acknowledgement = {{CNPq; PRP/UNICAMP}},
Funding-Text = {{The authors would like to thank the institutions where they conduct
their research for supporting this project and also the financial
support provided by CNPq and PRP/UNICAMP.}},
Number-of-Cited-References = {{15}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{1}},
Doc-Delivery-Number = {{BH8KX}},
Unique-ID = {{ISI:000403403900084}},
OA = {{Other Gold}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000403403900026,
Author = {Signoreti, R. O. S. and Camargo, R. Z. and Canno, L. M. and Pires, M. S.
G. and Ribeiro, L. C. L. J.},
Editor = {{Vagenas, EC and Vlachos, DS}},
Title = {{Importance of pressure reducing valves (PRVs) in water supply networks}},
Booktitle = {{5TH INTERNATIONAL CONFERENCE ON MATHEMATICAL MODELING IN PHYSICAL
SCIENCES (IC-MSQUARE 2016)}},
Series = {{Journal of Physics Conference Series}},
Year = {{2016}},
Volume = {{738}},
Note = {{5th International Conference on Mathematical Modeling in Physical
Sciences (IC-MSquare), Athens, GREECE, MAY 23-26, 2016}},
Abstract = {{Challenged with the high rate of leakage from water supply systems,
these managers are committed to identify control mechanisms. In order to
standardize and control the pressure Pressure Reducing Valves (VRP) are
installed in the supply network, shown to be more effective and provide
a faster return for the actual loss control measures. It is known that
the control pressure is while controlling the occurrence of leakage.
Usually the network is sectorized in areas defined by pressure levels
according to its topography, once inserted the VRP in the same system
will limit the downstream pressure. This work aims to show the
importance of VRP as loss reduction for tool.}},
Publisher = {{IOP PUBLISHING LTD}},
Address = {{DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Signoreti, ROS (Reprint Author), Univ Estadual Campinas, UNICAMP, Coll
Technol, R Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Signoreti, R. O. S.; Camargo, R. Z.; Canno, L. M.; Pires, M. S. G.; Ribeiro, L. C.
L. J., Univ Estadual Campinas, UNICAMP, Coll Technol, R Paschoal Marmo 1888,
BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1088/1742-6596/738/1/012026}},
Article-Number = {{UNSP 012026}},
ISSN = {{1742-6588}},
Research-Areas = {{Mathematics; Physics}},
Web-of-Science-Categories = {{Mathematics, Applied; Physics, Mathematical}},
Author-Email = {{rodrigo.signoreti@gmail.com
rafael\kolosso@hotmail.com
laura@ft.unicamp.br
marta@ft.unicamp.br
lubienka.ft@gmail.com}},
Funding-Acknowledgement = {{CNPq; PRP/UNICAMP}},
Funding-Text = {{The authors would like to thank the institutions where they conduct
their research for supporting this project and also the financial
support provided by CNPq and PRP/UNICAMP.}},
Number-of-Cited-References = {{17}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{1}},
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@article{ ISI:000388662900011,
Author = {Arnold, Francisco Jose and Goncalves, Marcos Sergio and Massaro Junior,
Flavio Rubens and Martins, Paulo Sergio},
Title = {{Complex elastic coefficient and mechanical losses for piezoelectric
resonators under transversal and thickness modes}},
Journal = {{FERROELECTRICS}},
Year = {{2016}},
Volume = {{504}},
Number = {{1}},
Pages = {{104-115}},
Abstract = {{The performance of piezoelectric transducers depends upon a set of
physical parameters. Among them, losses are one of the most important.
Mechanical losses in piezoelectric devices are studied using complex
numbers in the elastic coefficients of the models. Usually, numerical
methods are employed to obtain the loss parameters through the
minimization of an error function. We insert mechanical losses dependent
on frequency in Mason's model to evaluate how this dependency affects
the electrical impedance curve. The results show that a better curve
fitting is achieved when the mechanical loss is a first order function
of frequency.}},
Publisher = {{TAYLOR & FRANCIS LTD}},
Address = {{2-4 PARK SQUARE, MILTON PARK, ABINGDON OR14 4RN, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Arnold, FJ (Reprint Author), Univ Estadual Campinas, Fac Technol, R
Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Arnold, Francisco Jose; Goncalves, Marcos Sergio; Massaro Junior, Flavio Rubens;
Martins, Paulo Sergio, Univ Estadual Campinas, Fac Technol, R Paschoal Marmo 1888,
BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1080/00150193.2016.1239999}},
ISSN = {{0015-0193}},
EISSN = {{1563-5112}},
Keywords = {{Piezoelectricity; transducers; electrical impedance; genetic algorithm;
frequency}},
Keywords-Plus = {{ARTIFICIAL-INTELLIGENCE TECHNIQUE; MATERIAL CONSTANTS; CERAMICS;
PARAMETERS; IDENTIFICATION; REAL}},
Research-Areas = {{Materials Science; Physics}},
Web-of-Science-Categories = {{Materials Science, Multidisciplinary; Physics,
Condensed Matter}},
Author-Email = {{arnold@ft.unicamp.br}},
ResearcherID-Numbers = {{Arnold, F. J./P-6287-2018}},
ORCID-Numbers = {{Arnold, F. J./0000-0003-2818-9709}},
Funding-Acknowledgement = {{Sao Paulo Research Foundation (FAPESP) {{2012/07639-4,
2011/12792-3}}}},
Funding-Text = {{The authors would like to thank Sao Paulo Research Foundation
(FAPESP),
Proc. 2012/07639-4 and 2011/12792-3.}},
Number-of-Cited-References = {{19}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{4}},
Journal-ISO = {{Ferroelectrics}},
Doc-Delivery-Number = {{ED2GV}},
Unique-ID = {{ISI:000388662900011}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000389020100022,
Author = {Guedes, Gustavo Bartz and Baioco, Gisele Busichia and de Oliveira
Moraes, Regina Lucia},
Editor = {{Hartmann, S and Ma, H}},
Title = {{Evolutionary Database Design: Enhancing Data Abstraction Through
Database Modularization to Achieve Graceful Schema Evolution}},
Booktitle = {{DATABASE AND EXPERT SYSTEMS APPLICATIONS, DEXA 2016, PT I}},
Series = {{Lecture Notes in Computer Science}},
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Year = {{2016}},
Volume = {{9827}},
Pages = {{355-369}},
Note = {{27th International Conference on Database and Expert Systems
  Applications (DEXA), Porto, PORTUGAL, SEP 05-08, 2016}},
Organization = {{Research Grp Intelligent Engn \& Comp Adv Innovat \& Dev; Inst Super
  Engn Porto}},
Abstract = {{Software systems are not immutable through time, especially in modern
  development methods such as agile ones. Therefore, a software system is
  constantly evolving. Besides coding, the database schema design also
  plays a major role. Changes in requirements will probably affect the
  database schema, which will have to be modified to accommodate them. In
  a software system, changes to the database schema are costly, due to
  application's perspective, where data semantics needs to be maintained.
  This paper presents a process to conduct database schema evolution by
  extending the database modularization to work in an evolutionary manner.
  The evolutionary database modularization process is executed during
  conceptual design, improving the abstraction capacity of generated data
  schema and results in loosely coupled database elements, organized in
  database modules. Finally, we present the process execution in an agile
  project.}},
Publisher = {{SPRINGER INT PUBLISHING AG}},
Address = {{GEWERBESTRASSE 11, CHAM, CH-6330, SWITZERLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Guedes, GB (Reprint Author), Fed Inst Sao Paulo, BR-13183250
  Hortolandia, SP, Brazil.
  Guedes, GB (Reprint Author), Univ Estadual Campinas, BR-13484332 Limeira, SP,
  Brazil.
  Guedes, Gustavo Bartz, Fed Inst Sao Paulo, BR-13183250 Hortolandia, SP, Brazil.
  Guedes, Gustavo Bartz; Baioco, Gisele Busichia; de Oliveira Moraes, Regina Lucia,
  Univ Estadual Campinas, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1007/978-3-319-44403-1_22}},
ISSN = {{0302-9743}},
ISBN = {{978-3-319-44403-1; 978-3-319-44402-4}},
Keywords = {{Evolutionary database design; Schema evolution; Database evolution;
  Agile methods}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Artificial Intelligence; Computer
  Science, Information
  Systems; Computer Science, Theory \& Methods}},
Author-Email = {{gubartz@ifsp.edu.br
  gisele@ft.unicamp.br
  regina@ft.unicamp.br}},
ORCID-Numbers = {{Moraes, Regina/0000-0003-0678-4777}},
Number-of-Cited-References = {{19}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{0}},
Doc-Delivery-Number = {{BG40B}},
Unique-ID = {{ISI:000389020100022}},
DA = {{2019-06-24}},
}

@inproceedings{ ISI:000387188000051,
Author = {Farias, R. L. S. and Timoteo, V. S. and Avancini, S. and Pinto, M. B.
  and Krein, G.},
Book-Group-Author = {{IOP}},
Title = {{Impact of a magnetic field on the thermodynamics of magnetized quark
  matter}},
Booktitle = {{XIII INTERNATIONAL WORKSHOP ON HADRON PHYSICS, SECTIONS 1-5}},
Series = {{Journal of Physics Conference Series}},
Year = {{2016}},
Volume = {{706}},
Note = {{13th International Workshop on Hadron Physics, Angra dos Reis, BRAZIL,
  MAR 22-27, 2015}},
Organization = {{Coordenacao Aperfeicoamento Pessoal Nivel Super; Conselho Nacl
  Desenvolvimento Cientifico Tecnologico; Fundacao Amparo Pesquisa Estado
  Rio de Janeiro; Fundacao Amparo Pesquisa Estado Sao Paulo; Int Union
  Pure \& Appl Phys}},
Abstract = {{We investigate the effect of a magnetic field on the thermodynamics of
  magnetized quark matter at finite temperature. By using the Nambu

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Jona-Lasino (NJL) model, we show that the lattice results for the quark condensate can be reproduced when the coupling constant G of the model decreases with the magnetic field and the temperature. Our results show that thermodynamic quantities and quark condensates are very sensitive to the dependence of G with the temperature, even in the absence of a magnetic field.}},

Publisher = {{IOP PUBLISHING LTD}},
Address = {{DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Farias, RLS (Reprint Author), Univ Fed Santa Maria, Dept Fis, BR-97105900 Santa Maria, RS, Brazil.
Farias, RLS (Reprint Author), Kent State Univ, Dept Phys, Kent, OH 44242 USA.
Farias, R. L. S., Univ Fed Santa Maria, Dept Fis, BR-97105900 Santa Maria, RS, Brazil.
Farias, R. L. S., Kent State Univ, Dept Phys, Kent, OH 44242 USA.
Timoteo, V. S., Univ Estadual Campinas UNICAMP, FT, Grp Opt \& Modelagem Numer GOMNI, BR-13484332 Limeira, SP, Brazil.
Avancini, S.; Pinto, M. B., Univ Fed Santa Catarina, Dept Fis, BR-88040900 Florianopolis, SC, Brazil.
Krein, G., Univ Estadual Paulista, Inst Fis Teor, Rua Dr Bento Teobaldo Ferraz 271,Bloco 2, BR-01140070 Sao Paulo, SP, Brazil.}},
DOI = {{10.1088/1742-6596/706/5/052029}},
Article-Number = {{UNSP 052029}},
ISSN = {{1742-6588}},
Keywords-Plus = {{MODEL}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Nuclear; Physics, Particles \& Fields}},
Author-Email = {{rfarias@kent.edu}},
ResearcherID-Numbers = {{avancini, sidney/V-4953-2017
Krein, Gastao/C-1204-2012
Pinto, Marcus Benghi/O-3487-2019
Farias, Ricardo L S/G-3896-2012}},
ORCID-Numbers = {{Krein, Gastao/0000-0003-1713-8578
Pinto, Marcus Benghi/0000-0002-6630-1653
Farias, Ricardo L S/0000-0003-4461-7494}},
Number-of-Cited-References = {{14}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{2}},
Doc-Delivery-Number = {{BG2AE}},
Unique-ID = {{ISI:000387188000051}},
OA = {{Other Gold}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000387188000056,
Author = {Szpigiel, S. and Timoteo, V. S. and Ruiz Arriola, E.},
Book-Group-Author = {{IOP}},
Title = {{Block-diagonal similarity renormalization group and effective nucleon-nucleon interactions}},
Booktitle = {{XIII INTERNATIONAL WORKSHOP ON HADRON PHYSICS, SECTIONS 1-5}},
Series = {{Journal of Physics Conference Series}},
Year = {{2016}},
Volume = {{706}},
Note = {{13th International Workshop on Hadron Physics, Angra dos Reis, BRAZIL, MAR 22-27, 2015}},
Organization = {{Coordenacao Aperfeicoamento Pessoal Nivel Super; Conselho Nacl Desenvolvimento Cientifico Tecnologico; Fundacao Amparo Pesquisa Estado Rio de Janeiro; Fundacao Amparo Pesquisa Estado Sao Paulo; Int Union Pure \& Appl Phys}},
Abstract = {{We apply the block-diagonal similarity renormalization group to a simple toy-model for the nucleon-nucleon (N N) interaction in the S-1(0) channel, aiming to analyze the complementarity between the explicit and the implicit renormalization approaches in nuclear physics. By explicit renormalization we mean the methods based on the wilsonian renormalization group in which high-energy modes above a given cutoff scale are integrated out while their effects are replaced by scale dependent effective interactions consistently generated in the process. We call implicit renormalization the usual procedure of cutoff effective theories in which the high-energy modes above the cutoff scale are simply removed and their effects are included through parametrized

cutoff dependent counterterms whose strengths are fixed by fitting low-energy data. We compare the effective interactions obtained in both schemes and find a wide range of cutoff scales where they overlap. We further analyze the role played by the one-pion exchange (OPE) considering a delta-shell plus OPE representation for the N N interaction.}},

Publisher = {{IOP PUBLISHING LTD}},
Address = {{DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Szipigel, S (Reprint Author), Univ Presbiteriana Mackenzie, Ctr Radioastron \& Astrofis Mackenzie, BR-01302907 Sao Paulo, SP, Brazil.
Szipigel, S., Univ Presbiteriana Mackenzie, Ctr Radioastron \& Astrofis Mackenzie, BR-01302907 Sao Paulo, SP, Brazil.
Timoteo, V. S., Univ Estadual Campinas, Grp Opt \& Modelagem Numer GOMNI, BR-13484332 Limeira, SP, Brazil.
Ruiz Arriola, E., Univ Granada, Dept Fis Atom, E-18071 Granada, Andalucia, Spain.
Ruiz Arriola, E., Univ Granada, Dept Mol, E-18071 Granada, Andalucia, Spain.
Ruiz Arriola, E., Univ Granada, Dept Nucl, E-18071 Granada, Andalucia, Spain.}},
DOI = {{10.1088/1742-6596/706/5/052034}},
Article-Number = {{UNSP 052034}},
ISSN = {{1742-6588}},
Keywords-Plus = {{EXPLICIT RENORMALIZATION; IMPLICIT; MODELS}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Nuclear; Physics, Particles \& Fields}},
Author-Email = {{szipigel@mackenzie.br
varese@ft.unicamp.br
earriola@ugr.es}},
ResearcherID-Numbers = {{Ruiz Arriola, Enrique/A-9388-2015
Szipigel, Sergio/F-5349-2012}},
ORCID-Numbers = {{Ruiz Arriola, Enrique/0000-0002-9570-2552
Szipigel, Sergio/0000-0003-2529-2225}},
Number-of-Cited-References = {{25}},
Times-Cited = {{0}},
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Usage-Count-Since-2013 = {{1}},
Doc-Delivery-Number = {{BG2AE}},
Unique-ID = {{ISI:000387188000056}},
OA = {{Other Gold}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000387188000058,
Author = {Timoteo, V. S. and Batista, E. F. and Farias, R. L. S. and Szipigel, S.},
Book-Group-Author = {{IOP}},
Title = {{Subtractive Renormalization of the NJL model}},
Booktitle = {{XIII INTERNATIONAL WORKSHOP ON HADRON PHYSICS, SECTIONS 1-5}},
Series = {{Journal of Physics Conference Series}},
Year = {{2016}},
Volume = {{706}},
Note = {{13th International Workshop on Hadron Physics, Angra dos Reis, BRAZIL, MAR 22-27, 2015}},
Organization = {{Coordenacao Aperfeicoamento Pessoal Nivel Super; Conselho Nacl Desenvolvimento Cientifico Tecnolologico; Fundacao Amparo Pesquisa Estado Rio de Janeiro; Fundacao Amparo Pesquisa Estado Sao Paulo; Int Union Pure \& Appl Phys}},
Abstract = {{In this work, we apply a subtractive renormalization method to the SU (2) Nambu-Jona-Lasinio (NJL) model in Born approximation and compare the results obtained here with those achieved by the standard momentum cutoff regularization. We have computed the dynamical quark mass, the chiral condensate, the pion mass and the quark-antiquark T-matrix as a function of the cutoff Lambda and the subtraction scale xi. We have shown that both approaches give similar results and the dependence of the physical quantities on the subtraction point xi is much weaker than the dependence on the cutoff Lambda.}},
Publisher = {{IOP PUBLISHING LTD}},
Address = {{DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Timoteo, VS (Reprint Author), Univ Estadual Campinas UNICAMP, FT, Grp Opt Modelagem Numer GOMNI, BR-13484332 Limeira, SP, Brazil.
Timoteo, V. S., Univ Estadual Campinas UNICAMP, FT, Grp Opt Modelagem Numer GOMNI,

BR-13484332 Limeira, SP, Brazil.
 Batista, E. F., Univ Estadual Sudoeste Bahia, Dept Ciencias Exatas \& Nat,
 BR-45700000 Itapetinga, BA, Brazil.
 Farias, R. L. S., Kent State Univ, Dept Phys, Kent, OH 44242 USA.
 Farias, R. L. S., Univ Fed Santa Maria, Dept Fis, BR-97105900 Santa Maria, RS,
 Brazil.
 Szpigel, S., Univ Presbiteriana Mackenzie, Ctr Radioastron \& Astrofis Mackenzie,
 BR-01302907 Sao Paulo, SP, Brazil.}},
 DOI = {{10.1088/1742-6596/706/5/052036}},
 Article-Number = {{UNSP 052036}},
 ISSN = {{1742-6588}},
 Research-Areas = {{Physics}},
 Web-of-Science-Categories = {{Physics, Nuclear; Physics, Particles \& Fields}},
 Author-Email = {{varese@ft.unicamp.br
 efbatista@uesb.edu.br
 rfarias@kent.edu
 szpigel@mackenzie.br}},
 ResearcherID-Numbers = {{Szpigel, Sergio/F-5349-2012
 Farias, Ricardo L S/G-3896-2012}},
 ORCID-Numbers = {{Szpigel, Sergio/0000-0003-2529-2225
 Farias, Ricardo L S/0000-0003-4461-7494}},
 Number-of-Cited-References = {{13}},
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 Doc-Delivery-Number = {{BG2AE}},
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 DA = {{2019-06-24}},
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@inproceedings{ ISI:000386564300002,
 Author = {Barbosa, R. and Silva, A. E. A. and Moraes, R.},
 Book-Group-Author = {{IEEE}},
 Title = {{Use of similarity measure to suggest the existence of duplicate user
 stories in the Scrum process}},
 Booktitle = {{2016 46TH ANNUAL IEEE/IFIP INTERNATIONAL CONFERENCE ON DEPENDABLE
 SYSTEMS AND NETWORKS WORKSHOPS (DSN-W)}},
 Year = {{2016}},
 Pages = {{2-5}},
 Note = {{46th Annual IEEE/IFIP International Conference on Dependable Systems and
 Networks Workshops (DSN-W), Toulouse, FRANCE, JUN 28-JUL 01, 2016}},
 Organization = {{IEEE; IFIP; IEEE Comp Soc}},
 Abstract = {{In the Scrum process, Product Backlog consists of a prioritized list of
 desired software functionalities recorded in the form of user stories.
 As the software product is developed, new functionalities are discovered
 and included in the Product Backlog. However, in large-scale projects,
 duplicate stories may arise because of the large number of generated
 stories, the lack of communication among team members, and due to the
 speed of development imposed by the Scrum process. In this case, it is
 important to detect such story as being duplicate, in order to avoid the
 rework of the software feature. This paper presents an approach that
 uses semantic similarity measures to suggest possible cases of
 duplication between user stories. This alert can help Product Owners and
 Scrum Masters in the decision about excluding duplicate user stories
 from the Product Backlog.}},
 Publisher = {{IEEE}},
 Address = {{345 E 47TH ST, NEW YORK, NY 10017 USA}},
 Type = {{Proceedings Paper}},
 Language = {{English}},
 Affiliation = {{Barbosa, R (Reprint Author), Univ Estadual Campinas, Sch Technol,
 UNICAMP, BR-13484332 Limeira, SP, Brazil.
 Barbosa, R.; Silva, A. E. A.; Moraes, R., Univ Estadual Campinas, Sch Technol,
 UNICAMP, BR-13484332 Limeira, SP, Brazil.}},
 DOI = {{10.1109/DSN-W.2016.7}},
 ISBN = {{978-1-4673-8891-7}},
 Keywords = {{similarity measures; similarity functions; user stories; product
 backlog; Scrum}},
 Research-Areas = {{Engineering}},
 Web-of-Science-Categories = {{Engineering, Electrical \& Electronic}},
 Author-Email = {{ricardob@unicamp.br
 aeasilva@ft.unicamp.br}}


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    regina@ft.unicamp.br}},
  ORCID-Numbers = {{Morales, Regina/0000-0003-0678-4777}},
  Number-of-Cited-References = {{14}},
  Times-Cited = {{1}},
  Usage-Count-Last-180-days = {{0}},
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  Doc-Delivery-Number = {{BG0XL}},
  Unique-ID = {{ISI:000386564300002}},
  DA = {{2019-06-24}},
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@inproceedings{ ISI:000382503300016,
  Author = {Rosolem, Joao B. and Hortencio, Claudio A. and Floridaia, Claudio and
    Dini, Danilo C. and Penze, Rivael S. and Aires, Bruno N. and Bassan,
    Fabio R. and Morbach, Rodrigo A. and de Costa, Eduardo F. and Salgado,
    Felipe C. and Peres, Rodrigo and Fracarolli, Joao Paulo V. and Santana,
    Marcus Vincius F. and Gregatti, Augusto Cezar M. and Muniz, Guilherme
    and Amadeo, Gerson L. and Carvalho, Gilson M. and Pertile, Fernando and
    Melegari, Luis Fernando P. and Herreros, Heloisa O. and Kurokawa,
    Marcelo Y. and de Avila, Luis F.},
  Editor = {{Udd, E and Pickrell, G and Du, HH}},
  Title = {{Field trial of a multi-parameters' monitoring network using FBGs adapted
    directly in the conventional instruments of dams}},
  Booktitle = {{FIBER OPTIC SENSORS AND APPLICATIONS XIII}},
  Series = {{Proceedings of SPIE}},
  Year = {{2016}},
  Volume = {{9852}},
  Note = {{Conference on Fiber Optic Sensors and Applications XIII, Baltimore, MD,
    APR 18-21, 2016}},
  Organization = {{SPIE}},
  Abstract = {{This paper presents the results of a field test of a multi-parameters'
    monitoring network using FBGs adapted directly in the conventional
    instruments of two dams which are in full operational capability. We
    presented the details of the design and tests of the sensor's network,
    such as, the sensors adaptation, the resolution comparison between the
    conventional instruments and the FBGs, the network topology, the
    spectral occupancy distribution considering the parameters optical
    bandwidth and also the temperature compensation for FBGs, the number of
    sensors by fiber and the performance of the FBGs sensors compared with
    the conventional instruments used in the Dams.}},
  Publisher = {{SPIE-INT SOC OPTICAL ENGINEERING}},
  Address = {{1000 20TH ST, PO BOX 10, BELLINGHAM, WA 98227-0010 USA}},
  Type = {{Proceedings Paper}},
  Language = {{English}},
  Affiliation = {{Rosolem, JB (Reprint Author), CPqD Fdn, 1000 St Dr Ricardo Benetton
    Martins, BR-13086902 Campinas, SP, Brazil.
    Rosolem, Joao B.; Hortencio, Claudio A.; Floridaia, Claudio; Dini, Danilo C.; Penze,
    Rivael S.; Aires, Bruno N.; Bassan, Fabio R.; Morbach, Rodrigo A.; de Costa, Eduardo
    F.; Salgado, Felipe C.; Peres, Rodrigo; Fracarolli, Joao Paulo V., CPqD Fdn, 1000 St
    Dr Ricardo Benetton Martins, BR-13086902 Campinas, SP, Brazil.
    Santana, Marcus Vincius F.; Gregatti, Augusto Cezar M.; Muniz, Guilherme, BAESA
    Energet Barra Grande, 1168 St M Benvenuta, BR-88035000 Florianopolis, SC, Brazil.
    Amadeo, Gerson L.; Carvalho, Gilson M.; Pertile, Fernando, Foz Chapeco Energia, 203
    St Germano Wendhausen, BR-88015460 Florianopolis, SC, Brazil.
    Melegari, Luis Fernando P.; Herreros, Heloisa O.; Kurokawa, Marcelo Y., CPFL
    Geracao, 2500 Hwy Miguel Noel Nascentes Burnier, BR-13088900 Campinas, SP, Brazil.
    de Avila, Luis F., Univ Estadual Campinas, 1888 St Paschoal Marmo, BR-13484332
    Limeira, SP, Brazil.}},
  DOI = {{10.1117/12.2223319}},
  Article-Number = {{UNSP 98520K}},
  ISSN = {{0277-786X}},
  ISBN = {{978-1-5106-0093-5}},
  Keywords = {{FBG; Dams monitoring; Structural health monitoring; Water level FBG
    sensors; Pressure FBG sensors; Displacement FBG sensors}},
  Research-Areas = {{Optics; Physics}},
  Web-of-Science-Categories = {{Optics; Physics, Applied}},
  ResearcherID-Numbers = {{Rosolem, Joao Batista/G-7143-2012
    Penze, Rivael Strobel/N-8940-2019
    Floridaia, Claudio/H-3987-2011
    PENZE, RIVAEL STROBEL/N-7793-2013
    de Avila, Luis/H-4187-2013
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ORCID-Numbers = {{Rosolem, Joao Batista/0000-0001-8648-957X
  PENZE, RIVAEEL STROBEL/0000-0002-4197-0164
  de Avila, Luis/0000-0002-5763-8078
  Salgado, Felipe Cezar/0000-0002-9109-9370}},
Number-of-Cited-References = {{8}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{1}},
Doc-Delivery-Number = {{BF5QU}},
Unique-ID = {{ISI:000382503300016}},
DA = {{2019-06-24}},
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@article{ ISI:000366078000003,
Author = {de Sousa, J. M. and Brunetto, G. and Coluci, V. R. and Galvao, D. S.},
Title = {{Torsional ``superplasticity{'}`` of graphyne nanotubes}},
Journal = {{CARBON}},
Year = {{2016}},
Volume = {{96}},
Pages = {{14-19}},
Month = {{JAN}},
Abstract = {{Graphyne is a planar two-dimensional carbon allotrope formed by atoms in
  sp, sp(2), and sp(3) hybridized states. Topologically graphyne nanotubes
  (GNTs) can be considered as cylindrically rolled up graphyne sheets,
  similarly as carbon nanotubes (CNTs) can be considered rolled up
  graphene sheets. Due to the presence of single, double, and triple
  bonds, GNTs exhibit porous sidewalls that can be exploited in many
  diverse applications. In this work, we investigated the mechanical
  behavior of GNTs under torsional strains through reactive molecular
  dynamics simulations. Our results show that GNTs are more flexible than
  CNTs and exhibit ``superplasticit{'}``, with fracture angles that are up
  to 35 times higher than the ones reported to CNTs. This GNT
  ``superplastic{'}`` behavior can be explained in terms of irreversible
  reconstruction processes (mainly associated with the triple bonds) that
  occur during torsional strains. (C) 2015 Elsevier Ltd. All rights
  reserved.}},
Publisher = {{PERGAMON-ELSEVIER SCIENCE LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Galvao, DS (Reprint Author), Univ Estadual Campinas, Dept Appl Phys,
  BR-13083970 Campinas, SP, Brazil.
  de Sousa, J. M.; Brunetto, G.; Galvao, D. S., Univ Estadual Campinas, Dept Appl
  Phys, BR-13083970 Campinas, SP, Brazil.
  Coluci, V. R., State Univ Campinas UNICAMP, Sch Technol, BR-13484332 Limeira, SP,
  Brazil.}},
DOI = {{10.1016/j.carbon.2015.09.039}},
ISSN = {{0008-6223}},
EISSN = {{1873-3891}},
Keywords-Plus = {{REACTIVE FORCE-FIELD; CARBON NANOTUBES; THEORETICAL PREDICTIONS;
  ELECTRONIC-STRUCTURE; MOLECULAR-DYNAMICS; ROOM-TEMPERATURE; GRAPHDIYNE;
  GRAPHENE; SHEET; TRANSISTORS}},
Research-Areas = {{Chemistry; Materials Science}},
Web-of-Science-Categories = {{Chemistry, Physical; Materials Science,
  Multidisciplinary}},
Author-Email = {{galvao@ifi.unicamp.br}},
ResearcherID-Numbers = {{UNICAMP, CCES -/J-7787-2015
  Coluci, Vitor/E-1079-2012
  Inst. of Physics, Gleb Wataghin/A-9780-2017
  }},
ORCID-Numbers = {{Coluci, Vitor/0000-0001-5179-6182
  De Sousa, Jose Moreira/0000-0002-3941-2382}},
Funding-Acknowledgement = {{CAPES; CNPq; FAPESP; Center for Computational Engineering
  and Sciences
  at Unicamp {{2013/08293-7}}}},
Funding-Text = {{This work was supported in part by the Brazilian Agencies CAPES, CNPq
  and FAPESP. The authors thank the Center for Computational Engineering
  and Sciences at Unicamp for financial support through the FAPESP/CEPID
  Grant \# 2013/08293-7.}},
Number-of-Cited-References = {{47}},
Times-Cited = {{12}},
Usage-Count-Last-180-days = {{1}},
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Usage-Count-Since-2013 = {{56}},
Journal-ISO = {{Carbon}},
Doc-Delivery-Number = {{CY0EB}},
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DA = {{2019-06-24}},
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@article{ ISI:000366438900002,
Author = {Cristale, Joyce and Ramos, Dayana D. and Dantas, Renato F. and Machulek
Junior, Amilcar and Lacorte, Silvia and Sans, Carme and Esplugas,
Santiago},
Title = {{Can activated sludge treatments and advanced oxidation processes remove
organophosphorus flame retardants?}},
Journal = {{ENVIRONMENTAL RESEARCH}},
Year = {{2016}},
Volume = {{144}},
Number = {{A}},
Pages = {{11-18}},
Month = {{JAN}},
Abstract = {{This study aims to determine the occurrence of 10 OPFRs (including
chlorinated, nonchlorinated alkyl and aryl compounds) in influent,
effluent wastewaters and partitioning into sludge of 5 wastewater
treatment plants (WWTP) in Catalonia (Spain). All target OPFRs were
detected in the WWTPs influents, and the total concentration ranged from
3.67 mu g L-1 to 150 mu g L-1. During activated sludge treatment, most
OPFRs were accumulated in the sludge at concentrations from 35.3 to 9980
ng g(-1) dw. Chlorinated compounds tris(2-chloroethyl) phosphate (TCEP),
tris(2-chloroisopropyl) phosphate (TCIPP) and tris(2,3-dichloropropyl)
phosphate (TDCPP) were not removed by the conventional activated sludge
treatment and they were released by the effluents at approximately the
same inlet concentration. On the contrary, aryl compounds
tris(methylphenyl) phosphate (TMPP) and 2-ethylhexyl diphenyl phosphate
(EHDP) together with alkyl tris(2-ethylhexyl) phosphate (TEHP) were not
detected in any of the effluents. Advanced oxidation processes (UV/H2O2
and O-3) were applied to investigate the degradability of recalcitrant
OPFRs in WWTP effluents. Those detected in the effluent sample (TCEP,
TCIPP, TDCPP, tributyl phosphate (TNBP), tri-iso-butyl phosphate (TIBP)
and tris(2-butoxyethyl) phosphate (TBOEP)) had very low direct UV-C
photolysis rates. TBOEP, TNBP and TIBP were degraded by UV/H2O2 and O-3.
Chlorinated compounds TCEP, TDCPP and TCIPP were the most recalcitrant
OPFR to the advanced oxidation processes applied. The study provides
information on the partitioning and degradability pathways of OPFR
within conventional activated sludge WWTPs. (C) 2015 Elsevier Inc. All
rights reserved.}},
Publisher = {{ACADEMIC PRESS INC ELSEVIER SCIENCE}},
Address = {{525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Lacorte, S (Reprint Author), CSIC, IDAEA, Dept Environm Chem, Jordi
Girona 18-2, Barcelona 08034, Catalonia, Spain.
Cristale, Joyce; Lacorte, Silvia, CSIC, IDAEA, Dept Environm Chem, Barcelona 08034,
Catalonia, Spain.
Ramos, Dayana D.; Machulek Junior, Amilcar, Univ Fed Mato Grosso do Sul, Inst Chem,
BR-79074460 Campo Grande, MS, Brazil.
Dantas, Renato F.; Sans, Carme; Esplugas, Santiago, Univ Barcelona, Dept Chem Engrn,
E-08028 Barcelona, Catalonia, Spain.
Dantas, Renato F., Univ Campinas UNICAMP, Sch Technol, BR-13484332 Limeira, SP,
Brazil.}},
DOI = {{10.1016/j.envres.2015.10.008}},
ISSN = {{0013-9351}},
EISSN = {{1096-0953}},
Keywords = {{Flame retardants; Advanced oxidation process; Emerging contaminants;
Sewage sludge}},
Keywords-Plus = {{POSSIBLE MOLECULAR-MECHANISMS; SEWAGE-TREATMENT PLANTS; WASTE-WATER;
ZEBRAFISH EMBRYOS/LARVAE; DEVELOPMENTAL TOXICITY; EMERGING CONTAMINANTS;
DRINKING-WATER; SURFACE WATERS; PLASTICIZERS; PHOSPHATE}},
Research-Areas = {{Environmental Sciences \& Ecology; Public, Environmental \&
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Health}},
Web-of-Science-Categories = {{Environmental Sciences; Public, Environmental \&
Occupational Health}},
ResearcherID-Numbers = {{Sans Mazon, Carmen/K-8584-2014}}
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    Junior, Amilcar/A-3569-2010
    Esplugas, Santiago/D-4652-2014
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ORCID-Numbers = {{Sans Mazon, Carmen/0000-0003-1713-5561
  Esplugas, Santiago/0000-0002-3693-2948
  Machulek Junior, Amilcar/0000-0002-4632-4647}},
Funding-Acknowledgement = {{Brazilian funding agency CNPq (Conselho Nacional de
Desenvolvimento
  Cientifico e Tecnologico); Brazilian funding agency CAPES (Coordenacao
de Aperfeicoamento de Pessoal de Nivel Superior); Brazilian funding
agency FUNDECT (Fundacao de Apoio ao Desenvolvimento do Ensino, Ciencia
e Tecnologia do Estado de Mato Grosso do Sul); Brazilian funding agency
INCT-EMA (Instituto Nacional de Ciencia e Tecnologia de Estudos do Meio
Ambiente); Spanish Government, through the Ministry of Economy and
Competitiveness {[CTM2008-03263/TECNO, CTQ2011-26258/PPQ]; FPI grant
from the Ministry of Education and Innovation (Spain)
  {[BES-2009-016460]}},
Funding-Text = {{The authors wish to thank the Brazilian funding agencies CNPq
(Conselho
  Nacional de Desenvolvimento Cientifico e Tecnologico), CAPES
  (Coordenacao de Aperfeicoamento de Pessoal de Nivel Superior), FUNDECT
  (Fundacao de Apoio ao Desenvolvimento do Ensino, Ciencia e Tecnologia do
  Estado de Mato Grosso do Sul) and INCT-EMA (Instituto Nacional de
  Ciencia e Tecnologia de Estudos do Meio Ambiente). The Spanish
  Government, through the Ministry of Economy and Competitiveness
  (Projects CTM2008-03263/TECNO) and CTQ2011-26258/PPQ), financed this
  study. Joyce Cristale acknowledges a FPI grant (BES-2009-016460) from
  the Ministry of Education and Innovation (Spain).}},
Number-of-Cited-References = {{36}},
Times-Cited = {{22}},
Usage-Count-Last-180-days = {{9}},
Usage-Count-Since-2013 = {{97}},
Journal-ISO = {{Environ. Res.}},
Doc-Delivery-Number = {{CY5HO}},
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DA = {{2019-06-24}},
}

@article{ ISI:000367881400003,
Author = {Baudet, Christian and Dias, Ulisses and Dias, Zanoni},
Title = {{Sorting by weighted inversions considering length and symmetry}},
Journal = {{BMC BIOINFORMATICS}},
Year = {{2015}},
Volume = {{16}},
Number = {{19}},
Month = {{DEC 16}},
Abstract = {{Large-scale mutational events that occur when stretches of DNA sequence
move throughout genomes are called genome rearrangements. In bacteria,
inversions are one of the most frequently observed rearrangements. In
some bacterial families, inversions are biased in favor of symmetry as
shown by recent research. In addition, several results suggest that
short segment inversions are more frequent in the evolution of microbial
genomes. Despite the fact that symmetry and length of the reversed
segments seem very important, they have not been considered together in
any problem in the genome rearrangement field. Here, we define the
problem of sorting genomes (or permutations) using inversions whose
costs are assigned based on their lengths and asymmetries. We consider
two formulations of the same problem depending on whether we know the
orientation of the genes. Several procedures are presented and we assess
these procedure performances on a large set of more than 4.4 x 10(9)
permutations. The ideas presented in this paper provide insights to
solve the problem and set the stage for a proper theoretical analysis.}},
Publisher = {{BIOMED CENTRAL LTD}},
Address = {{236 GRAYS INN RD, FLOOR 6, LONDON WC1X 8HL, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Dias, U (Reprint Author), Univ Estadual Campinas, Fac Technol,
BR-13484332 Limeira, Brazil.
  Baudet, Christian, Univ Lyon 1, Inria Erable Team, F-69622 Villeurbanne, France.
  Dias, Ulisses, Univ Estadual Campinas, Fac Technol, BR-13484332 Limeira, Brazil.
  Dias, Zanoni, Univ Estadual Campinas, Inst Comp, BR-13083852 Campinas, SP,
  Brazil.}},

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DOI = {{10.1186/1471-2105-16-S19-S3}},
Article-Number = {{S3}},
ISSN = {{1471-2105}},
Keywords-Plus = {{SIGNED PERMUTATIONS; REVERSALS}},
Research-Areas = {{Biochemistry \& Molecular Biology; Biotechnology \& Applied
  Microbiology; Mathematical \& Computational Biology}},
Web-of-Science-Categories = {{Biochemical Research Methods; Biotechnology \& Applied
  Microbiology;
  Mathematical \& Computational Biology}},
ResearcherID-Numbers = {{UNICAMP, CCES -/J-7787-2015}},
Funding-Acknowledgement = {{FAPESP {{[]2012/01584-3, 2014/19401-8}}; CNPq {{[]477692/
  2012-5,
  483370/2013-4}}; CAPES/COFECUB {{[]831/15}}; French Project ANR MIRI
  {{[]BLAN08-1335497}}; ERC; Computational Engineering and Sciences at
  Unicamp {{[]2013/08293-7}}}},
Funding-Text = {{This work was supported by a Postdoctoral Fellowship from FAPESP to UD
  (number 2012/01584-3), by project fundings from CNPq (numbers 477692/
  2012-5 and 483370/2013-4), FAPESP (number 2014/19401-8) and
  CAPES/COFECUB (number 831/15) to ZD, and by French Project ANR MIRI
  BLAN08-1335497 and the ERC Advanced Grant SISYPHE to CB. The authors
  also thank the Center for Computational Engineering and Sciences at
  Unicamp for financial support through the FAPESP/CEPID Grant
  2013/08293-7.}},
Number-of-Cited-References = {{16}},
Times-Cited = {{1}},
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Journal-ISO = {{BMC Bioinformatics}},
Doc-Delivery-Number = {{DA5ZN}},
Unique-ID = {{ISI:000367881400003}},
OA = {{DOAJ Gold, Green Published}},
DA = {{2019-06-24}},
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@article{ ISI:000359873800041,
Author = {De Luca, Antonella and Dantas, Renato F. and Esplugas, Santiago},
Title = {{Study of Fe(III)-NTA chelates stability for applicability in
  photo-Fenton at neutral pH}},
Journal = {{APPLIED CATALYSIS B-ENVIRONMENTAL}},
Year = {{2015}},
Volume = {{179}},
Pages = {{372-379}},
Month = {{DEC}},
Abstract = {{The stability of ferric nitrilotriacetate chelates (Fe(III)-NTA) was
  studied under thermal, oxidative and photochemical stress. The knowledge
  of chelate stability is fundamental to correctly implement the
  management system of wastewater treatment plant for application of
  chelates as catalyst in photo-Fenton process at neutral pH. Fe(III)-NTA
  solution stability was monitored under different temperature conditions
  (T=10-30 degrees C), in presence and absence of UV-A irradiation and by
  adding three different concentrations of H2O2. The additional effect on
  chelate stability caused by different irradiation source (UV-A, UV-C and
  Xenon lamps) was also evaluated. Although the complexes were stable
  under the temperature test range, temperature control is crucial when
  stressing the solution by irradiation or by adding hydrogen peroxide.
  The solution was kept stable during two hours of reaction under UV-A
  irradiation only when temperature was set at 10-15 degrees C while in
  presence of hydroxyl radicals (HO center dot) the temperature control
  could only reduce the chelates decomposition. Fe(III)-NTA solution
  mineralization could be obtained under irradiation and radical strain.
  Thus, the production of organic radical from free ligands was also
  demonstrated. Finally, the suitability of UV-C lamps as light source
  for the process application was questioned since they caused a strong
  degradation of the chelate solution. Indeed, only 30 min of UV-C
  irradiation by adding 0.59 mM of hydrogen peroxide caused almost 90%
  reduction of the chelate content in the solution. (C) 2015 Elsevier B.V.
  All rights reserved.}},
Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{De Luca, A (Reprint Author), Univ Barcelona, Dept Chem Engn, Marti \&
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Franques 1, E-08028 Barcelona, Spain.

De Luca, Antonella; Esplugas, Santiago, Univ Barcelona, Dept Chem Engr, E-08028 Barcelona, Spain.

Dantas, Renato F., Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, Brazil.}}

DOI = {{10.1016/j.apcatb.2015.05.025}},

ISSN = {{0926-3373}},

EISSN = {{1873-3883}},

Keywords = {{Chelating agent; NTA; Iron; Neutral pH; Stability; AOPs}},

Keywords-Plus = {{HYDROGEN-PEROXIDE OXIDATION; AQUEOUS-SOLUTION; AMINOPOLYCARBOXYLIC ACIDS; DEGRADATION; IRON(III); EDTA; PHOTODEGRADATION; BIODEGRADATION; ACTINOMETRY; COMPLEXES}},

Research-Areas = {{Chemistry; Engineering}},

Web-of-Science-Categories = {{Chemistry, Physical; Engineering, Environmental; Engineering, Chemical}},

Author-Email = {{antonelladeluca@ub.edu}},

ResearcherID-Numbers = {{Esplugas, Santiago/D-4652-2014}},

ORCID-Numbers = {{Esplugas, Santiago/0000-0002-3693-2948}},

Funding-Acknowledgement = {{Ministry of Science and Innovation of Spain {{

CTQ2011-26258,

CTQ2014-52607-R, CSD2007-00055}; Spanish Ministry of Economy and

Competitiveness (FPI) {{BES-2012-053177}}}},

Funding-Text = {{The authors thank the Ministry of Science and Innovation of Spain (projects CTQ2011-26258 and CTQ2014-52607-R and Consolider-Ingenio 2010 CSD2007-00055) for their financial support. Authors are also grateful to Spanish Ministry of Economy and Competitiveness (FPI research fellowship, Ref. BES-2012-053177).}},

Number-of-Cited-References = {{31}},

Times-Cited = {{20}},

Usage-Count-Last-180-days = {{16}},

Usage-Count-Since-2013 = {{170}},

Journal-ISO = {{Appl. Catal. B-Environ.}},

Doc-Delivery-Number = {{CP4SV}},

Unique-ID = {{ISI:000359873800041}},

DA = {{2019-06-24}},

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@article{ ISI:000364324700005,

Author = {Martins, Rui C. and Dantas, Renato F. and Sans, Carme and Esplugas, Santiago and Quinta-Ferreira, Rosa M.},

Title = {{Ozone/H2O2 Performance on the Degradation of Sulfamethoxazole}},

Journal = {{OZONE-SCIENCE \& ENGINEERING}},

Year = {{2015}},

Volume = {{37}},

Number = {{6}},

Pages = {{509-517}},

Month = {{NOV 2}},

Abstract = {{This work aims to analyze the contribution of H2O2 on ozonation of Sulfamethoxazole (SMX). A single ozonation was able to totally remove SMX. TOC and COD depletion rates after a transferred ozone dose of 60 mg/L was related to the formation and decomposition of H2O2. An increase on O-3 gas inlet concentration from 10 g/m(3) to 20 g/m(3) improved COD abatement from 11% to 36%. When the presence of H2O2 at the beginning of ozonation was tested, it was verified that COD and TOC degradation were enhanced, attaining maximum values of 76% and 32%, respectively, when compared with 35% and 15% reached in a single ozonation.}},

Publisher = {{TAYLOR \& FRANCIS INC}},

Address = {{530 WALNUT STREET, STE 850, PHILADELPHIA, PA 19106 USA}},

Type = {{Article}},

Language = {{English}},

Affiliation = {{Martins, RC (Reprint Author), Univ Coimbra, Dept Chem Engr, Chem Engr Proc \& Forest Prod Res Ctr CIEPQPF, Polo 2 Rua Silvio Lima, P-3030790 Coimbra, Portugal.

Martins, Rui C.; Quinta-Ferreira, Rosa M., Univ Coimbra, Dept Chem Engr, Chem Engr Proc \& Forest Prod Res Ctr CIEPQPF, P-3030790 Coimbra, Portugal.

Dantas, Renato F., Univ Estadual Campinas, UNICAMP Paschoal Marmo, Sch Technol, BR-13484332 Limeira, Brazil.

Sans, Carme; Esplugas, Santiago, Univ Barcelona, Dept Engr Quim, E-08028 Barcelona, Spain.}},

DOI = {{10.1080/01919512.2015.1053427}},

ISSN = {{0191-9512}},

EISSN = {{1547-6545}},


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Keywords = {{Ozone; AOP; Emerging Contaminants; Hydrogen Peroxide; Perozonation;
  Sulfamethoxazole}},
Keywords-Plus = {{WASTE-WATER; CATALYTIC OZONATION; HYDROGEN-PEROXIDE; ACTIVATED
  CARBON;
  OXIDATION; TRANSFORMATION; ANTIBIOTICS; EFFICIENCY; EFFLUENTS; ABATEMENT}},
Research-Areas = {{Engineering; Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Engineering, Environmental; Environmental Sciences}},
Author-Email = {{martins@eq.uc.pt}},
ResearcherID-Numbers = {{Esplugas, Santiago/D-4652-2014
  Martins, Rui/B-4704-2011
  Sans Mazon, Carmen/K-8584-2014
  Quinta-Ferreira, Rosa/L-2663-2014}},
ORCID-Numbers = {{Esplugas, Santiago/0000-0002-3693-2948
  Martins, Rui/0000-0003-1376-0829
  Sans Mazon, Carmen/0000-0003-1713-5561
  Quinta-Ferreira, Rosa/0000-0002-0762-2641}},
Funding-Acknowledgement = {{Fundacao para a Ciencia e Tecnologia {{BPD/72200/2010}}}},
Funding-Text = {{Rui C. Martins gratefully acknowledges Fundacao para a Ciencia e
  Tecnologia by the post-doc grant (BPD/72200/2010).}},
Number-of-Cited-References = {{29}},
Times-Cited = {{7}},
Usage-Count-Last-180-days = {{2}},
Usage-Count-Since-2013 = {{37}},
Journal-ISO = {{Ozone-Sci. Eng.}},
Doc-Delivery-Number = {{CV5QA}},
Unique-ID = {{ISI:000364324700005}},
DA = {{2019-06-24}},
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@article{ ISI:000370251500010,
Author = {dos Santos, Talia Simoes and Batista, Marilia Carone and Pozza, Simone
  Andrea and Rossi, Luciana Savoi},
Title = {{Analysis of energy efficiency, environmental and economical between LED
  and conventional lamps}},
Journal = {{ENGENHARIA SANITARIA E AMBIENTAL}},
Year = {{2015}},
Volume = {{20}},
Number = {{4}},
Pages = {{595-602}},
Month = {{OCT-DEC}},
Abstract = {{Light Emitter Diode, more commonly known as LED's, are semiconductor
  electronic components that can transform electrical energy into light,
  unlike conventional lamps. LED has a bipolar component, when polarized,
  allows the passage of electric current creating light. Modern lamps use
  LED in their formation, which release less heat, use less energy, and
  are more economic than incandescent and fluorescent. Besides present
  more durability than the others, LED lamps do not heat up the
  environment and their disposals do not attack the environment. The
  association of environmental and economic advantages makes this
  technology attractive to consumer, although the cost of acquisition is
  higher than the other lamps models available in market. The verification
  of luminous flux and energy efficiency tests were realized in this
  study, beyond an environmental analysis. The obtained results proved the
  potential of LED technology due to other analyzed lamps, especially
  economic and environmental issue as previous studies analyzed.}},
Publisher = {{ASSOC BRASILEIRA ENGENHARIA SANITARIA AMBIENTAL}},
Address = {{AV BEIRA MAR, 216-13 ANDAR-CASTELO, RIO DE JANEIRO, RJ 20021-060, BRAZIL}},
Type = {{Article}},
Language = {{Portuguese}},
Affiliation = {{dos Santos, TS (Reprint Author), Rua Paschoal Marmo,1888 Jd Nova
  Italia, BR-13484332 Limeira, SP, Brazil.
  dos Santos, Talia Simoes; Pozza, Simone Andrea, Univ Estadual Campinas Unicamp, Fac
  Tecnol, Campinas, SP, Brazil.
  Batista, Marilia Carone, ISCA Fac, Engn Ambiental, Limeira, SP, Brazil.
  Rossi, Luciana Savoi, ISCA Fac, Limeira, SP, Brazil.}},
DOI = {{10.1590/S1413-41522015020040125106}},
ISSN = {{1413-4152}},
EISSN = {{1809-4457}},
Keywords = {{lamps; LED; energy savings; energy efficiency; sustainability}},
Research-Areas = {{Water Resources}},
Web-of-Science-Categories = {{Water Resources}},
Author-Email = {{talia@ft.unicamp.br}},

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ResearcherID-Numbers = {{Pozza, Simone/M-4690-2019}},
ORCID-Numbers = {{Pozza, Simone/0000-0001-7423-0982}},
Number-of-Cited-References = {{31}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{8}},
Journal-ISO = {{Eng. Sanit. Ambient.}},
Doc-Delivery-Number = {{DD9NC}},
Unique-ID = {{ISI:000370251500010}},
OA = {{DOAJ Gold}},
DA = {{2019-06-24}},
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@article{ ISI:000364220200051,
Author = {Rocha, Peterson and Gallep, Cristiano M. and Conforti, Evandro},
Title = {{All-optical mitigation of amplitude and phase-shift drift noise in
semiconductor optical amplifiers}},
Journal = {{OPTICAL ENGINEERING}},
Year = {{2015}},
Volume = {{54}},
Number = {{10}},
Month = {{OCT}},
Abstract = {{An all-optical scheme aimed at minimizing distortions induced by
semiconductor optical amplifiers (SOAs) over modulated optical carriers
is presented. The scheme employs an additional SOA properly biased to
act as a saturated absorber, and thus counteract the distortions induced
by the first amplifying device. The scheme here is demonstrated in
silico, for 40 and 100 Gb/s (10 and 25 Gbaud, 16 QAM), with reasonable
total gain (>20 dB) for symbol error rate below the forward error
correction limit. (C) 2015 Society of Photo-Optical Instrumentation
Engineers (SPIE)}},
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Affiliation = {{Conforti, E (Reprint Author), Univ Estadual Campinas, Fac Elect \&
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Rocha, Peterson; Conforti, Evandro, Univ Estadual Campinas, Fac Elect \& Comp Engr
FEEC, BR-13083970 Campinas, SP, Brazil.
Gallep, Cristiano M., Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, SP,
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Research-Areas = {{Optics}},
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Author-Email = {{conforti@decom.fee.unicamp.br}},
ResearcherID-Numbers = {{Conforti, Evandro/L-5408-2016}},
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Funding-Text = {{The authors would like to thank CAPES (Coordination of Improvement of
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Author = {Angelin, Andressa F. and Andrade, Matheus F. F. and Bonatti, Rodrigo and
Cecche Lintz, Rosa C. and Gachet-Barbosa, Luisa A. and Osorio, Wislei R.},
Title = {{Effects of spheroid and fiber-like waste-tire rubbers on interrelation
of strength-to-porosity in rubberized cement and mortars}},
Journal = {{CONSTRUCTION AND BUILDING MATERIALS}},
Year = {{2015}},
Volume = {{95}},
Pages = {{525-536}},
Month = {{OCT 1}},
Abstract = {{The waste tire rubber represents a serious pollution and waste disposal
problem. The aim of this experimental investigation is focused on the
interrelation of strength/porosity in the rubberized cement and mortars
as a function of distinctive rubber morphologies. Experimental results
show the interrelation of flexural (FS), compressive (CS) and specific
(SS) strengths with porosity (P) and water absorption (WA) of the
control and four distinctive rubberized cement pastes and mortars. It is
found that the fiber-like rubber particles provide distinctive both the
slump flow tendency and mechanical behavior. A bimodal distribution of
the pore sizing between irregular and spheroidal morphologies is
observed. Models of the compressive, flexural and specific strengths as
a function of both the rubber content and porosity are also proposed.
When a 5\% (volume) of sand is replaced with rubber particles, a number
of alternative applications (e.g. flexible pavement, building facades
and water purification systems) can be induced. (C) 2015 Elsevier Ltd.
All rights reserved.}},
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Type = {{Article}},
Language = {{English}},
Affiliation = {{Osorio, WR (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch Appl
Sci FCA, Campus Limeira,1300,Pedro Zaccaria St, BR-13484350 Limeira, SP, Brazil.
Angelin, Andressa F.; Andrade, Matheus F. F.; Bonatti, Rodrigo; Cecche Lintz, Rosa
C.; Gachet-Barbosa, Luisa A.; Osorio, Wislei R., Univ Estadual Campinas, UNICAMP, Sch
Technol, BR-13484332 Limeira, SP, Brazil.
Osorio, Wislei R., Univ Estadual Campinas, UNICAMP, Sch Appl Sci FCA, BR-13484350
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DOI = {{10.1016/j.conbuildmat.2015.07.166}},
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friendly cement}},
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DURABILITY}},
Research-Areas = {{Construction \& Building Technology; Engineering; Materials
Science}},
Web-of-Science-Categories = {{Construction \& Building Technology; Engineering,
Civil; Materials
Science, Multidisciplinary}},
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ResearcherID-Numbers = {{Gachet Barbosa, Luisa Andreia/R-9595-2018
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}},
ORCID-Numbers = {{Gachet Barbosa, Luisa Andreia/0000-0002-1661-2605
Osorio, Wislei Riuper/0000-0002-2754-9584}},
Funding-Acknowledgement = {{FAEPEX-UNICAMP; CNPq (The Brazilian Research Council)}},
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Heberton and Bayarri, Bernardi and Gonzalez, Oscar and Gimenez, Jaime
and Esplugas, Santiago and Machulek, Jr., Amilcar},
Title = {{Photocatalytic treatment of metoprolol with B-doped TiO2: Effect of
water matrix, toxicological evaluation and identification of
intermediates}},
Journal = {{APPLIED CATALYSIS B-ENVIRONMENTAL}},
Year = {{2015}},
Volume = {{176}},
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Abstract = {{The aim of this study was to investigate the effectiveness of B doped
TiO2 on the removal of metoprolol tartrate salt (MET) in ultrapure water
(UW) and municipal secondary effluent (SE) using a Xenon lamp (photon
flux of 2.99 x 10(-6) Einstein s(-1)) as irradiation source. The
analyzed parameters were MET removal, total organic carbon (TOC),
chemical oxygen demand (COD), biochemical oxygen demand (BOD5) and acute
toxicity (Microtox (R)). The optimal photocatalyst concentration was
determined in both matrices. After 180 min of irradiation, 70% and 44%
of MET were removed using 0.4 g L-1 catalyst in UW and 2.0 g L-1
catalyst in SE, respectively. A substantial improvement of
biodegradability (BOD5/COD) was also achieved. The acute eco-toxicity
decreased when MET was degraded and no toxic products were formed at the
end of the process. Several reaction intermediates generated during the
MET removal were identified and a possible degradation pathway was
proposed for the TiO2/5%B(w/w) reaction. Photocatalysis with B-doped
TiO2 can be considered as an interesting MET degradation alternative,
leading to higher removals and potential to use solar energy, thus,
minimizing the operating costs. (C) 2015 Elsevier B.V. All rights
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Affiliation = {{Gimenez, J (Reprint Author), Univ Barcelona, Dept Chem Engn, C Marti
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Bayarri, Bernardi; Gonzalez, Oscar; Gimenez, Jaime; Esplugas, Santiago, Univ
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Keywords = {{Heterogeneous photocatalysis; TiO2/5%B(w/w); Drug metoprolol; Effluent
organic matter; Biodegradability}},
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Research-Areas = {{Chemistry; Engineering}},
Web-of-Science-Categories = {{Chemistry, Physical; Engineering, Environmental;
Engineering, Chemical}},
Author-Email = {{j.gimenez.fa@ub.edu}},
ResearcherID-Numbers = {{Gimenez, Jaime/K-4571-2014
Esplugas, Santiago/D-4652-2014
Wender, Heberton/G-3741-2012
Junior, Amilcar/A-3569-2010
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ORCID-Numbers = {{Gimenez, Jaime/0000-0002-2213-9041
Esplugas, Santiago/0000-0002-3693-2948
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and Luna, Luis Augusto V. and Silveira, Camila P. and Duran, Nelson and  
Alves, Oswaldo L.},
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Title = {{Monitoring the Hemolytic Effect of Mesoporous Silica Nanoparticles after  
Human Blood Protein Corona Formation}},
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Journal = {{EUROPEAN JOURNAL OF INORGANIC CHEMISTRY}},
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Year = {{2015}},
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Number = {{27, SI}},
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Pages = {{4595-4602}},
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Abstract = {{The interaction of promising nanoparticles with red blood cells (RBCs)  
is a critical point to be addressed in nanomedicine and nanotoxicology,  
and the hemolytic assay is a classical and common test used to evaluate  
such interactions and the consequent nanoparticle toxicity. In addition,  
the protein corona is an emergent concept in bionanoscience associated  
with the manifestation of energetically driven protein-nanoparticle  
interactions, with a great impact on the nanomaterial toxicity  
assessment. In the convergence of these two concepts, we evaluated the  
influence of the formation of the protein corona during the hemolysis  
induced by spherical mesoporous silica nanoparticles with silanol groups  
on the external surface (MSN-SiOH), which present a confirmed toxicity  
on RBCs when they are dispersed as a colloid in phosphate buffer saline  
solution (PBS). It was observed that human blood proteins such as human  
serum albumin (HSA), human plasma (HP), hemoglobin (Hb), and RBC lysate,  
termed hemolysate (HL), can suppress the hemolytic effect induced by  
MSN-SiOH in a dose-dependent manner. The EC50 values of hemolysis  
suppression were 24, 8.0, 19, and 28  $\mu\text{g mL}^{-1}$  for HSA, HP, Hb, and HL,  
respectively. This work thus shows that the results of the hemolytic  
assay that defines the toxicity and bioreactivity of silica  
nanoparticles (and others) must be interpreted as a function of the  
formation of the protein corona.}},
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Affiliation = {{Martinez, DST (Reprint Author), Brazilian Ctr Res Energy \& Mat,  
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Martinez, Diego Stefani T.; Fonseca, Leandro C.; Luna, Luis Augusto V.; Silveira,  
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Silveira, Camila P.; Duran, Nelson, Univ Estadual Campinas, Biol Chem Lab, UNICAMP,  
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MOLECULES; TOXICITY; ASSAYS}},
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Research-Areas = {{Chemistry}},
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Paula, Amauri/D-9254-2011
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Physics Department, Universidade Federal Ceara/J-4630-2016
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UFC, DF/E-1564-2017
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Martinez, Diego/K-8310-2012
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Paula, Amauri/0000-0002-3113-2597
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Martinez, Diego/0000-0002-0086-3055
Duran, Nelson/0000-0001-8372-5143
Visani de Luna, Luis Augusto/0000-0003-0375-1064}},
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Tecnologico (CNPq);
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(INCT-Inomat); Brazilian Nanotoxicology Network - Cigenanotox; Sistema
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Funding-Text = {{The authors thank the Conselho Nacional de Desenvolvimento Cientifico
e
Tecnologico (CNPq), Fundacao de Amparo a Pesquisa do Estado de Sao Paulo
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Tecnologico (FUNCAP), Instituto Nacional de C,T&I em Materiais
Complexos Funcionais (INCT-Inomat), Brazilian Nanotoxicology Network -
Cigenanotox, and the Sistema Nacional de Laboratorios em Nanotecnologias
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@article{ ISI:000358939600050,
Author = {Osorio, Wislei R. and Peixoto, Leandro C. and Garcia, Amauri},
Title = {{Electrochemical and Mechanical Behavior of Lead-Silver and Lead-Bismuth
Casting Alloys for Lead-Acid Battery Components}},
Journal = {{METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND
MATERIALS SCIENCE}},
Year = {{2015}},
Volume = {{46A}},
Number = {{9}},
Pages = {{4255-4267}},
Month = {{SEP}},
Abstract = {{The present study focuses on the interrelation of microstructure,
mechanical properties, and corrosion resistance of Pb-Ag and Pb-Bi
casting alloys, which can be used in the manufacture of lead-acid
battery components, as potential alternatives to alloys currently used.
A water-cooled solidification system is used, in which vertical upward
directional solidification is promoted permitting a wide range of
microstructures to be investigated. Correlations between microstructural
arrays, tensile strengths, and corrosion resistances of Pb-1 wt pct Ag,
Pb-2.5 wt pct Ag, Pb-1 wt pct Bi, and Pb-2.5 wt pct Bi alloys are
envisaged. It is shown that a compromise between corrosion resistance
(represented by the corrosion current density) and mechanical properties
(represented by the ultimate tensile strength) can be obtained.
Comparisons between specific strengths and mechanical/corrosion ratios
are also made. It is also shown that, for microstructures solidified
under cooling rates higher than 10 K/s, the Pb-Ag alloys exhibit higher
specific strength and mechanical/corrosion ratio. In contrast, for
casting processes in which the cooling rates are lower than 5 K/s, the
dilute Pb-Bi alloy (i.e., 1 wt pct Bi) is shown to have more appropriate
requirements for lead-acid battery components. Comparisons between
specific strengths, mechanical/corrosion ratio, and relative weight and
cost with Pb-Sn and Pb-Sb alloys are also made.}},
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Affiliation = {{Osorio, WR (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch Appl
Sci FCA, Campus Limeira,1300,Pedro Zaccaria St, BR-13484350 Limeira, SP, Brazil.
Osorio, Wislei R., Univ Estadual Campinas, UNICAMP, Sch Appl Sci FCA, BR-13484350
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Osorio, Wislei R.; Peixoto, Leandro C.; Garcia, Amauri, Univ Estadual Campinas,
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Osorio, Wislei R., Univ Estadual Campinas, UNICAMP, Sch Technol, BR-13484332
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Peixoto, Leandro C., IFSP, Caraguatatuba, SP, Brazil.}},
DOI = {{10.1007/s11661-015-3023-0}},
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Keywords-Plus = {{CORROSION BEHAVIOR; MICROSTRUCTURE; PERFORMANCE}},
Research-Areas = {{Materials Science; Metallurgy \& Metallurgical Engineering}},
Web-of-Science-Categories = {{Materials Science, Multidisciplinary; Metallurgy \&
Metallurgical
Engineering}},
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Garcia, Amauri/C-6916-2012
Osorio, Wislei R*/E-2585-2013
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Funding-Acknowledgement = {{FAPESP (The Scientific Research Foundation of the State of
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Brazil); FAEPEX-UNICAMP; CNPq (The Brazilian Research Council)
{{446797/2014-6}}}},
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446797/2014-6.}},
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@article{ ISI:000358611600009,

Author = {Martins, Rui C. and Cardoso, Mafalda and Dantas, Renato F. and Sans, Carmen and Esplugas, Santiago and Quinta-Ferreira, Rosa M.},

Title = {{Catalytic studies for the abatement of emerging contaminants by ozonation}},

Journal = {{JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY}},

Year = {{2015}},

Volume = {{90}},

Number = {{9}},

Pages = {{1611-1618}},

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Abstract = {{BACKGROUNDPharmaceutical industry generates a large amount of liquid effluents rich in toxic compounds that reach natural water streams, if improperly degraded, being a threat for ecosystems. In this context, ozonation appears as an interesting alternative to conventional treatments. This work aims to study the effect of this technology aided by two ceramic catalysts (the laboratory Mn-Ce-O and the commercial N-150) on the degradation of a mixture of two contaminants: sulfamethoxazole and diclofenac. RESULTS: The presence of the catalysts had no significant impact on pharmaceuticals removal when compared with single ozonation. However, both materials increased the amount of COD removed per mg of ozone applied (0.10 mgCOD(removed) mg(-1)O(3) and 0.067 mgCOD(removed) mg(-1)O(3) for catalytic and single ozonation, respectively). The performance of Mn-Ce-O was very dependent upon the solution pH whereas no significant pH impact was detected for N-150. The generalized kinetic model (GKM) was able to satisfactorily describe the lumped kinetic mechanism concerning COD abatement. Moreover, no differences in the degradation results were observed for the Mn-Ce-O

system when comparing two types of waters (ultrapure and natural) used to dissolve the pharmaceutical compounds. Importantly, the presence of the solid catalyst improved ozone usage and reduced the effluents' toxicity.

CONCLUSION Although work has been published regarding the removal of single emerging contaminants, the analysis of mixtures is not so frequent. The use of Mn-Ce-O truly enhances COD degradation revealing its potential as heterogeneous catalytic material to improve ozone action on pollutants. (c) 2015 Society of Chemical Industry}},

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Address = {{111 RIVER ST, HOBOKEN 07030-5774, NJ USA}},
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Affiliation = {{Martins, RC (Reprint Author), Univ Coimbra, Grp Environm React Separat \& Thermodynam, CIEPQPF Chem Engn Proc \& Forest Prod Res Ctr GERS, Dept Chem Engn, Fac Sci \& Technol, Polo 2 Rua Silvio Lima, P-3030790 Coimbra, Portugal.
Martins, Rui C.; Cardoso, Mafalda; Quinta-Ferreira, Rosa M., Univ Coimbra, Grp Environm React Separat \& Thermodynam, CIEPQPF Chem Engn Proc \& Forest Prod Res Ctr GERS, Dept Chem Engn, Fac Sci \& Technol, P-3030790 Coimbra, Portugal.
Dantas, Renato F., Univ Campinas UNICAMP, Sch Technol, BR-13484332 Limeira, Brazil.
Sans, Carmen; Esplugas, Santiago, Univ Barcelona, Dept Engn Quim, E-08028 Barcelona, Spain.}},
DOI = {{10.1002/jctb.4711}},
ISSN = {{0268-2575}},
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Keywords = {{ozonation; emerging contaminants; diclofenac; sulfamethoxazole; heterogeneous catalysts; wastewater}},
Keywords-Plus = {{PHARMACEUTICAL WASTE-WATER; ACTIVATED CARBON; HUMIC ACIDS; OZONE; SULFAMETHOXAZOLE; OXIDATION; TOXICITY; DEGRADATION; EFFLUENTS; REMOVAL}},
Research-Areas = {{Biotechnology \& Applied Microbiology; Chemistry; Engineering}},
Web-of-Science-Categories = {{Biotechnology \& Applied Microbiology; Chemistry, Multidisciplinary;
Engineering, Environmental; Engineering, Chemical}},
Author-Email = {{martins@eq.uc.pt}},
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Quinta-Ferreira, Rosa/L-2663-2014
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ORCID-Numbers = {{Esplugas, Santiago/0000-0002-3693-2948
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Martins, Rui/0000-0003-1376-0829}},
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Number-of-Cited-References = {{25}},
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@article{ ISI:000355215200006,
Author = {Cavalcante, Rodrigo Pereira and Dantas, Renato Falcao and Bayarri, Bernardi and Gonzalez, Oscar and Gimenez, Jaime and Esplugas, Santiago and Machulek Junior, Amilcar},
Title = {{Synthesis and characterization of B-doped TiO₂ and their performance for the degradation of metoprolol}},
Journal = {{CATALYSIS TODAY}},
Year = {{2015}},
Volume = {{252}},
Pages = {{27-34}},
Month = {{SEP 1}},
Note = {{8th European Meeting on Solar Chemistry and Photocatalysis - Environmental Applications (SPEA), Thessaloniki, GREECE, JUN 25-28, 2014}},
Organization = {{Aristotle Univ Thessaloniki, Dept Chem; University of Patras, Dept Chem Engn}},

Abstract = {{Pure and B-doped TiO₂ photocatalysts were synthesized by sol-gel method. Boric acid was used as boron source and titanium tetra-isopropoxide as TiO₂ precursor. Nominal boron/titania proportions were in the range 0-9% (w/w). The powder was characterized by X-ray diffraction (XRD), scanning and transmission electron microscopy (SEM and TEM), UV-vis absorption spectra, BET specific surface area, X-ray photoelectron spectroscopy (XPS) and zeta potential. The beta-blockers are pharmaceuticals frequently detected in waters. Among these beta-blockers, metoprolol (MET) is one of the most commonly used for the treatment of a variety of cardiovascular diseases, thus being necessary the search for methods able to remove it. In this context, the photocatalytic reactivity of the synthesized catalysts was evaluated by its use in MET photodegradation using a solar simulator with xenon lamp as irradiation source. Results showed that the 5% (w/w) B-doped TiO₂ exhibited greater photodegradation (70% MET removal) than pure TiO₂ (48% MET removal). Some factors were responsible for the photocatalytic performance of B-doped TiO₂ which include the high surface area, mesoporous structure, anatase-rutile crystalline structure, formation of Ti(III), introduction of boron as a B-O-Ti species and uniformity in particles surface size. (C) 2014 Elsevier B.V. All rights reserved.}},

Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article; Proceedings Paper}},
Language = {{English}},
Affiliation = {{Gimenez, J (Reprint Author), Univ Barcelona, Dept Chem Engn, C Marti & Franques 1, E-08028 Barcelona, Spain.
Cavalcante, Rodrigo Pereira; Machulek Junior, Amilcar, Univ Fed Mato Grosso do Sul, Inst Chem, BR-79074460 Campo Grande, MS, Brazil.
Dantas, Renato Falcao, Univ Estadual Campinas, Fac Technol, BR-13484332 Limeira, SP, Brazil.
Bayarri, Bernardi; Gonzalez, Oscar; Gimenez, Jaime; Esplugas, Santiago, Univ Barcelona, Dept Chem Engn, E-08028 Barcelona, Spain.}},
DOI = {{10.1016/j.cattod.2014.09.030}},
ISSN = {{0920-5861}},
EISSN = {{1873-4308}},
Keywords = {{Photocatalysis; Sol-gel method; TiO₂-B; Metoprolol}},
Keywords-Plus = {{ADVANCED OXIDATION PROCESSES; NEUTRAL PHOTO-FENTON; BORON-MODIFIED TIO₂;
SOL-GEL METHOD; PHOTOCATALYTIC DEGRADATION; VISIBLE-LIGHT;
BETA-BLOCKERS; WASTE-WATER; PILOT-PLANT; UV}},
Research-Areas = {{Chemistry; Engineering}},
Web-of-Science-Categories = {{Chemistry, Applied; Chemistry, Physical; Engineering, Chemical}},
Author-Email = {{j.gimenez.fa@ub.edu}},
ResearcherID-Numbers = {{Esplugas, Santiago/D-4652-2014
Gimenez, Jaime/K-4571-2014
Junior, Amilcar/A-3569-2010
}},
ORCID-Numbers = {{Esplugas, Santiago/0000-0002-3693-2948
Gimenez, Jaime/0000-0002-2213-9041
Machulek Junior, Amilcar/0000-0002-4632-4647}},
Funding-Acknowledgement = {{CNPq (Conselho Nacional de Desenvolvimento Cientifico e Tecnologico);
CAPES (Coordenacao de Aperfeicoamento de Pessoal de Nivel Superior);
FUNDECT (Fundacao de Apoio ao Desenvolvimento do Ensino, Ciencia e Tecnologia do Estado de Mato Grosso do Sul); INCT-EMA (Instituto Nacional de Ciencia e Tecnologia de Estudos do Meio Ambiente); Ministry of Science and Innovation of Spain {{CTQ2011-26258, CSD2007-00055};
AGAUR {{2009SGR 1466}}}},
Funding-Text = {{The authors wish to thank the Brazilian funding agencies CNPq (Conselho Nacional de Desenvolvimento Cientifico e Tecnologico), CAPES (Coordenacao de Aperfeicoamento de Pessoal de Nivel Superior), FUNDECT (Fundacao de Apoio ao Desenvolvimento do Ensino, Ciencia e Tecnologia do Estado de Mato Grosso do Sul) and INCT-EMA (Instituto Nacional de Ciencia e Tecnologia de Estudos do Meio Ambiente). The authors also thank the Ministry of Science and Innovation of Spain (projects CTQ2011-26258 and NOVEDAR 2010 CSD2007-00055) and AGAUR (project 2009SGR 1466) for funds received.}},
Number-of-Cited-References = {{58}},
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Usage-Count-Last-180-days = {{3}},
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Journal-ISO = {{Catal. Today}},
Doc-Delivery-Number = {{CJ1BA}},
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Author = {da Silva, Fabiana Maria and Barbosa, Luisa Andreia Gachet and Lintz,
Rosa Cristina Cecche and Jacintho, Ana Elisabete P. G. A.},
Title = {{Investigation on the properties of concrete tactile paving blocks made
with recycled tire rubber}},
Journal = {{CONSTRUCTION AND BUILDING MATERIALS}},
Year = {{2015}},
Volume = {{91}},
Pages = {{71-79}},
Month = {{AUG 30}},
Abstract = {{Due to the increasing demand for buildings that meet accessibility
standards and give access to all users, without restriction to people
with a disability or reduced mobility, it arises the search for
efficient and quality products. Aiming to develop a concrete paving
block that contributes to sustainability in building and to
accessibility in the built environment, in this paper recycled tire
rubber (crumb rubber) was used as aggregate in concrete to produce
tactile paving block. The replacement was made in relation of the mass
of sand at the level of 10%, 20%, 30%, 40% and 50%. The concrete
characterization was performed by testing the consistency, compressive
strength, flexural strength, water absorption, porosity, density,
abrasion resistance, impact resistance and microstructure analysis.
Although the major limitation of using crumb rubber as aggregate in the
concrete is to reduce the compressive strength, the results reached were
higher than 40 MPa for the paving blocks with the inclusion of 50% of
crumb rubber. The results of flexural strength obtained to all concrete
mixes studied were higher than 6.5 MPa. It was found that concrete
containing rubber showed a better abrasion resistance. (C) 2015 Elsevier
Ltd. All rights reserved.}},
Publisher = {{ELSEVIER SCI LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND}},
Type = {{Review}},
Language = {{English}},
Affiliation = {{da Silva, FM (Reprint Author), Rua Augusto Merichi,156 Jardim Santa
Amalia, BR-13484813 Sao Paulo, Brazil.
da Silva, Fabiana Maria; Barbosa, Luisa Andreia Gachet; Lintz, Rosa Cristina
Cecche, Univ Estadual Campinas, Fac Technol, BR-13484332 Sao Paulo, Brazil.
Jacintho, Ana Elisabete P. G. A., Pontifical Catholic Univ Campinas PUC Campinas,
CEATEC, Ctr Exact Sci Environm Sci & Technol, BR-13086900 Sao Paulo, Brazil.}},
DOI = {{10.1016/j.conbuildmat.2015.05.027}},
ISSN = {{0950-0618}},
EISSN = {{1879-0526}},
Keywords = {{Accessibility; Crumb rubber; Concrete; Tactile paving blocks;
Alternative materials; Materials and construction components}},
Research-Areas = {{Construction & Building Technology; Engineering; Materials
Science}},
Web-of-Science-Categories = {{Construction & Building Technology; Engineering,
Civil; Materials
Science, Multidisciplinary}},
Author-Email = {{faby\ febs@yahoo.com.br}},
ResearcherID-Numbers = {{Gachet Barbosa, Luisa Andreia/R-9595-2018
LINTZ, ROSA/T-3294-2018
Jacintho, Ana Elisabete/G-3622-2012}},
ORCID-Numbers = {{Gachet Barbosa, Luisa Andreia/0000-0002-1661-2605
Jacintho, Ana Elisabete/0000-0001-5401-2160}},
Funding-Acknowledgement = {{CAPES, Brazil}},
Funding-Text = {{The authors acknowledge the financial support of CAPES, Brazil. The
authors also thank CCB for technical support and BASF for providing raw
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Number-of-Cited-References = {{31}},
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Usage-Count-Since-2013 = {{38}},
Journal-ISO = {{Constr. Build. Mater.}},
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Doc-Delivery-Number = {{CK3LT}},
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Author = {Pereira, S. and Reis, T. and Souza, B. S. and Dantas, R. F. and Azevedo,
D. A. and Dezotti, M. and Sans, C. and Esplugas, S.},
Title = {{Oestrogenicity assessment of s-triazines by-products during ozonation}},
Journal = {{ENVIRONMENTAL TECHNOLOGY}},
Year = {{2015}},
Volume = {{36}},
Number = {{12}},
Pages = {{1538-1546}},
Month = {{JUN 18}},
Abstract = {{The triazines are a group of herbicides with a wide range of uses.
Atrazine is, in fact, one of the most used agricultural pesticides in
the world. The terbuthylazine is applied as a substitute of atrazine in
some countries of Europe since 2004, when the European Union announced a
ban of atrazine because of ubiquitous water contamination. In this
study, both atrazine and terbuthylazine were degraded by the ozone
process to estimate the efficiency on pesticide removal in water, the
intermediates formed and their potential oestrogenic activity using the
yeast oestrogen screen (YES) test. Both pesticides were rapidly
eliminated from the medium during ozonation (applied ozone dose 0.083
and 0.02 mmol O-3 L-1, respectively). The results show that both
compounds generated similar by-products from ozone degradation.
Moreover, significant oestrogenic activity was detected for both
atrazine and terbuthylazine intermediates, during the first minutes of
ozonation. The YES assay used in this study proved to be a sensitive
tool in assessing trace amounts of oestrogenic chemicals, which can
represent critical issues influencing the experimental results in
environmental applications.}},
Publisher = {{TAYLOR & FRANCIS LTD}},
Address = {{4 PARK SQUARE, MILTON PARK, ABINGDON OX14 4RN, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Dantas, R (Reprint Author), Univ Barcelona, Dept Chem Engn, Marti \&
Franques 1, E-08028 Barcelona, Spain.
Pereira, S., Fed Inst Educ Sci \& Technol Rio de Janeiro, Rio De Janeiro, Brazil.
Reis, T.; Azevedo, D. A., Fed Univ Rio de Janeiro CT, Dept Organ Chem, Inst Chem,
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Pereira, S.; Souza, B. S.; Dezotti, M., Univ Fed Rio de Janeiro, Chem Engn Program
COPEPE, BR-21941972 Rio de Janeiro, Brazil.
Dantas, R. F.; Sans, C.; Esplugas, S., Univ Barcelona, Dept Chem Engn, E-08028
Barcelona, Spain.
Dantas, R. F., Univ Campinas UNICAMP, Sch Technol, BR-13484332 Limeira, Brazil.
Souza, B. S., Univ Fed Sergipe, Environm Engn Dept CCET, BR-49100000 Sao Cristovao,
Brazil.}},
DOI = {{10.1080/09593330.2014.995235}},
ISSN = {{0959-3330}},
EISSN = {{1479-487X}},
Keywords = {{terbuthylazine; ozonation; atrazine; pesticides; by-products;
oestrogenic activity}},
Keywords-Plus = {{ADVANCED OXIDATION PROCESSES; PERFORMANCE LIQUID-CHROMATOGRAPHY;
AQUEOUS
PESTICIDE DEGRADATION; CURRENTLY USED PESTICIDES; DRINKING-WATER
TREATMENT; SOLID-PHASE EXTRACTION; PART I; ATRAZINE; OZONE; KINETICS}},
Research-Areas = {{Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Environmental Sciences}},
Author-Email = {{renatofalcaod@ft.unicamp.br}},
ResearcherID-Numbers = {{Sans Mazon, Carmen/K-8584-2014
Esplugas, Santiago/D-4652-2014
AZEVEDO, DEBORA/U-1887-2017
Dantas, Renato/J-4499-2013}},
ORCID-Numbers = {{Sans Mazon, Carmen/0000-0003-1713-5561
Esplugas, Santiago/0000-0002-3693-2948
AZEVEDO, DEBORA/0000-0003-4924-6741
Dantas, Renato/0000-0001-6208-8763}},
Funding-Acknowledgement = {{Spanish Ministry of Education and Science {[}CTQ2008-1710,
CTQ2011-26258, CSD2007-00055]; Brazilian 'Coordenacao de Aperfeicoamento
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Funding-Text = {{The authors are grateful to Spanish Ministry of Education and Science
  {[{}CTQ2008-1710; CTQ2011-26258; Consolider-Ingenio 2010 CSD2007-00055]
  and the Brazilian 'Coordenacao de Aperfeicoamento de Pessoal de Nivel
  Superior' CAPES {[{}114/06] for funds received to carry out this work.}},
Number-of-Cited-References = {[{}41]},
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Usage-Count-Last-180-days = {[{}0]},
Usage-Count-Since-2013 = {[{}36]},
Journal-ISO = {[{}Environ. Technol.]},
Doc-Delivery-Number = {[{}CC6AZ]},
Unique-ID = {[{}ISI:000350448200007]},
DA = {[{}2019-06-24]},
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Author = {Franciscon, Elisangela and Mendonca, Danilo and Seber, Samile and
  Morales, Daniel Alexandre and Zocolo, Guilherme Juliao and Zaroni,
  MariaValnice Boldrin and Grossman, Matthew James and Durrant, Lucia
  Regina and Freeman, Harold S. and Umbuzeiro, Gisela Aragao},
Title = {{Potential of a bacterial consortium to degrade azo dye Disperse Red 1 in
  a pilot scale anaerobic-aerobic reactor}},
Journal = {{PROCESS BIOCHEMISTRY}},
Year = {{2015}},
Volume = {{50}},
Number = {{5}},
Pages = {{816-825}},
Month = {{MAY}},
Abstract = {{The textile industry is the largest consumer of azo dyes and activated
  sludge treatment systems typically used to remove them are frequently
  inefficient, resulting in significant quantities of these compounds
  adsorbed in the sludge or released into water bodies. The aim of this
  study was to evaluate the biodegradation of the commercial azo dye
  Disperse Red 1 in a pilot scale anaerobic-aerobic reactor inoculated by
  a microbial consortium selected for its capacity to degrade azo dyes.
  Dye decolorization (80\%) occurred in 60 h in the anaerobic reactor and
  92\% COD (chemical oxygen demand) was removed as measured in the treated
  effluent. LC-ESI-MS/MS of the treated effluent showed the formation of a
  reduced azo bond and azo bond cleavage and subsequent degradation
  products. Aromatic amines produced by the cleavage of the azo bond were
  not detected. Toxicity tests performed with Daphnia similis and Hydra
  attenuate in the treated effluent showed that the toxicity was reduced
  significantly. Mutagenicity, evaluated using the Salmonella/microsome
  Ames test, found the untreated dye medium was only mutagenic toward
  Salmonella strain YG1041. However after treatment, only marginal
  mutagenicity was observed. These results indicate the bacterial
  consortium was effective in biodegrading Disperse Red 1 and also
  reducing the toxicity and mutagenicity and may represent a promising
  application for dyes biodegradation. (C) 2015 Elsevier Ltd. All rights
  reserved.}},
Publisher = {{ELSEVIER SCI LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Franciscon, E (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
  Technol, BR-13484332 Limeira, SP, Brazil.
  Franciscon, Elisangela; Mendonca, Danilo; Seber, Samile; Morales, Daniel Alexandre;
  Umbuzeiro, Gisela Aragao, Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira,
  SP, Brazil.
  Zocolo, Guilherme Juliao; Zaroni, MariaValnice Boldrin, Paulista Julio Mesquita
  Filho State Univ, Inst Chem, BR-14801970 Araraquara, SP, Brazil.
  Grossman, Matthew James; Durrant, Lucia Regina, Univ Estadual Campinas, Food Engrn
  Fac, BR-13083970 Campinas, SP, Brazil.
  Freeman, Harold S., N Carolina State Univ, Dept Text Engrn Chem \& Sci, Raleigh, NC
  27695 USA.}},
DOI = {{10.1016/j.procbio.2015.01.022}},
ISSN = {{1359-5113}},
EISSN = {{1873-3298}},
Keywords = {{Disperse Red 1; Bioreactor; Biodegradation; Microbial consortium;
  Metabolites; Toxicity}},
Keywords-Plus = {{AROMATIC-AMINES; BIODEGRADATION; DECOLORIZATION; TOXICITY;
  MUTAGENICITY;
  BIOREACTOR; WATER; ASSAY}},
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Research-Areas = {{Biochemistry \& Molecular Biology; Biotechnology \& Applied
  Microbiology; Engineering}},
Web-of-Science-Categories = {{Biochemistry \& Molecular Biology; Biotechnology \&
  Applied
  Microbiology; Engineering, Chemical}},
Author-Email = {{elisfranciscon@hotmail.com}},
ResearcherID-Numbers = {{Umbuzeiro, Gisela A./H-4603-2011
  boldrin zanoni, maria valnice/D-4251-2013
  Zocolo, Guilherme/D-2621-2013
  Morales, Daniel/D-9553-2015}},
ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200
  boldrin zanoni, maria valnice/0000-0002-2296-1393
  Zocolo, Guilherme/0000-0001-8835-0184
  }},
Funding-Acknowledgement = {{FAPESP {[2008/10449-7, 2009/12739-5]}},
Funding-Text = {{The authors thank FAPESP (2008/10449-7 and 2009/12739-5) for financial
  support and Marielly Resende, Adria Oliveira Caloto and Francine
  Inforcato Vacchi for helping with Salmonella/microsome and
  ecotoxicological testing.}},
Number-of-Cited-References = {{49}},
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Journal-ISO = {{Process Biochem.}},
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Unique-ID = {{ISI:000354147700017}},
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@article{ ISI:000352441500008,
Author = {Maselli, Bianca de S. and Luna, Luis A. V. and Palmeira, Joice de O. and
  Tavares, Karla P. and Barbosa, Sandro and Beijo, Luiz A. and Umbuzeiro,
  Gisela A. and Kummrow, Fabio},
Title = {{Ecotoxicity of raw and treated effluents generated by a veterinary
  pharmaceutical company: a comparison of the sensitivities of different
  standardized tests}},
Journal = {{ECOTOXICOLOGY}},
Year = {{2015}},
Volume = {{24}},
Number = {{4}},
Pages = {{795-804}},
Month = {{MAY}},
Abstract = {{Pharmaceutical effluents have recently been recognized as an important
  contamination source to aquatic environments and the toxicity related to
  the presence of antibiotics in effluents has attracted great attention.
  Conventionally, these effluents have been treated using physico-chemical
  and aerobic biological processes, usually with low rates of
  pharmaceuticals removal. Due to the complexity of effluents, it is
  impossible to determine all pharmaceuticals and their degradation
  products using analytical methods. Ecotoxicity tests with different
  organisms may be used to determine the effect level of effluents and
  thus their environmental impacts. The objective of this work was to
  compare the sensitivities of five ecotoxicity tests using aquatic and
  terrestrial organisms to evaluate the toxicity of effluents from the
  production of veterinary medicines before and after treatment. Raw and
  chemically treated effluent samples were highly toxic to aquatic
  organisms, achieving 100,000 toxic units, but only few of those samples
  presented phytotoxicity. We observed a reduction in the toxicity in the
  biologically treated effluent samples, which were previously chemically
  pre-treated, however the toxicity was not eliminated. The rank of test
  organisms' reactions levels was: Daphnia similis > Raphidocelis
  subcapitata > Aliivibrio fischeri > Allium cepa similar to Lactuca
  sativa. Effluent treatment employed by the evaluated company was only
  partially efficient at removing the effluent toxicity, suggesting
  potential risks to biota. The acute toxicity test with D. similis proved
  to be the most sensitive for both raw and treated effluents and is a
  suitable option for further characterization and monitoring of
  pharmaceutical effluents.}},
Publisher = {{SPRINGER}},
Address = {{VAN GODEWIJCKSTRAAT 30, 3311 GZ DORDRECHT, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
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Affiliation = {{Kummrow, F (Reprint Author), Univ Fed Sao Paulo, Inst Environm Chem \& Pharmaceut Sci, Unifesp, Campus Diadema, Rua Sao Nicolau 210, BR-09972270 Diadema, SP, Brazil.

Maselli, Bianca de S.; Palmeira, Joice de O.; Tavares, Karla P.; Barbosa, Sandro; Beijo, Luiz A., Fed Univ Alfenas Unifal MG, Inst Nat Sci, BR-37130000 Alfenas, MG, Brazil.

Luna, Luis A. V.; Umbuzeiro, Gisela A., State Univ Campinas Unicamp, Fac Technol, BR-13484332 Limeira, SP, Brazil.

Kummrow, Fabio, Univ Fed Sao Paulo, Inst Environm Chem \& Pharmaceut Sci, Unifesp, BR-09972270 Diadema, SP, Brazil.}},

DOI = {{10.1007/s10646-015-1425-9}},

ISSN = {{0963-9292}},

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Keywords = {{Industrial effluent; Acute and chronic toxicity test; Phytotoxicity test; Veterinary antibiotics; Aquatic organisms; Higher plants}},

Keywords-Plus = {{WASTE-WATER TREATMENT; IDENTIFICATION EVALUATION; ENVIRONMENTAL-POLLUTANTS; TREATMENT PLANTS; TOXICITY; ANTIBIOTICS; SLUDGE; BIOASSAYS; SURFACE; PHYTOTOXICITY}},

Research-Areas = {{Environmental Sciences \& Ecology; Toxicology}},

Web-of-Science-Categories = {{Ecology; Environmental Sciences; Toxicology}},

Author-Email = {{fkummrow@unifesp.br}},

ResearcherID-Numbers = {{Kummrow, Fabio/A-6168-2013

Umbuzeiro, Gisela A./H-4603-2011

}},

ORCID-Numbers = {{Kummrow, Fabio/0000-0003-2977-0108

Umbuzeiro, Gisela A./0000-0002-8623-5200

Beijo, Luiz/0000-0002-3286-5602

Visani de Luna, Luis Augusto/0000-0003-0375-1064}},

Funding-Acknowledgement = {{Conselho Nacional de Desenvolvimento Cientifico e Tecnologico (CNPq)

{{475243/2011-0}; Fundacao de Amparo a Pesquisa do Estado de Minas

Gerais (FAPEMIG)}},

Funding-Text = {{The authors acknowledge the Conselho Nacional de Desenvolvimento Cientifico e Tecnologico (CNPq-Project no 475243/2011-0). Maselli BS thanks Fundacao de Amparo a Pesquisa do Estado de Minas Gerais (FAPEMIG) for the scholarship granted. We also thank to Dr. Eldridge ML for helpful comments on this manuscript.}},

Number-of-Cited-References = {{62}},

Times-Cited = {{4}},

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Usage-Count-Since-2013 = {{45}},

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@article{ ISI:000353930000071,

Author = {Furtado, Guilherme F. and Picone, Carolina S. F. and Cuellar, Maria C. and Cunha, Rosiane L.},

Title = {{Breaking oil-in-water emulsions stabilized by yeast}},

Journal = {{COLLOIDS AND SURFACES B-BIOINTERFACES}},

Year = {{2015}},

Volume = {{128}},

Pages = {{568-576}},

Month = {{APR 1}},

Abstract = {{Several biotechnological processes can show an undesirable formation of emulsions making difficult phase separation and product recovery. The breakup of oil-in-water emulsions stabilized by yeast was studied using different physical and chemical methods. These emulsions were composed by deionized water, hexadecane and commercial yeast (*Saccharomyces cerevisiae*). The stability of the emulsions was evaluated varying the yeast concentration from 7.47 to 22.11% (w/w) and the phases obtained after gravity separation were evaluated on chemical composition, droplet size distribution, rheological behavior and optical microscopy. The cream phase showed kinetic stability attributed to mechanisms as electrostatic repulsion between the droplets, a possible Pickering-type stabilization and the viscoelastic properties of the concentrated emulsion. Oil recovery from cream phase was performed using gravity separation, centrifugation, heating and addition of demulsifier agents (alcohols and magnetic nanoparticles). Long centrifugation time and high centrifugal forces (2 h/150,000 x g) were necessary to obtain a complete

oil recovery. The heat treatment (60 degrees C) was not enough to promote a satisfactory oil separation. Addition of alcohols followed by centrifugation enhanced oil recovery: butanol addition allowed almost complete phase separation of the emulsion while ethanol addition resulted in 84% of oil recovery. Implementation of this method, however, would require additional steps for solvent separation. Addition of charged magnetic nanoparticles was effective by interacting electrostatically with the interface, resulting in emulsion destabilization under a magnetic field. This method reached almost 96% of oil recovery and it was potentially advantageous since no additional steps might be necessary for further purifying the recovered oil. (C) 2015 Elsevier B.V. All rights reserved.}}

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Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Cunha, RL (Reprint Author), Univ Estadual Campinas, Sch Food Engr, Dept Food Engr, BR-13083970 Campinas, SP, Brazil.
Furtado, Guilherme F.; Picone, Carolina S. F.; Cunha, Rosiane L., Univ Estadual Campinas, Sch Food Engr, Dept Food Engr, BR-13083970 Campinas, SP, Brazil.
Picone, Carolina S. F., Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, SP, Brazil.
Cuellar, Maria C., Delft Univ Technol, Dept Biotechnol, NL-2628 BC Delft, Netherlands.}},
DOI = {{10.1016/j.colsurfb.2015.03.010}},
ISSN = {{0927-7765}},
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Keywords = {{Emulsion; Stability; Demulsification}},
Keywords-Plus = {{SACCHAROMYCES-CEREVISIAE; BIODIESEL PRODUCTION; SOLID PARTICLES; RECENT TRENDS; SURFACE; CELLS; DEMULSIFICATION; EMULSIFICATION; BIOEMULSIFIER; CHALLENGES}},
Research-Areas = {{Biophysics; Chemistry; Materials Science}},
Web-of-Science-Categories = {{Biophysics; Chemistry, Physical; Materials Science, Biomaterials}},
Author-Email = {{rosiane@fea.unicamp.br}},
ResearcherID-Numbers = {{Cunha, Rosiane/D-4958-2012
Cuellar Soares, Maria/F-5630-2013
Picone, Carolina/Q-2494-2018
Furtado, Guilherme/E-8985-2017
}},
ORCID-Numbers = {{Picone, Carolina/0000-0003-0610-9667
Furtado, Guilherme/0000-0003-2280-0159
Cunha, Rosiane/0000-0003-2228-5492}},
Funding-Acknowledgement = {{Fundacao de Amparo Pesquisa e Desenvolvimento de Sao Paulo-Brazil
{{2011/51707-1, 2012/14003-9}; Conselho Nacional de Desenvolvimento Cientifico e Tecnologico-Brazil {{305477/2012-9, 130752/2012-6}; Dutch Ministry of Economic affairs, agriculture and innovation (ELI)}},
Funding-Text = {{This work was supported by the Fundacao de Amparo Pesquisa e Desenvolvimento de Sao Paulo-Brazil (2011/51707-1 and 2012/14003-9) and by the Conselho Nacional de Desenvolvimento Cientifico e Tecnologico-Brazil (305477/2012-9 and 130752/2012-6). Furthermore, this work was partly carried out within the BE-Basic R&D Program, which was granted a FES subsidy from the Dutch Ministry of Economic affairs, agriculture and innovation (EL&I).}},
Number-of-Cited-References = {{48}},
Times-Cited = {{13}},
Usage-Count-Last-180-days = {{3}},
Usage-Count-Since-2013 = {{67}},
Journal-ISO = {{Colloid Surf. B-Biointerfaces}},
Doc-Delivery-Number = {{CH3KQ}},
Unique-ID = {{ISI:000353930000071}},
OA = {{Bronze}},
DA = {{2019-06-24}},
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@article{ ISI:000352212300021,
Author = {Silveira, Jefferson E. and Zazo, Juan A. and Pliego, Gema and Bidoia, Ederio D. and Moraes, Peterson B.},
Title = {{Electrochemical oxidation of landfill leachate in a flow reactor: optimization using response surface methodology}},

```

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Journal = {{ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH}},
Year = {{2015}},
Volume = {{22}},
Number = {{8}},
Pages = {{5831-5841}},
Month = {{APR}},
Abstract = {{Response surface methodology based on Box-Behnken (BBD) design was
  successfully applied to the optimization in the operating conditions of
  the electrochemical oxidation of sanitary landfill leachate aimed for
  making this method feasible for scale up. Landfill leachate was treated
  in continuous batch-recirculation system, where a dimensional stable
  anode (DSA(A (c))) coated with Ti/TiO2 and RuO2 film oxide were used.
  The effects of three variables, current density (milliampere per square
  centimeter), time of treatment (minutes), and supporting electrolyte
  dosage (moles per liter) upon the total organic carbon removal were
  evaluated. Optimized conditions were obtained for the highest
  desirability at 244.11 mA/cm(2), 41.78 min, and 0.07 mol/L of NaCl and
  242.84 mA/cm(2), 37.07 min, and 0.07 mol/L of Na2SO4. Under the optimal
  conditions, 54.99 \% of chemical oxygen demand (COD) and 71.07 ammonia
  nitrogen (NH3-N) removal was achieved with NaCl and 45.50 of COD and
  62.13 NH3-N with Na2SO4. A new kinetic model predicted obtained from the
  relation between BBD and the kinetic model was suggested.}},
Publisher = {{SPRINGER HEIDELBERG}},
Address = {{TIERGARTENSTRASSE 17, D-69121 HEIDELBERG, GERMANY}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Silveira, JE (Reprint Author), Univ Campinas UNICAMP, Fac Technol,
  Dept Environm Technol, R Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
  Silveira, Jefferson E.; Moraes, Peterson B., Univ Campinas UNICAMP, Fac Technol,
  Dept Environm Technol, BR-13484332 Limeira, SP, Brazil.
  Zazo, Juan A.; Pliego, Gema, Autonomous Univ Madrid, Chem Engn, E-28049 Madrid,
  Spain.
  Bidoia, Ederio D., Sao Paulo State Univ, UNESP, IB, BR-13506900 Rio Claro, SP,
  Brazil.}},
DOI = {{10.1007/s11356-014-3738-2}},
ISSN = {{0944-1344}},
EISSN = {{1614-7499}},
Keywords = {{Electrooxidation; Box-Behnken design (BBD); Landfill leachate
  degradation; Dimensional stable anode (DSA(C)); Kineticmodel predicted}},
Keywords-Plus = {{AMMONIUM REMOVAL; DEGRADATION; PERFORMANCE; POLLUTANTS; PARAMETERS;
  REDUCTION}},
Research-Areas = {{Environmental Sciences \& Ecology}},
Web-of-Science-Categories = {{Environmental Sciences}},
Author-Email = {{jeffersonano@yahoo.com.br}},
ResearcherID-Numbers = {{Martinez, Juan Antonio A Zazo/H-9954-2015
  }},
ORCID-Numbers = {{Martinez, Juan Antonio A Zazo/0000-0001-7322-8899
  Bidoia, Ederio/0000-0001-7040-1983}},
Funding-Acknowledgement = {{CNPq-Conselho Nacional de Desenvolvimento Cientifico e
  Tecnologico;
  PRP/UNICAMP}},
Funding-Text = {{The authors gratefully acknowledge the financial support from
  CNPq-Conselho Nacional de Desenvolvimento Cientifico e Tecnologico-and
  PRP/UNICAMP.}},
Number-of-Cited-References = {{44}},
Times-Cited = {{15}},
Usage-Count-Last-180-days = {{3}},
Usage-Count-Since-2013 = {{41}},
Journal-ISO = {{Environ. Sci. Pollut. Res.}},
Doc-Delivery-Number = {{CF0DG}},
Unique-ID = {{ISI:000352212300021}},
DA = {{2019-06-24}},
}

@article{ ISI:000349846600002,
Author = {Hidalgo, Ieda G. and Correia, Paulo B. and Arnold, Francisco J. and
  Estrocio, Joao Paulo F. and de Barros, Regiane S. and Fernandes, Jessica
  P. T. and Yeh, William W. -G.},
Title = {{Hybrid Model for Short-Term Scheduling of Hydropower Systems}},
Journal = {{JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT}},
Year = {{2015}},
Volume = {{141}},

```

```
Number = {{3}},
Month = {{MAR}},
Abstract = {{In this paper the authors propose a global-local methodology for
optimizing the short-term operation of hydroelectric plants. The authors
determine the tradeoffs between minimizing the daily release from the
plant and minimizing the number of startups and shutdowns of the
generating units. The model is formulated as a mixed integer, nonlinear
programming optimization problem with multiple objectives. The authors
consider the nonlinearities of the generating units without
simplifications or approximations. The authors develop a solution method
that combines an evolutionary algorithm for the global search of the
integer variables and a gradient-based local optimizer for the
continuous variables. The local optimizer is embedded in the global
search algorithm. Convergence is achieved by iterating between the
global search and the local optimizer. The proposed methodology is
applied to a moderately sized Brazilian hydroelectric plant that belongs
to the national interconnected system. Additionally, a comparative study
was conducted using historical operational records. The results
demonstrate that the proposed methodology is feasible for online daily
operations and delivers two specific benefits. The first is the
efficiency gained, as the model seeks to operate the generating units as
close as possible to their most efficient operating points. The second
benefit is reduction of the units' maintenance costs, as the model
minimizes switching on/off of the generating units.}},
Publisher = {{ASCE-AMER SOC CIVIL ENGINEERS}},
Address = {{1801 ALEXANDER BELL DR, RESTON, VA 20191-4400 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Hidalgo, IG (Reprint Author), State Univ Campinas Unicamp, Fac
Technol, CP 6122, BR-13484332 Campinas, Brazil.
Hidalgo, Ieda G.; Arnold, Francisco J., State Univ Campinas Unicamp, Fac Technol,
BR-13484332 Campinas, Brazil.
Correia, Paulo B.; de Barros, Regiane S.; Fernandes, Jessica P. T., State Univ
Campinas Unicamp, Fac Mech Engn, BR-13484332 Campinas, Brazil.
Estrocio, Joao Paulo F., CESP, BR-04447011 Sao Paulo, Brazil.
Yeh, William W. -G., Univ Calif Los Angeles, Los Angeles, CA 90095 USA.}},
DOI = {{10.1061/(ASCE)WR.1943-5452.0000444}},
Article-Number = {{04014062}},
ISSN = {{0733-9496}},
EISSN = {{1943-5452}},
Keywords = {{Optimization; Algorithms; Hydro power; Hybrid methods; Scheduling; Power
plants; Unit commitment; Globallocal optimization methods; Evolutionary
algorithms; Gradient search; Hydroelectric plants}},
Keywords-Plus = {{UNIT COMMITMENT; HYDROELECTRIC PLANT; ELECTRICITY MARKET;
GENERATING-UNITS; HEAD; ALGORITHMS; CHAIN}},
Research-Areas = {{Engineering; Water Resources}},
Web-of-Science-Categories = {{Engineering, Civil; Water Resources}},
Author-Email = {{iedahidalgo@gmail.com
pcorreia@fem.unicamp.br
arnold@ft.unicamp.br
joao.estrocio@cesp.com.br
rsbarros@fem.unicamp.br
pillon@fem.unicamp.br
williamy@seas.ucla.edu}},
Funding-Acknowledgement = {{CNPq, a Brazilian government agency {{200759/2012-4}}; CESP
{{01-P-26974/2011}}}},
Funding-Text = {{The research reported herein was supported by CNPq, a Brazilian
government agency dedicated to the development of science and technology
(Process: 200759/2012-4) and by CESP, one of Brazil's largest power
generators (Process: 01-P-26974/2011). We would like to thank three
anonymous reviewers for their in-depth reviews and constructive
comments.}},
Number-of-Cited-References = {{34}},
Times-Cited = {{3}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{26}},
Journal-ISO = {{J. Water Resour. Plan. Manage.-ASCE}},
Doc-Delivery-Number = {{CB7ZD}},
Unique-ID = {{ISI:000349846600002}},
DA = {{2019-06-24}},
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@article{ ISI:000353070200010,
Author = {Arriola, E. Ruiz and Szpigel, S. and Timoteo, V. S.},
Title = {{Implicit and explicit renormalization: Two complementary views of
effective interactions}},
Journal = {{ANNALS OF PHYSICS}},
Year = {{2015}},
Volume = {{353}},
Pages = {{129-149}},
Month = {{FEB}},
Abstract = {{We analyze quantitatively the interplay between explicit and implicit
renormalization in Nuclear Physics. By explicit renormalization we mean
to integrate out higher energy modes below a given cutoff scale using
the similarity renormalization group (SRG) with a block-diagonal
evolution generator, which separates the total Hilbert-space into a
model space and its complementary. In the implicit renormalization we
impose given conditions at low energies for a cutoff theory. In both
cases we compare the outcoming effective interactions as functions of
the cutoff scale. We carry out a comprehensive analysis of a toy-model
which captures the main features of the nucleon-nucleon (NN) S-wave
interaction at low energies. We find a wide energy region where both
approaches overlap. This amounts to a great simplification in the
determination of the effective interaction. Actually, the outcoming
scales are within the expected ones relevant for the physics of light
nuclei. (C) 2014 Elsevier Inc. All rights reserved.}},
Publisher = {{ACADEMIC PRESS INC ELSEVIER SCIENCE}},
Address = {{525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Szpigel, S (Reprint Author), Univ Presbiteriana Mackenzie, Escola
Engn, Ctr Reidio Astron \& Astrofis Mackenzie, BR-01302907 Sao Paulo, SP, Brazil.
Arriola, E. Ruiz, Univ Granada, Dept Fis Atom Mol \& Nucl, E-18071 Granada, Spain.
Arriola, E. Ruiz, Univ Granada, Inst Carlos \& Fis Teor \& Computac, E-18071
Granada, Spain.
Szpigel, S., Univ Presbiteriana Mackenzie, Escola Engn, Ctr Reidio Astron \&
Astrofis Mackenzie, BR-01302907 Sao Paulo, SP, Brazil.
Timoteo, V. S., Univ Estadual Campinas, Fac Technol, Grp Opt \& Modelagem Numer,
BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1016/j.aop.2014.11.010}},
ISSN = {{0003-4916}},
EISSN = {{1096-035X}},
Keywords = {{Nuclear force; Renormalization; Similarity renormalization group}},
Keywords-Plus = {{EFFECTIVE-FIELD THEORY; NUCLEON-INTERACTION; FORCES; MODEL;
HAMILTONIANS}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Multidisciplinary}},
Author-Email = {{szpigel@mackenzie.br}},
ResearcherID-Numbers = {{Ruiz Arriola, Enrique/A-9388-2015
Szpigel, Sergio/F-5349-2012}},
ORCID-Numbers = {{Ruiz Arriola, Enrique/0000-0002-9570-2552
Szpigel, Sergio/0000-0003-2529-2225}},
Funding-Acknowledgement = {{Spanish DGI {[}FIS2011-24149]; Junta de Andalucia {[}
FQM225]; FAPESP
{[}2014/04975-9]; FAEPEX {[}1165/2014]; CNPq {[}310980/2012-7]}},
Funding-Text = {{E.R.A. would like to thank the Spanish DGI (Grant FIS2011-24149) and
Junta de Andalucia (Grant FQM225). S.S. is partially supported by FAPESP
and V.S.T. thanks FAEPEX (1165/2014), FAPESP (2014/04975-9) and CNPq
(310980/2012-7) for financial support.}},
Number-of-Cited-References = {{61}},
Times-Cited = {{4}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{2}},
Journal-ISO = {{Ann. Phys.}},
Doc-Delivery-Number = {{CG1XT}},
Unique-ID = {{ISI:000353070200010}},
DA = {{2019-06-24}},
}

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@article{ ISI:000346845300012,
Author = {Avila, L. F. and Pradel, A. and Ribeiro, S. J. L. and Messaddeq, Y. and
Nalin, M.},
Title = {{Laser irradiation and thermal treatment inducing selective
crystallization in Sb2O3-Sb2S3 glassy films}},

```

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Journal = {{PHYSICA B-CONDENSED MATTER}},
Year = {{2015}},
Volume = {{458}},
Pages = {{67-72}},
Month = {{FEB 1}},
Abstract = {{The influence of both thermal treatment and laser it on the structural
and optical properties of films in the Sb2O3-Sb2S3 system was
investigated. The films were prepared by RF-sputtering using glass
compositions as raw materials. Irreversible photodarkening effect was
observed after exposure the films to a 458 rim solid state laser, It is
shown, for the first time, the use of holographic technique to measure
in situ'', simultaneously and independently, the phase and amplitude
modulations in glassy films. The films were also photo-crystallized and
analysed ``in situ'' using a laser coupled to a micro-Raman equipment.
Results showed that 517253 crystalline phase was obtained after
irradiation. The effect of thermal annealing on the structure of the
films was carried out. Different from the result obtained by
irradiation, thermal annealing induces the crystallization of the Sb2O3
phase. Photo and thermal induced effects on films were studied using
UV-Vis and Raman spectroscopy, atomic force microscopy (AFM), thermal
analysis (DSC), X-ray diffraction, scanning electron microscopy (MEV)
and energy-dispersive X-ray spectroscopy (EDX). (C) 2014 Elsevier B.V.
All rights reserved.}},
Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Avila, LF (Reprint Author), Univ Estadual Campinas, Sch Technol, Rua
Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Avila, L. F., Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, SP, Brazil.
Pradel, A., Univ Montpellier 2, LPMC, UMR 5617, CC3, Montpellier, France.
Ribeiro, S. J. L.; Messaddeq, Y., Sao Paulo State Univ, UNESP, Inst Chem, LAMF,
Araraquara, SP, Brazil.
Nalin, M., Sao Paulo State Univ, UNESP, Inst Chem, LAVIE, Araraquara, SP, Brazil.}},
DOI = {{10.1016/j.physb.2014.11.011}},
ISSN = {{0921-4526}},
EISSN = {{1873-2135}},
Keywords = {{Antimony; Films; Photodarkening; Crystallization; Glass}},
Keywords-Plus = {{CHALCOGENIDE; TEMPERATURE}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Condensed Matter}},
Author-Email = {{lfavila@ft.unicamp.br}},
ResearcherID-Numbers = {{CerTEV, CerTEV/J-6817-2015
de Avila, Luis/H-4187-2013
Nalin, Marcelo/P-6793-2019
Ribeiro, Sidney/E-9864-2012
}},
ORCID-Numbers = {{de Avila, Luis/0000-0002-5763-8078
Ribeiro, Sidney/0000-0003-3286-9440
Ribeiro, Sidney/0000-0002-8162-6747
Nalin, Marcelo/0000-0002-7971-6794}},
Funding-Acknowledgement = {{PNPD/CAPES {[}2654/2011]; Sao Paulo Research Foundation -
FAPESP
{[}2013/07793-6, 2008/57857-2]; CNPq {[}574017/2008]}},
Funding-Text = {{The authors are grateful to Grant 2654/2011 PNPd/CAPES, Grant
2013/07793-6, Sao Paulo Research Foundation - FAPESP, Grant 2008/57857-2
(FAPESP) and Grant 574017/2008 (CNPq) for financial support.}},
Number-of-Cited-References = {{28}},
Times-Cited = {{3}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{42}},
Journal-ISO = {{Physica B}},
Doc-Delivery-Number = {{AX3NE}},
Unique-ID = {{ISI:000346845300012}},
DA = {{2019-06-24}},
}

@inproceedings{ ISI:000381744400004,
Author = {Fonseca, Adriane M. and Camolesi, Jr., Luiz},
Editor = {{Rocha, A and Correia, AM and Costanzo, S and Reis, LP}},
Title = {{Refactoring Rules for Graph Databases}},
Booktitle = {{NEW CONTRIBUTIONS IN INFORMATION SYSTEMS AND TECHNOLOGIES, VOL 1, PT 1}},
```

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Series = {{Advances in Intelligent Systems and Computing}},
Year = {{2015}},
Volume = {{353}},
Number = {{1}},
Pages = {{33-42}},
Note = {{World Conference on Information Systems and Technologies (WorldCIST),
  Univ Azores, Ponta Delgada, PORTUGAL, APR 01-03, 2015}},
Abstract = {{The information generated nowadays is growing in volume and complexity,
  representing a technological challenge which demands more than the
  relational model for databases can currently offer. This situation
  stimulates the use of different forms of storage, such as Graph
  Databases. Current Graph Databases allow automatic database evolution,
  but do not provide adequate resources for the information organization.
  This is mostly left under the responsibility of the applications which
  access the database, compromising the data integrity and reliability.
  The goal of this work is the definition of refactoring rules to support
  the management of the evolution of Graph Databases by adapting and
  extending existent refactoring rules for relational databases to meet
  the requirements of the Graph Databases features. These refactoring
  rules can be used by developers of graph database management tools to
  guarantee the integrity of the operations of database evolution.}},
Publisher = {{SPRINGER-VERLAG BERLIN}},
Address = {{HEIDELBERGER PLATZ 3, D-14197 BERLIN, GERMANY}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Fonseca, AM (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
  Technol FT, Paschoal Marmo St 1888, BR-13484332 Limeira, SP, Brazil.
  Fonseca, Adriane M.; Camolesi, Luiz, Jr., Univ Estadual Campinas, UNICAMP, Sch
  Technol FT, Paschoal Marmo St 1888, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1007/978-3-319-16486-1_4}},
ISSN = {{2194-5357}},
EISSN = {{2194-5365}},
ISBN = {{978-3-319-16486-1; 978-3-319-16485-4}},
Keywords = {{Graph Databases; Data Refactoring; Evolutionary Databases}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Artificial Intelligence; Computer
  Science, Information
  Systems; Computer Science, Theory & Methods}},
Author-Email = {{adrianedmf@gmail.com
  camolesi@ft.unicamp.br}},
ORCID-Numbers = {{Camolesi Junior, Luiz/0000-0001-5295-3514}},
Number-of-Cited-References = {{11}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{0}},
Doc-Delivery-Number = {{BF4WN}},
Unique-ID = {{ISI:000381744400004}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000380950200018,
Author = {Arnold, F. J. and Ximenes, R. L. and Arthur, R. and Muhlen, S. S.},
Editor = {{Lucas, M and Riera, E}},
Title = {{A driver for piezoelectric transducers with control of resonance}},
Booktitle = {{43RD ANNUAL UIA SYMPOSIUM}},
Series = {{Physics Procedia}},
Year = {{2015}},
Volume = {{63}},
Pages = {{114-119}},
Note = {{43rd Annual Symposium of the Ultrasonic-Industry-Association (UIA
  Symposium), Madrid, SPAIN, APR 23-25, 2014}},
Organization = {{Ultrason Ind Assoc; Ethicon; INTEGRA}},
Abstract = {{Variations in electric impedance curves of piezoelectric transducers
  occur under influence of mechanical load, temperature, electric
  excitation, among others. Electronic circuits for driving these
  transducers should correct the tune to maintain the performance of the
  transducer. Considering the changes at resonance, we have developed a
  circuit for a laboratory bench that performs two functions. The first,
  working on low power, by swapping frequencies around resonance, allows
  to the user define electric impedance and frequency operation that
  intend to apply in the experiment. The operation of this circuit is
  based on detection of magnitude of current in the transducer. A

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microcontroller and Labview are used to obtain the results. In the second, while under high power operation, deviations from original impedance are corrected by using a feedback network that evaluates amplitude of impedance. In this circuit, a class D MOSFET amplifier is used for exciting the transducer. Also, a microcontroller system controls the feedback network. Experiments with variation of mechanical loads have shown the effectiveness of the system. (C) 2015 The Authors.

Published by Elsevier B.V.}}

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Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{SARA BURGERHARTSTRAAT 25, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Arnold, FJ (Reprint Author), Univ Estadual Campinas, Sch Technol, R
Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Arnold, F. J.; Ximenes, R. L.; Arthur, R., Univ Estadual Campinas, Sch Technol, R
Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Univ Estadual Campinas, Fac Elect \& Comp Engrn, BR-13083852 Campinas, SP, Brazil.}},
DOI = {{10.1016/j.phpro.2015.03.019}},
ISSN = {{1875-3892}},
Keywords = {{microcontroller; Labview; acoustic load}},
Keywords-Plus = {{ULTRASONIC TRANSDUCERS; HIGH-POWER; SYSTEM}},
Research-Areas = {{Acoustics; Physics}},
Web-of-Science-Categories = {{Acoustics; Physics, Applied}},
ResearcherID-Numbers = {{Arnold, F. J./P-6287-2018}},
ORCID-Numbers = {{Arnold, F. J./0000-0003-2818-9709}},
Number-of-Cited-References = {{8}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{4}},
Doc-Delivery-Number = {{BF4HS}},
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OA = {{Other Gold}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000365994200319,
Author = {Romualdo, Lincoln L. and Santos, Rafaela S. and Lima, Francielle C. and
Andrade, Leonardo S. and Ferreira, Idelvone M. and Pozza, Simone A.},
Editor = {{Pierucci, S and Klemes, JJ}},
Title = {{Environmental Impact Monitoring of a Minero-Chemical Complex in Catalao
Urban Area of PTS, PM10 and PM2.5 by EDX Characterization}},
Booktitle = {{ICHEAP12: 12TH INTERNATIONAL CONFERENCE ON CHEMICAL \& PROCESS
ENGINEERING}},
Series = {{Chemical Engineering Transactions}},
Year = {{2015}},
Volume = {{43}},
Pages = {{1909-1914}},
Note = {{12th International Conference on Chemical and Process Engineering
(ICheap), Milano, ITALY, MAY 19-22, 2015}},
Abstract = {{Depending on its nature, particulate matter has very different size,
composition and morphology. By the combination of these criteria it is
possible to distinguish the emitting sources (primary or secondary). The
shape and the dimension of the particles have also a direct interaction
with the risk assessment for human health. The minero-chemical complex
consists of phosphate fertilizer manufacturing, rock phosphate and
niobium mining open pits and it is located northeast of the urban area
of the city. Environmental issues associated with it include the
following: fugitive emissions which are primarily associated with
operational leaks from tubing, valves, connections, flanges, packings,
open ended lines, floating roof storage tank and pump seals, gas
conveyance systems, compressor seals, pressure relief valves, tanks or
open its/containments, and loading and unloading operations of products.
Furthermore the area of study is characterized by a predominantly
northeast winds direction. The monitoring was performed weekly
particulates samples were collected in two seasonal episodes at one
representative places in the urban area of Catalao (a Brazilian city
located in Goias state) in the period from August to November of 2014.
Suspended particles were sampled on pure fiberglass filters by using a
High Volume air sampler and were analyzed via an energy dispersive X-ray
microanalysis system (EDX). The airborne particulate matter was
characterized from a physico-chemical point of view to supply
information on the particle composition and the compounds carried on
```

their surfaces. The microanalysis enables identification of several groups of particles such as: soot, Si-rich, metal-rich and biological particules. These results may help in controlling and preventing fugitive emissions in atmospheric air.}}

Publisher = {{AIDIC SERVIZI SRL}},
Address = {{VIA GIUSEPPE COLOMBO 81/A, MILANO, MI 20133, ITALY}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Romualdo, LL (Reprint Author), Fed Univ Goias Reg Catalao, Dept Chem, Setor Univ, Ave Dr Lamartine Pinto de Avelar 1120, BR-75704020 Catalao, Go, Brazil.
Romualdo, Lincoln L.; Santos, Rafaela S.; Lima, Francielle C.; Andrade, Leonardo S., Fed Univ Goias Reg Catalao, Dept Chem, Setor Univ, BR-75704020 Catalao, Go, Brazil.
Ferreira, Idelvone M., Fed Univ Goias Reg Catalao, Dept Geog, Setor Univ, BR-75704020 Catalao, Go, Brazil.
Pozza, Simone A., Univ Estadual Campinas, Sch Technol, BR-13484332 Sao Paulo, Brazil.}}},
DOI = {{10.3303/CET1543319}},
ISSN = {{1974-9791}},
ISBN = {{978-88-95608-34-1}},
Keywords-Plus = {{PARTICULATE MATTER; POLLUTION; AIR; PARTICLES; TRANSPORT; AEROSOL; HEALTH; INDIA; CHINA; SIZE}},
Research-Areas = {{Biotechnology \& Applied Microbiology; Engineering; Food Science \& Technology; Science \& Technology - Other Topics}},
Web-of-Science-Categories = {{Biotechnology \& Applied Microbiology; Engineering, Chemical; Food
Science \& Technology; Nanoscience \& Nanotechnology}},
Author-Email = {{lincolnromualdo@ufg.br}},
ResearcherID-Numbers = {{Pozza, Simone/M-4690-2019}},
ORCID-Numbers = {{Pozza, Simone/0000-0001-7423-0982}},
Number-of-Cited-References = {{17}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{8}},
Doc-Delivery-Number = {{BE0GQ}},
Unique-ID = {{ISI:000365994200319}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000365994200361,
Author = {Souza, Romulo M. S. and Coelho, Guilherme P. and da Silva, Ana Estela A. and Pozza, Simone A.},
Editor = {{Pierucci, S and Klemes, JJ}},
Title = {{Using Ensembles of Artificial Neural Networks to Improve PM10 Forecasts}},
Booktitle = {{ICHEAP12: 12TH INTERNATIONAL CONFERENCE ON CHEMICAL \& PROCESS ENGINEERING}},
Series = {{Chemical Engineering Transactions}},
Year = {{2015}},
Volume = {{43}},
Pages = {{2161-2166}},
Note = {{12th International Conference on Chemical and Process Engineering (IChEaP), Milano, ITALY, MAY 19-22, 2015}},
Abstract = {{High concentrations of atmospheric pollutants provoke negative effects that range from respiratory problems in humans to altered growth in crops due to the reduction of solar radiation. In this context, the study of suspended particulate matter (PM) in the atmosphere is especially relevant. Several works in the literature are dedicated to evaluate PM impacts and to develop models to forecast PM concentrations. Among these models, artificial neural networks (ANNs) are often employed mainly due to the facts that they are capable of learning from a set of training data samples and that they are known to be universal function approximators. However, most ANN training algorithms are susceptible to initial conditions, so the resulting models of distinct training phases may present different accuracies for the same problem. It is known from the machine learning literature that the ensemble approach, which basically combines a set of slightly different high-accuracy predictors, tends to lead to more accurate forecasts. Therefore, in this paper an ensemble of ANNs is proposed to forecast the daily concentrations of PM10 ($\phi \leq 10 \mu m$) in the city of Piracicaba, Brazil. The ensemble was trained with daily samples collected from 07.2009 to 06.2013 and evaluated with one-day-ahead forecasts from 07.2013 to 06.2014. Experiments with distinct ANN configurations were made and an average reduction of 8.85 % was obtained in the Mean Squared Error. The

ensembles were compared to individual ANNs that led to the best accuracy in the training dataset. It was also verified that, when compared to distinct single ANNs, the ensemble-based approach facilitated the generation of high accuracy models, as it increased the robustness of the development process. It is important to highlight that the proposed approach can be directly applied to other scenarios related to the prediction of PM concentrations, such as different atmospheric pollutants and meteorological data.}}

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Publisher = {{AIDIC SERVIZI SRL}},
Address = {{VIA GIUSEPPE COLOMBO 81/A, MILANO, MI 20133, ITALY}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Souza, RMS (Reprint Author), Univ Campinas Unicamp, Sch Technol FT, Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Souza, Romulo M. S.; Coelho, Guilherme P.; da Silva, Ana Estela A.; Pozza, Simone A., Univ Campinas Unicamp, Sch Technol FT, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.3303/CET1543361}},
ISSN = {{2283-9216}},
ISBN = {{978-88-95608-34-1}},
Keywords-Plus = {{PARTICULATE MATTER; PREDICTION; MODEL; REGRESSION; PAULO; PM2.5}},
Research-Areas = {{Biotechnology \& Applied Microbiology; Engineering; Food Science \& Technology; Science \& Technology - Other Topics}},
Web-of-Science-Categories = {{Biotechnology \& Applied Microbiology; Engineering, Chemical; Food
Science \& Technology; Nanoscience \& Nanotechnology}},
Author-Email = {{guilherme@ft.unicamp.br}},
ResearcherID-Numbers = {{Coelho, Guilherme Palermo/E-8795-2012
Pozza, Simone/M-4690-2019}},
ORCID-Numbers = {{Coelho, Guilherme Palermo/0000-0002-4641-0684
Pozza, Simone/0000-0001-7423-0982}},
Number-of-Cited-References = {{26}},
Times-Cited = {{2}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{10}},
Doc-Delivery-Number = {{BE0GQ}},
Unique-ID = {{ISI:000365994200361}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000359434100056,
Author = {Batista, E. F. and Szpigel, S. and Timoteo, V. S.},
Book-Group-Author = {{IOP}},
Title = {{Running of the contact interactions in chiral N3LO potentials from subtractive renormalization}},
Booktitle = {{XXXVII BRAZILIAN MEETING ON NUCLEAR PHYSICS}},
Series = {{Journal of Physics Conference Series}},
Year = {{2015}},
Volume = {{630}},
Note = {{37th Brazilian Meeting on Nuclear Physics (XXXVII RTFNB), Sao Paulo, BRAZIL, SEP 08-12, 2014}},
Abstract = {{In this work a subtracted kernel renormalization procedure (SKM) is applied to the chiral NN potential up to next-to-next-to-leading-order ((NLO)-L-3) to obtain the running of the renormalized contact strengths with the subtraction scale mu and the phase shifts for all uncoupled waves with contact interaction (S, P, D). We use two potentials constructed within the framework of Weinberg's approach to ChEFT, which provide a very accurate description of NN scattering data below laboratory energies E similar to 350 MeV, namely Epelbaum, Glockle and Meissner (N3LO-EGM) and Entem and Machleidt (N3LO-EM). For both potentials, we consider a large cutoff (30 fm(-1)) and analyze the phases and the running of the contact strengths with the subtraction point mu by making a fit of the K-matrix with five subtractions to the K-matrix from the Nijmegen II potential at low energies (E <= 20 MeV).}},
Publisher = {{IOP PUBLISHING LTD}},
Address = {{DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Batista, EF (Reprint Author), Univ Estadual Sudoeste Bahia, Dept Ciencias Exatas \& Nat, BR-45700000 Itapetinga, BA, Brazil.
Batista, E. F., Univ Estadual Sudoeste Bahia, Dept Ciencias Exatas \& Nat, BR-45700000 Itapetinga, BA, Brazil.}}
```


Szpigel, S., Univ Presbiteriana Mackenzie, Ctr Radioastron \& Astrofis Mackenzie, BR-01302907 Sao Paulo, SP, Brazil.

Timoteo, V. S., Univ Estadual Campinas UNICAMP, FT, Grp Opt \& Modelagem Numer GOMNI, BR-13484332 Limeira, SP, Brazil.}}

DOI = {{10.1088/1742-6596/630/1/012056}},

Article-Number = {{012056}},

ISSN = {{1742-6588}},

Keywords-Plus = {{NUCLEAR-FORCES; LAGRANGIANS}},

Research-Areas = {{Physics}},

Web-of-Science-Categories = {{Physics, Nuclear}},

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varese@ft.unicamp.br}},

ResearcherID-Numbers = {{Szpigel, Sergio/F-5349-2012}},

ORCID-Numbers = {{Szpigel, Sergio/0000-0003-2529-2225}},

Number-of-Cited-References = {{15}},

Times-Cited = {{2}},

Usage-Count-Last-180-days = {{0}},

Usage-Count-Since-2013 = {{1}},

Doc-Delivery-Number = {{BD3AZ}},

Unique-ID = {{ISI:000359434100056}},

OA = {{Other Gold}},

DA = {{2019-06-24}},

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@inproceedings{ ISI:000359434100036,

Author = {Ruiz Arriola, E. and Szpigel, S. and Timoteo, V. S.},

Book-Group-Author = {{IOP}},

Title = {{Unitary neutron matter in the on-shell limit}},

Booktitle = {{XXXVII BRAZILIAN MEETING ON NUCLEAR PHYSICS}},

Series = {{Journal of Physics Conference Series}},

Year = {{2015}},

Volume = {{630}},

Note = {{37th Brazilian Meeting on Nuclear Physics (XXXVII RTFNB), Sao Paulo, BRAZIL, SEP 08-12, 2014}},

Abstract = {{We compute the Bertsch parameter for neutron matter by using nucleon-nucleon interactions that are fully diagonal in momentum space.

We analyze the on-shell limit with the similarity renormalization group

and compare the results for a simple separable toy model to realistic

calculations with high precision NN potentials.}},

Publisher = {{IOP PUBLISHING LTD}},

Address = {{DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND}},

Type = {{Proceedings Paper}},

Language = {{English}},

Affiliation = {{Arriola, ER (Reprint Author), Univ Granada, Dept Fis Atom Mol \& Nucl, E-18071 Granada, Andalucia, Spain.

Ruiz Arriola, E., Univ Granada, Dept Fis Atom Mol \& Nucl, E-18071 Granada, Andalucia, Spain.

Szpigel, S., Univ Presbiteriana Mackenzie, Ctr Radioastron, BR-01302907 Sao Paulo, SP, Brazil.

Timoteo, V. S., Univ Estadual Campinas, Grp Opt \& Modelagem Numer GOMNI, BR-13484332 Limeira, SP, Brazil.}}

DOI = {{10.1088/1742-6596/630/1/012036}},

Article-Number = {{012036}},

ISSN = {{1742-6588}},

Keywords-Plus = {{EXPLICIT RENORMALIZATION; IMPLICIT}},

Research-Areas = {{Physics}},

Web-of-Science-Categories = {{Physics, Nuclear}},

Author-Email = {{earriola@ugr.es

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varese@ft.unicamp.br}},

ResearcherID-Numbers = {{Ruiz Arriola, Enrique/A-9388-2015

Szpigel, Sergio/F-5349-2012}},

ORCID-Numbers = {{Ruiz Arriola, Enrique/0000-0002-9570-2552

Szpigel, Sergio/0000-0003-2529-2225}},

Number-of-Cited-References = {{16}},

Times-Cited = {{1}},

Usage-Count-Last-180-days = {{0}},

Usage-Count-Since-2013 = {{2}},

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Unique-ID = {{ISI:000359434100036}},

OA = {{Other Gold}},

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DA = {{2019-06-24}},
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@article{ ISI:000347693100021,
  Author = {Yu, Tsai Hsin and Dafre, Alcir Luiz and Umbuzeiro, Gisela de Arago and
    Franciscan, Elisangela},
  Title = {{CYP-dependent induction of glutathione S-transferase in Daphnia similis
    exposed to a disperse azo dye}},
  Journal = {{ECOTOXICOLOGY}},
  Year = {{2015}},
  Volume = {{24}},
  Number = {{1}},
  Pages = {{232-237}},
  Month = {{JAN}},
  Abstract = {{Disperse Red 1 (DR1) is an azo dye that can reach the aquatic
    environment through the discharge of textile industrial wastewaters. It
    has been tested in Daphnia similis and shown to be highly toxic.
    Cytochrome P450 (CYP) is a class of enzymes involved in phase I of
    detoxification, while glutathione S-transferase (GST) are a class of
    phase II enzymes. No information about phase I or II dye metabolism in
    microcrustacea were found in the literature. In this study we identified
    CYP and GST enzymes involved in the metabolism of DR1 in juveniles of D.
    similis. Using spectrophotometric analysis we showed that 50 % of the
    dye was absorbed by the organisms, which could be confirmed by the
    reddish color of animals exposed to DR1, however adsorption cannot be
    ruled out. GST activity increased from 280 to 615 nmol(-1) min(-1) mg
    when D. similis were exposed for 48 h to 0.2 mg L-1 DR1 and from 274 to
    815 nmol(-1) min(-1) mg when exposed to 5 mg L-1. Data clearly
    demonstrate that exposure to DR1 can stimulate a strong induction of GST
    activity, whose participation in DR1 metabolism needs to be confirmed.
    The induction of GST activity seems to be dependent on CYP activity,
    since treatment with SKF535A, a CYP inhibitor, blocked the DR1-dependent
    GST induction. We speculate that GST is involved in DR1 metabolism in
    Daphnia and that CYP activity is necessary to induce GST-activity, which
    is an indirect evidence of its role in the biotransformation of DR1.}},
  Publisher = {{SPRINGER}},
  Address = {{VAN GODEWIJCKSTRAAT 30, 3311 GZ DORDRECHT, NETHERLANDS}},
  Type = {{Article}},
  Language = {{English}},
  Affiliation = {{Franciscan, E (Reprint Author), Univ Estadual Campinas, Technol Sch,
    BR-13484332 Limeira, SP, Brazil.
    Yu, Tsai Hsin; Umbuzeiro, Gisela de Arago; Franciscan, Elisangela, Univ Estadual
    Campinas, Technol Sch, BR-13484332 Limeira, SP, Brazil.
    Dafre, Alcir Luiz, Univ Fed Santa Catarina, Dept Biochem, Ctr Biol Sci, BR-88040900
    Florianopolis, SC, Brazil.}},
  DOI = {{10.1007/s10646-014-1348-x}},
  ISSN = {{0963-9292}},
  EISSN = {{1573-3017}},
  Keywords = {{Daphnia similis; Azo dye; Disperse Red 1; Glutathione S-transferase;
    CYP}},
  Keywords-Plus = {{1-PHENYLAZO-2-NAPHTHOL SUDAN-I; MICROCYSTIN-LR; TEXTILE DYES; MAGNA;
    PROTEIN; BIOTRANSFORMATION; METABOLISM; EXPRESSION; ENZYME}},
  Research-Areas = {{Environmental Sciences & Ecology; Toxicology}},
  Web-of-Science-Categories = {{Ecology; Environmental Sciences; Toxicology}},
  Author-Email = {{elisfranciscan@hotmail.com}},
  ResearcherID-Numbers = {{Umbuzeiro, Gisela A./H-4603-2011}},
  ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200}},
  Funding-Acknowledgement = {{Sao Paulo Research Foundation FAPESP {{2008/10449-7,
    2012/01253-7,
    2010/13003-0}}}},
  Funding-Text = {{The authors thank Sao Paulo Research Foundation FAPESP (2008/10449-7,
    2012/01253-7 and 2010/13003-0) for financial support. The authors also
    thank Dr. Errol Zeiger for suggestions and English editing of this
    manuscript.}},
  Number-of-Cited-References = {{31}},
  Times-Cited = {{5}},
  Usage-Count-Last-180-days = {{0}},
  Usage-Count-Since-2013 = {{27}},
  Journal-ISO = {{Ecotoxicology}},
  Doc-Delivery-Number = {{AY6RK}},
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  DA = {{2019-06-24}},
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@article{ ISI:000347873800007,  
  Author = {Pujaico, Fernando and Portugheis, Jaime},  
  Title = {{Optimal Rate for Joint Source-Channel Coding of Correlated Sources Over  
    Orthogonal Channels}},  
  Journal = {{IEEE COMMUNICATIONS LETTERS}},  
  Year = {{2015}},  
  Volume = {{19}},  
  Number = {{1}},  
  Pages = {{22-25}},  
  Month = {{JAN}},  
  Abstract = {{Joint source-channel coding of multiple correlated sources transmitted  
    over orthogonal channels is considered. Two optimization problems  
    related to coding schemes are formulated: maximal common rate, and  
    maximal sum rate. These two problems model different power saving  
    situations in energy-constrained wireless sensor networks. Solutions of  
    these problems for an arbitrary number of sources are described, and  
    some specific examples are given.}},  
  Publisher = {{IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC}},  
  Address = {{445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA}},  
  Type = {{Article}},  
  Language = {{English}},  
  Affiliation = {{Pujaico, F (Reprint Author), Univ Estadual Campinas, Dept Commun,  
    BR-13083852 Campinas, SP, Brazil.  
    Pujaico, Fernando, Univ Estadual Campinas, Dept Commun, BR-13083852 Campinas, SP,  
    Brazil.  
    Portugheis, Jaime, Univ Estadual Campinas, Sch Technol, BR-13484332 Limeira, SP,  
    Brazil.}},  
  DOI = {{10.1109/LCOMM.2014.2377237}},  
  ISSN = {{1089-7798}},  
  EISSN = {{1558-2558}},  
  Keywords = {{Distributed source coding; joint source-channel coding; optimal rate}},  
  Keywords-Plus = {{NOISY CHANNELS; PERFORMANCE; CODES}},  
  Research-Areas = {{Telecommunications}},  
  Web-of-Science-Categories = {{Telecommunications}},  
  Author-Email = {{fpujaico@decom.fee.unicamp.br  
    jaime@ft.unicamp.br}},  
  Funding-Acknowledgement = {{CAPES; FAPESP {{2012/22641-5}}}},  
  Funding-Text = {{This work was partially supported by CAPES and FAPESP under grant  
    2012/22641-5. The associate editor coordinating the review of this paper  
    and approving it for publication was L. Dolecek.}},  
  Number-of-Cited-References = {{14}},  
  Times-Cited = {{0}},  
  Usage-Count-Last-180-days = {{1}},  
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  Journal-ISO = {{IEEE Commun. Lett.}},  
  Doc-Delivery-Number = {{AY9LY}},  
  Unique-ID = {{ISI:000347873800007}},  
  DA = {{2019-06-24}},  
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@inproceedings{ ISI:000399133902078,  
  Author = {Ursini, Edson L. and Martins, Paulo S. and Timoteo, Varese S. and  
    Massaro, Jr., Flavio R.},  
  Book-Group-Author = {{IEEE}},  
  Title = {{MODELING AND SIMULATION APPLIED TO LINK DIMENSIONING OF STREAM IP  
    TRAFFIC WITH INCREMENTAL VALIDATION}},  
  Booktitle = {{2015 WINTER SIMULATION CONFERENCE (WSC)}},  
  Series = {{Winter Simulation Conference Proceedings}},  
  Year = {{2015}},  
  Pages = {{3049-3060}},  
  Note = {{Winter Simulation Conference (WSC), Huntington Beach, CA, DEC 06-09,  
    2015}},  
  Abstract = {{Modern networks for converged services (voice, video and data) require  
    appropriate planning and dimensioning. In this paper, we present a  
    methodology for dimensioning the link capacity and packet delay in  
    stream, IP multi-service networks with QoS requirements, in which  
    discrete-event simulation is essential. The model may be used in the  
    lack of enough reliable real-world data, since it is initially validated  
    by an analytical model and then augmented step by step. The approach can  
    be made more reliable if measured values are used. We show that the
```

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incremental approach allows a significant reduction in simulation time
without significant loss of accuracy, by exploiting the sample variance
reduction due to the large difference in the time scale between events
occurring in the application (service layer) and in the packet layer. We
demonstrated the applicability of this method with typical multi-service
network scenarios.}},
Publisher = {{IEEE}},
Address = {{345 E 47TH ST, NEW YORK, NY 10017 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Ursini, EL (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
Technol, BR-13484332 Limeira, SP, Brazil.
Ursini, Edson L.; Martins, Paulo S.; Timoteo, Varese S.; Massaro, Flavio R., Jr.,
Univ Estadual Campinas, UNICAMP, Sch Technol, BR-13484332 Limeira, SP, Brazil.}},
ISSN = {{0891-7736}},
ISBN = {{978-1-4673-9743-8}},
Research-Areas = {{Computer Science}},
Web-of-Science-Categories = {{Computer Science, Interdisciplinary Applications;
Computer Science,
Theory \& Methods}},
Author-Email = {{ursini@ft.unicamp.br
paulo@ft.unicamp.br
varese@ft.unicamp.br
frmassaro@gmail.com}},
Funding-Acknowledgement = {{FAPESPIUNICAMP-FAEPEX {[}2011117339-5]; CNPq {[}
310980/2012-7]}},
Funding-Text = {{We would like to thank FAPESPIUNICAMP-FAEPEX 2011117339-5 and CNPq
\#310980/2012-7 grants.}},
Number-of-Cited-References = {{19}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{0}},
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DA = {{2019-06-24}},
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@article{ ISI:000345106100022,
Author = {Ferrari Felisberto, Maria Herminia and Esteves Lopes Galvao, Maria
Teresa and Franco Picone, Carolina Siqueira and Cunha, Rosiane Lopes and
Rodrigues Pollonio, Manse Aparecida},
Title = {{Effect of prebiotic ingredients on the rheological properties and
microstructure of reduced-sodium and low-fat meat emulsions}},
Journal = {{LWT-FOOD SCIENCE AND TECHNOLOGY}},
Year = {{2015}},
Volume = {{60}},
Number = {{1}},
Pages = {{148-155}},
Month = {{JAN}},
Abstract = {{The technological and rheological properties were evaluated for low-fat
and reduced-sodium meat emulsions containing various levels of prebiotic
fibers (inulin, FOS, polydextrose, and resistant starch) as fat and
starch substitutes. Low emulsion stability was observed, mainly in the
treatments containing inulin and polydextrose (3 and 6 g/100 g). Higher
tenderness was observed in the low-fat bologna sausages containing
prebiotic fibers. The prebiotic fibers influenced the color of the meat
batters but not that of the bologna sausage, probably due to the curing
reactions and fat melting and subsequent solidification reaction. The
meat batters presented elastic behavior, demonstrated by a G' value that
was higher than the G'' value during oscillatory tests. An increase in
the gelation temperature may result from the addition of the fibers,
which delayed the gelation reaction of the myosin. The microstructures
showed a porous matrix in the treatments containing prebiotic fibers,
and a compact and dense network was observed only in the control
formulations and that one containing inulin, due to its chain length.
Further studies are required to evaluate the suitable levels in low-fat
and reduced-sodium meat emulsions of prebiotic fibers, including cassava
starch, which it is not possible to remove completely from the
formulations. (C) 2014 Elsevier Ltd. All rights reserved.}},
Publisher = {{ELSEVIER SCIENCE BV}},
Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
Type = {{Article}},
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Language = {{English}},
 Affiliation = {{Felisberto, MHF (Reprint Author), Univ Estadual Campinas, UNICAMP, Fac Food Engn, Dept Food Technol, Cidade Univ Zeferino Vaz, BR-13083862 Campinas, SP, Brazil.

Ferrari Felisberto, Maria Herminia; Esteves Lopes Galvao, Maria Teresa; Rodrigues Pollonio, Manse Aparecida, Univ Estadual Campinas, UNICAMP, Fac Food Engn, Dept Food Technol, BR-13083862 Campinas, SP, Brazil.

Franco Picone, Carolina Siqueira; Cunha, Rosiane Lopes, Univ Estadual Campinas, UNICAMP, Fac Food Engn, Dept Food Engn, BR-13083862 Campinas, SP, Brazil.

Franco Picone, Carolina Siqueira, Univ Estadual Campinas, UNICAMP, Fac Technol, BR-13484332 Sao Paulo, Brazil.}}

DOI = {{10.1016/j.lwt.2014.08.004}},

ISSN = {{0023-6438}},

EISSN = {{1096-1127}},

Keywords = {{Fat reduction; Gelling; Meat emulsion; Prebiotic fibers; Sodium reduction}},

Keywords-Plus = {{BOLOGNA-TYPE SAUSAGES; RESISTANT STARCH; SENSORY CHARACTERISTICS; TEXTURAL PROPERTIES; FERMENTED SAUSAGES; COOKED SAUSAGES; BEEF PATTIES; BETA-GLUCAN; QUALITY; INULIN}},

Research-Areas = {{Food Science \& Technology}},

Web-of-Science-Categories = {{Food Science \& Technology}},

Author-Email = {{mariaferrari.felisberto@gmail.com}},

ResearcherID-Numbers = {{Cunha, Rosiane/D-4958-2012

Pollonio, Marise A. R./B-7994-2012

Picone, Carolina/Q-2494-2018

Ferrari Felisberto, Maria Herminia/G-9474-2015

}},

ORCID-Numbers = {{Pollonio, Marise A. R./0000-0002-9273-1710

Picone, Carolina/0000-0003-0610-9667

Ferrari Felisberto, Maria Herminia/0000-0003-1538-7941

Cunha, Rosiane/0000-0003-2228-5492}},

Number-of-Cited-References = {{51}},

Times-Cited = {{18}},

Usage-Count-Last-180-days = {{0}},

Usage-Count-Since-2013 = {{51}},

Journal-ISO = {{LWT-Food Sci. Technol.}},

Doc-Delivery-Number = {{AT7HA}},

Unique-ID = {{ISI:000345106100022}},

OA = {{Bronze}},

DA = {{2019-06-24}},

}

@article{ ISI:000343391600018,

Author = {Osorio, Wislei R. and Bortolozo, Ausdinir D. and Peixoto, Leandro C. and Garcia, Amauri},

Title = {{Mechanical performance and microstructure array of as-cast lead-silver and lead-bismuth alloys}},

Journal = {{JOURNAL OF POWER SOURCES}},

Year = {{2014}},

Volume = {{271}},

Pages = {{124-133}},

Month = {{DEC 20}},

Abstract = {{The aim of this study is to establish correlations between mechanical properties of Pb-Ag and Pb-Bi alloys and parametric features of their as-cast microstructures, as well as to develop a comparative analysis with the corresponding properties of Pb-Sn alloys considering applications of these alloys in the manufacture of Pb-acid battery components. A wide range of microstructures are obtained using an upward water-cooled directional solidification system. Ultimate (UTS) and yield tensile strengths (YS) and elongation are experimentally determined as a function of cellular and dendritic spacings, and Hall-Petch type experimental equations are proposed relating UTS to these microstructure parameters. Despite the higher specific strengths of Pb-Ag alloys, as compared with those of Pb-Bi and Pb-Sn alloys, their corresponding relative costs are the highest of all Pb-based alloys examined. It is found that the Pb-Bi and Pb-Sn alloys examined have similar specific strengths and relative costs. (C) 2014 Elsevier B.V. All rights reserved.}},

Publisher = {{ELSEVIER SCIENCE BV}},

Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},

Type = {{Article}},

Language = {{English}},

Affiliation = {{Osorio, WR (Reprint Author), Univ Estadual Campinas, Sch Appl Sci FCA, UNICAMP, Campus Limeira 1300, Pedro Zaccaria St, BR-13484350 Limeira, SP, Brazil.

Osorio, Wislei R.; Bortolozzo, Ausdinir D., Univ Estadual Campinas, Sch Appl Sci FCA, UNICAMP, BR-13484350 Limeira, SP, Brazil.

Osorio, Wislei R., Univ Campinas UNICAMP, Sch Technol, BR-13484332 Limeira, SP, Brazil.

Peixoto, Leandro C.; Garcia, Amauri, Univ Estadual Campinas, Dept Mfg & Mat Engr, UNICAMP, BR-13083970 Campinas, SP, Brazil.}}

DOI = {{10.1016/j.jpowsour.2014.07.166}},

ISSN = {{0378-7753}},

EISSN = {{1873-2755}},

Keywords = {{Lead-acid batteries; Lead-silver alloys; Lead-bismuth alloys;

Valve-regulated; Microstructure; Solidification}},

Keywords-Plus = {{ACID-BATTERY COMPONENTS; CORROSION BEHAVIOR; ELECTROCHEMICAL-BEHAVIOR;

RESISTANCE; ZINC}},

Research-Areas = {{Chemistry; Electrochemistry; Energy & Fuels; Materials Science}},

Web-of-Science-Categories = {{Chemistry, Physical; Electrochemistry; Energy & Fuels; Materials

Science, Multidisciplinary}},

Author-Email = {{wislei.osorio@fca.unicamp.br}},

ResearcherID-Numbers = {{Peixoto, Leandro/K-3491-2015

Bortolozzo, Ausdinir/G-3421-2012

Osorio, Wislei R*/E-2585-2013

Garcia, Amauri/C-6916-2012

}},

ORCID-Numbers = {{Garcia, Amauri/0000-0002-3834-3258

Osorio, Wislei Riuper/0000-0002-2754-9584}},

Funding-Acknowledgement = {{CNPq (Brazilian Research Council); FAEPEX-UNICAMP; FAPESP (Scientific

Research Foundation of the State of Sao Paulo, Brazil)}}},

Funding-Text = {{The authors acknowledge the financial support provided by CNPq (The Brazilian Research Council), FAEPEX-UNICAMP and FAPESP (The Scientific

Research Foundation of the State of Sao Paulo, Brazil).}},

Number-of-Cited-References = {{21}},

Times-Cited = {{3}},

Usage-Count-Last-180-days = {{0}},

Usage-Count-Since-2013 = {{37}},

Journal-ISO = {{J. Power Sources}},

Doc-Delivery-Number = {{AR2CQ}},

Unique-ID = {{ISI:000343391600018}},

DA = {{2019-06-24}},

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@article{ ISI:000345320200018,

Author = {Rego, A. P. J. and Reganhan-Coneglian, C. M. and Montagnolli, R. N. and

Bidoia, E. D.},

Title = {{CO₂ Production of Soil Microbiota in the Presence of Ametryne and Biofertilizer}},

Journal = {{WATER AIR AND SOIL POLLUTION}},

Year = {{2014}},

Volume = {{225}},

Number = {{12}},

Month = {{DEC}},

Abstract = {{Ametryne is an herbicide applied to sugar cane cultures to prevent the emergence of weeds. It is a persistent compound that percolates ground and surface water thus impacting aquatic communities. In this study, we evaluated microbial activity in soil with increased concentrations of ametryne solution and commercial Microgeo biofertilizer. The soil subject to analysis was obtained from a sugar cane cultivation area. The concentration used in the experiment was ametryne 12 μ g/L and 1 % of biofertilizer. It was used with the Bartha and Pramer respirometric method to quantify CO₂ production and determine microbial activity. Complimentary phytotoxicity tests with *Lactuca sativa* seeds after respirometry experiments were conducted in the soluble fraction of the soil. According to the results, the addition of biofertilizer promoted microbial activity in the presence of ametryne and reduced ametryne phytotoxicity for *Lactuca sativa* seeds. Thus, Microgeo biofertilizer can potentially improve biodegradation of ametryne through both bioaugmentation and bioestimulation.}},

Publisher = {{SPRINGER}},

Address = {{VAN GODEWIJCKSTRAAT 30, 3311 GZ DORDRECHT, NETHERLANDS}},

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Type = {{Article}},
Language = {{English}},
Affiliation = {{Bidoia, ED (Reprint Author), UNESP Sao Paulo State Univ, Dept Biochem
\& Microbiol, IB, Av 24 A,1515 Bela Vista, BR-13506900 Sao Paulo, Brazil.
  Rego, A. P. J.; Montagnolli, R. N.; Bidoia, E. D., UNESP Sao Paulo State Univ, Dept
Biochem \& Microbiol, IB, BR-13506900 Sao Paulo, Brazil.
  Rego, A. P. J.; Reganhan-Coneglian, C. M., UNICAMP State Univ Campinas, Fac
Technol, BR-13484332 Sao Paulo, Brazil.}},
DOI = {{10.1007/s11270-014-2222-4}},
Article-Number = {{2222}},
ISSN = {{0049-6979}},
EISSN = {{1573-2932}},
Keywords = {{Ametryne; Biofertilizers; Respirometry; Sandy soil}},
Keywords-Plus = {{GROWTH; BIODegradation}},
Research-Areas = {{Environmental Sciences \& Ecology; Meteorology \& Atmospheric
Sciences;
  Water Resources}},
Web-of-Science-Categories = {{Environmental Sciences; Meteorology \& Atmospheric
Sciences; Water
  Resources}},
Author-Email = {{ederio@rc.unesp.br}},
ORCID-Numbers = {{Bidoia, Ederio/0000-0001-7040-1983
  Montagnolli, Renato/0000-0003-3801-9631}},
Funding-Acknowledgement = {{CAPES-Coordenacao de Aperfeicoamento de Pessoal de Nivel
Superior}},
Funding-Text = {{The authors acknowledge the financial support from CAPES-Coordenacao
de
  Aperfeicoamento de Pessoal de Nivel Superior.}},
Number-of-Cited-References = {{24}},
Times-Cited = {{2}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{15}},
Journal-ISO = {{Water Air Soil Pollut.}},
Doc-Delivery-Number = {{AUONO}},
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DA = {{2019-06-24}},
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@article{ ISI:000343613900010,
Author = {Ursini, Edson L. and Martins, Paulo S. and Moraes, Regina L. and
  Timoteo, Varese S.},
Title = {{n-Steps ahead software reliability prediction using the Kalman filter}},
Journal = {{APPLIED MATHEMATICS AND COMPUTATION}},
Year = {{2014}},
Volume = {{245}},
Pages = {{116-134}},
Month = {{OCT 15}},
Abstract = {{This paper presents KSL, a new software reliability growth model (SRGM)
based on the Kalman filter with a sub filter and the Laplace trend test.
We applied the model to the Linux operating system kernel as a case
study to predict the absolute and relative (per lines of code) number of
faults n-steps ahead. The Laplace trend test is applied to detect when
the series no longer follows a homogeneous Poisson process, improving
the confidence level. An example is provided with a prediction of 13
months ahead on the number of faults with 8\% error. The results (i.e.
predictive capability) indicated that the proposed approach outperforms
the S-shaped prediction model, Weibull, and Exponentiated Weibull
distributions, as well as typical and OS-ELM Neural networks when the
series has a short number of observations. (C) 2014 Elsevier Inc. All
rights reserved.}},
Publisher = {{ELSEVIER SCIENCE INC}},
Address = {{360 PARK AVE SOUTH, NEW YORK, NY 10010-1710 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Ursini, EL (Reprint Author), Univ Estadual Campinas, UNICAMP, Sch
Technol, BR-13484332 Limeira, SP, Brazil.
  Ursini, Edson L.; Martins, Paulo S.; Moraes, Regina L.; Timoteo, Varese S., Univ
Estadual Campinas, UNICAMP, Sch Technol, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1016/j.amc.2014.07.018}},
ISSN = {{0096-3003}},
EISSN = {{1873-5649}},
Keywords = {{Trend analysis; Kalman fflter; Laplace trend test; SRGMs; n-Steps ahead

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reliability prediction}},
Keywords-Plus = {{ALGORITHM; MODELS}},
Research-Areas = {{Mathematics}},
Web-of-Science-Categories = {{Mathematics, Applied}},
Author-Email = {{ursini@ft.unicamp.br
paulo@ft.unicamp.br
regina@ft.unicamp.br
varese@ft.unicamp.br}},
ORCID-Numbers = {{Moraes, Regina/0000-0003-0678-4777}},
Funding-Acknowledgement = {{FAPESP {[2011/17339-5, 2013/17823-0]; PAPDIC {[1198/12]}}},
Funding-Text = {{The authors would like to thank FAPESP 2011/17339-5, FAPESP 2013/17823-0
and PAPDIC \#1198/12 grants. We would like to thank the editor and
referees for their valuable comments and suggestions that improved the
paper.}},
Number-of-Cited-References = {{19}},
Times-Cited = {{4}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{11}},
Journal-ISO = {{Appl. Math. Comput.}},
Doc-Delivery-Number = {{AR5GU}},
Unique-ID = {{ISI:000343613900010}},
DA = {{2019-06-24}},
}

@article{ ISI:000343672900006,
Author = {Osorio, Wislei R. and Freitas, Emmanuelle S. and Garcia, Amauri},
Title = {{Electrochemical Impedance Spectroscopy and Potentiodynamic Polarization
Studies Affected by the Microstructure Array of a Monotectic Al-Pb Alloy
in a NaCl Solution}},
Journal = {{CORROSION}},
Year = {{2014}},
Volume = {{70}},
Number = {{10}},
Pages = {{1031-1042}},
Month = {{OCT}},
Abstract = {{In this study, electrochemical impedance spectroscopy (EIS) plots and
potentiodynamic polarization curves of tests carried out with monotectic
Al-Pb alloy samples in a 0.5 Molar sodium chloride (NaCl) solution at 25
degrees C are evaluated. It is shown that for a microstructure
characterized by immiscible Pb droplets disseminated into an Al matrix,
the microstructural array and segregation pattern are the corrosion
driving forces. Microstructures characterized by Pb droplets of higher
diameter and more homogeneously distributed into the Al-matrix, typical
of positions close to the casting surface, have lower corrosion
resistance. This has been attributed to a higher anode/cathode area that
characterizes such microstructures and that, as a consequence, induces a
higher number of galvanic couples that are formed between the Pb
droplets and the Al matrix.}},
Publisher = {{NATL ASSOC CORROSION ENG}},
Address = {{1440 SOUTH CREEK DRIVE, HOUSTON, TX 77084-4906 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Osorio, WR (Reprint Author), Univ Estadual Campinas, Sch Appl Sci FCA,
UNICAMP Campus Limeira,1300 Pedro Zaccaria St, BR-13484350 Limeira, SP, Brazil.
Osorio, Wislei R., Univ Estadual Campinas, Sch Appl Sci FCA, BR-13484350 Limeira,
SP, Brazil.
Osorio, Wislei R.; Freitas, Emmanuelle S.; Garcia, Amauri, Univ Campinas UNICAMP,
Sch Technol, BR-13484332 Limeira, SP, Brazil.
Osorio, Wislei R.; Freitas, Emmanuelle S.; Garcia, Amauri, Univ Estadual Campinas,
UNICAMP, Dept Mfg & Mat Engrn, BR-13083970 Campinas, SP, Brazil.}},
DOI = {{10.5006/1293}},
ISSN = {{0010-9312}},
EISSN = {{1938-159X}},
Keywords = {{Al-Pb monotectic alloy; corrosion; electrochemical behavior;
microstructure; solidification}},
Keywords-Plus = {{SULFURIC-ACID-SOLUTIONS; CORROSION PERFORMANCE; INTERMETALLIC PHASES;
GRAIN-SIZE; ALUMINUM; BEHAVIOR; CHLORIDE; IRON; MICROHARDNESS;
RESISTANCE}},
Research-Areas = {{Materials Science; Metallurgy & Metallurgical Engineering}},
Web-of-Science-Categories = {{Materials Science, Multidisciplinary; Metallurgy &
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Metallurgical
  Engineering}},
Author-Email = {{wislei.osorio@fca.uni-camp.br}},
ResearcherID-Numbers = {{Garcia, Amauri/C-6916-2012
  Freitas, Emmanuelle/O-1833-2019
  Freitas, Emmanuelle/A-6624-2013
  Osorio, Wislei R*/E-2585-2013
}},
ORCID-Numbers = {{Garcia, Amauri/0000-0002-3834-3258
  Freitas, Emmanuelle/0000-0002-6526-3878
  Freitas, Emmanuelle/0000-0002-6526-3878
  Osorio, Wislei Riuper/0000-0002-2754-9584}},
Funding-Acknowledgement = {{FAEPEX-UNICAMP; CNPq (The Brazilian Research Council);
  FAPESP (Sao Paulo
  Research Foundation) {{2013/15478-3, 2013/23396-7}}}},
Funding-Text = {{The authors acknowledge the financial support provided by
  FAEPEX-UNICAMP, CNPq (The Brazilian Research Council) and FAPESP (Sao
  Paulo Research Foundation, grant nos. 2013/15478-3 and 2013/23396-7).}},
Number-of-Cited-References = {{46}},
Times-Cited = {{3}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{9}},
Journal-ISO = {{Corrosion}},
Doc-Delivery-Number = {{AR6DG}},
Unique-ID = {{ISI:000343672900006}},
DA = {{2019-06-24}},
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@article{ ISI:000340981600008,
Author = {Montagner, Cassiana C. and Vidal, Cristiane and Acayaba, Raphael D. and
  Jardim, Wilson F. and Jardim, Isabel C. S. F. and Umbuzeiro, Gisela A.},
Title = {{Trace analysis of pesticides and an assessment of their occurrence in
  surface and drinking waters from the State of Sao Paulo (Brazil)}},
Journal = {{ANALYTICAL METHODS}},
Year = {{2014}},
Volume = {{6}},
Number = {{17}},
Pages = {{6668-6677}},
Month = {{SEP 7}},
Abstract = {{An efficient method based on solid phase extraction (SPE) and
  determination by liquid chromatography-tandem mass spectrometry
  (LC-MS/MS) has been developed for simultaneous determination of 12
  pesticides at trace levels in surface and drinking waters from the State
  of Sao Paulo (Brazil), which are likely to be contaminated due to the
  widespread use of these products. Several parameters that affect SPE and
  the analysis were studied, such as conditioning and elution solvents,
  sample pH, breakthrough volume and matrix effects. Method development
  was validated by several figures of merit. Recoveries from synthetic
  samples spiked at 150 ng L-1 and 1000 ng L-1 levels with difenoconazole,
  epoxiconazole, tebuconazole, atrazine, azoxystrobin, pyraclostrobin,
  picoxystrobin, trifloxystrobin, profenofos and fipronil varied from 73
  to 99%, with intraday precision in the 5-24% range. A lower
  fortification level (10 ng L-1), close to detection limits, led to
  recoveries from 86-155%, which was considered acceptable for the
  purpose of trace analysis of environmental samples. Low detections
  limits (1-50 ng L-1) and quantification limits (2-180 ng L-1) were
  obtained. The method was applied for the determination of pesticide
  residues at the nanogram per liter level in samples of drinking water
  from 9 cities and in surface waters from 13 rivers of the State of Sao
  Paulo, Brazil. The results showed that the investigated waters are
  highly impacted with carbendazim and atrazine, which were the most
  frequently determined compounds.}},
Publisher = {{ROYAL SOC CHEMISTRY}},
Address = {{THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS,
  ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Montagner, CC (Reprint Author), Univ Estadual Campinas, Fac Technol,
  BR-13484332 Limeira, SP, Brazil.
  Montagner, Cassiana C.; Acayaba, Raphael D.; Umbuzeiro, Gisela A., Univ Estadual
  Campinas, Fac Technol, BR-13484332 Limeira, SP, Brazil.
  Vidal, Cristiane; Jardim, Wilson F.; Jardim, Isabel C. S. F., Univ Estadual
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Campinas, Inst Chem, BR-13084971 Campinas, SP, Brazil.}},
DOI = {{10.1039/c4ay00782d}},
ISSN = {{1759-9660}},
EISSN = {{1759-9679}},
Keywords-Plus = {{CHROMATOGRAPHY-MASS SPECTROMETRY; PERSONAL CARE PRODUCTS; MULTI-RESIDUE ANALYSIS; LIQUID-CHROMATOGRAPHY; PHARMACEUTICALS; SAMPLES; MS/MS; METABOLITES; SPE}},
Research-Areas = {{Chemistry; Food Science \& Technology; Spectroscopy}},
Web-of-Science-Categories = {{Chemistry, Analytical; Food Science \& Technology; Spectroscopy}},
Author-Email = {{montagner@ft.unicamp.br}},
ResearcherID-Numbers = {{Umbuzeiro, Gisela A./H-4603-2011
Acayaba, Raphael/E-1923-2015
Montagner Raimundo, Cassiana/L-1198-2014
}},
ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200
Acayaba, Raphael/0000-0002-3885-9385
Vidal, Cristiane/0000-0001-6363-9475
Montagner, Cassiana Carolina/0000-0002-6475-5969}},
Funding-Acknowledgement = {{Instituto Nacional de Ciencia e Tecnologia Analitica Avancada (INCTAA); Conselho Nacional de Desenvolvimento Cientifico e Tecnologic {{CNPq 573894/2008-6}}; Fundacao de Amparo a Pesquisa do Estado de Sao Paulo {{FAPESP 2008/57808-1, 2012/00303-0}}}},
Funding-Text = {{The authors gratefully acknowledge the Instituto Nacional de Ciencia e Tecnologia Analitica Avancada (INCTAA), Conselho Nacional de Desenvolvimento Cientifico e Tecnologic (CNPq 573894/2008-6) and Fundacao de Amparo a Pesquisa do Estado de Sao Paulo (FAPESP 2008/57808-1 and 2012/00303-0) for financial support and fellowships that made this research possible. They also thank C.H. Collins for helpful discussion and suggestions. The authors declare no conflict of interest.}},
Number-of-Cited-References = {{31}},
Times-Cited = {{31}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{108}},
Journal-ISO = {{Anal. Methods}},
Doc-Delivery-Number = {{A00EJ}},
Unique-ID = {{ISI:000340981600008}},
DA = {{2019-06-24}},
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@article{ ISI:000340044800004,
Author = {Jarvis, I. W. H. and Bergvall, C. and Morales, D. A. and Kummrow, F. and Umbuzeiro, G. A. and Westerholm, R. and Stenius, U. and Dreij, K.},
Title = {{Nanomolar levels of PAHs in extracts from urban air induce MAPK signaling in HepG2 cells}},
Journal = {{TOXICOLOGY LETTERS}},
Year = {{2014}},
Volume = {{229}},
Number = {{1}},
Pages = {{25-32}},
Month = {{AUG 17}},
Abstract = {{Polycyclic aromatic hydrocarbons (PAHs) are common environmental pollutants that occur naturally in complex mixtures. Many of the adverse health effects of PAHs including cancer are linked to the activation of intracellular stress response signaling. This study has investigated intracellular MAPK signaling in response to PAHs in extracts from urban air collected in Stockholm, Sweden and Limeira, Brazil, in comparison to BP in HepG2 cells. Nanomolar concentrations of PAHs in the extracts induced activation of MEK4 signaling with down-stream increased gene expression of several important stress response mediators. Involvement of the MEK4/JNK pathway was confirmed using siRNA and an inhibitor of JNK signaling resulting in significantly reduced MAPK signaling transactivated by the AP-1 transcription factors ATF2 and c-Jun. ATF2 was also identified as a sensitive stress responsive protein with activation observed at extract concentrations equivalent to 0.1 nM BP. We show that exposure to low levels of environmental PAH mixtures more strongly activates these signaling pathways compared to BP alone suggesting effects due to interactions. Taken together, this is the first study showing the involvement of MEK4/JNK/AP-1 pathway in
```


regulating the intracellular stress response after exposure to nanomolar levels of PAHs in environmental mixtures. (C) 2014 Elsevier Ireland Ltd. All rights reserved.}},
Publisher = {{ELSEVIER IRELAND LTD}},
Address = {{ELSEVIER HOUSE, BROOKVALE PLAZA, EAST PARK SHANNON, CO, CLARE, 00000, IRELAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Dreij, K (Reprint Author), Karolinska Inst, Inst Environm Med, Box 210, SE-17177 Stockholm, Sweden.
Jarvis, I. W. H.; Stenius, U.; Dreij, K., Karolinska Inst, Inst Environm Med, SE-17177 Stockholm, Sweden.
Bergvall, C.; Westerholm, R., Stockholm Univ, Dept Analyt Chem, SE-10691 Stockholm, Sweden.
Morales, D. A.; Umbuzeiro, G. A., Univ Estadual Campinas, UNICAMP, Fac Technol, BR-13484332 Sao Paulo, Brazil.
Kummrow, F., Fed Univ Sao Paulo UNIFESP, Inst Environm Chem \& Pharmaceut Sci, BR-09972270 Sao Paulo, Brazil.}},
DOI = {{10.1016/j.toxlet.2014.06.013}},
ISSN = {{0378-4274}},
EISSN = {{1879-3169}},
Keywords = {{PAHs; Air particulate matter; Complex mixtures; Benzo[a]pyrene; MAPK}},
Keywords-Plus = {{POLYCYCLIC AROMATIC-HYDROCARBONS; CANCER-RISK ASSESSMENT; PARTICULATE MATTER; COMPLEX-MIXTURES; C-JUN; BENZO(A)PYRENE-INDUCED APOPTOSIS; TRANSDUCTION PATHWAYS; ORGANIC EXTRACTS; MEDIATED PATHWAY; EPITHELIAL-CELLS}},
Research-Areas = {{Toxicology}},
Web-of-Science-Categories = {{Toxicology}},
Author-Email = {{Kristian.Dreij@ki.se}},
ResearcherID-Numbers = {{Morales, Daniel/D-9553-2015
Umbuzeiro, Gisela A./H-4603-2011
Kummrow, Fabio/A-6168-2013
}},
ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200
Kummrow, Fabio/0000-0003-2977-0108
Dreij, Kristian/0000-0001-8445-4293}},
Funding-Acknowledgement = {{Swedish Research Council Formas, Cancer- och Allergifonden, Stockholm
University; CAPES - Coodernacao de Aperfeicoamento de Pessoal de Nivel Superior; EU/FP7 Marie Curie IRG}},
Funding-Text = {{This work was supported by the Swedish Research Council Formas, Cancer- och Allergifonden, Stockholm University, CAPES - Coodernacao de Aperfeicoamento de Pessoal de Nivel Superior (to D.A.M) and EU/FP7 Marie Curie IRG (to K.D). The authors declare no competing financial interests.}},
Number-of-Cited-References = {{44}},
Times-Cited = {{8}},
Usage-Count-Last-180-days = {{1}},
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Journal-ISO = {{Toxicol. Lett.}},
Doc-Delivery-Number = {{AM7KE}},
Unique-ID = {{ISI:000340044800004}},
DA = {{2019-06-24}},
}

@article{ ISI:000340081400004,
Author = {Montagner, C. C. and Umbuzeiro, G. A. and Pasquini, C. and Jardim, W. F.},
Title = {{Caffeine as an indicator of estrogenic activity in source water}},
Journal = {{ENVIRONMENTAL SCIENCE-PROCESSES \& IMPACTS}},
Year = {{2014}},
Volume = {{16}},
Number = {{8}},
Pages = {{1866-1869}},
Month = {{AUG}},
Abstract = {{Caffeine has already been used as an indicator of anthropogenic impacts, especially the ones related to the disposal of sewage in water bodies. In this work, the presence of caffeine has been correlated with the estrogenic activity of water samples measured using the BLYES assay. After testing 96 surface water samples, it was concluded that caffeine can be used to prioritize samples to be tested for estrogenic activity in water quality programs evaluating emerging contaminants with

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    endocrine disruptor activity.}},
  Publisher = {{ROYAL SOC CHEMISTRY}},
  Address = {{THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS,
    ENGLAND}},
  Type = {{Article}},
  Language = {{English}},
  Affiliation = {{Montagner, CC (Reprint Author), Univ Estadual Campinas, Fac Technol,
    BR-13484332 Limeira, SP, Brazil.
    Montagner, C. C.; Umbuzeiro, G. A., Univ Estadual Campinas, Fac Technol,
    BR-13484332 Limeira, SP, Brazil.
    Pasquini, C.; Jardim, W. F., Univ Estadual Campinas, Inst Chem, BR-13084971
    Campinas, SP, Brazil.}},
  DOI = {{10.1039/c4em00058g}},
  ISSN = {{2050-7887}},
  EISSN = {{2050-7895}},
  Keywords-Plus = {{HUMAN FECAL CONTAMINATION; SOLID-PHASE EXTRACTION; DRINKING-WATER;
    WASTE-WATER; PHARMACEUTICAL COMPOUNDS; LIQUID-CHROMATOGRAPHY; ENDOCRINE
    DISRUPTORS; ARRAY DETECTION; TAP WATERS; SURFACE}},
  Research-Areas = {{Chemistry; Environmental Sciences \& Ecology}},
  Web-of-Science-Categories = {{Chemistry, Analytical; Environmental Sciences}},
  Author-Email = {{montagner@ft.unicamp.br}},
  ResearcherID-Numbers = {{Montagner Raimundo, Cassiana/L-1198-2014
    Umbuzeiro, Gisela A./H-4603-2011
  }},
  ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200
    Montagner, Cassiana Carolina/0000-0002-6475-5969}},
  Funding-Acknowledgement = {{INCTAA {[2008/57808-1, 573894/2008-6]; FAPESP {[2012/00303-0]}},
  Funding-Text = {{This is a contribution of the INCTAA (FAPESP, proc. 2008/57808-1 and
    CNPq proc. 573894/2008-6). C.C.M. is grateful to FAPESP for the PhD
    fellowship (proc. 2012/00303-0).}},
  Number-of-Cited-References = {{29}},
  Times-Cited = {{12}},
  Usage-Count-Last-180-days = {{3}},
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  Journal-ISO = {{Environ. Sci.-Process Impacts}},
  Doc-Delivery-Number = {{AM7XG}},
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  DA = {{2019-06-24}},
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@article{ ISI:000339828900084,
  Author = {Ruiz Arriola, E. and Szpigel, S. and Timoteo, V. S.},
  Title = {{Implicit Versus Explicit Renormalization of the NN Force: An S-Wave Toy
    Model}},
  Journal = {{FEW-BODY SYSTEMS}},
  Year = {{2014}},
  Volume = {{55}},
  Number = {{8-10}},
  Pages = {{989-992}},
  Month = {{AUG}},
  Note = {{The 22nd European Conference on Few-Body Problems in Physics,
    Jagiellonian Univ, Cracow, POLAND, SEP 09-13, 2013}},
  Abstract = {{We use an S-wave toy model for the two-nucleon system to show that the
    implicit renormalization of a contact theory matches the explicit
    renormalization through a flow equation which integrates out the high
    momentum components. By fitting the low-momentum interaction with a new
    contact theory, we show that the running of the contact strengths in
    both original and fitted contact theories match over a wide cutoff
    range.}},
  Publisher = {{SPRINGER WIEN}},
  Address = {{SACHSENPLATZ 4-6, PO BOX 89, A-1201 WIEN, AUSTRIA}},
  Type = {{Article; Proceedings Paper}},
  Language = {{English}},
  Affiliation = {{Timoteo, VS (Reprint Author), Univ Estadual Campinas UNICAMP, Grp Opt
    \& Modelagem Numer GOMNI, FT, BR-13484332 Limeira, SP, Brazil.
    Ruiz Arriola, E., Univ Granada, Dept Fis Atom Mol \& Nucl, E-18071 Granada, Spain.
    Ruiz Arriola, E., Univ Granada, Inst Carlos Fis Teor \& Computac 1, E-18071
    Granada, Spain.
    Szpigel, S., Univ Presbiteriana Mackenzie, Fac Comp \& Informat, BR-01302907 Sao
    Paulo, Brazil.
    Timoteo, V. S., Univ Estadual Campinas UNICAMP, Grp Opt \& Modelagem Numer GOMNI,
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FT, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1007/s00601-014-0811-9}},
ISSN = {{0177-7963}},
EISSN = {{1432-5411}},
Keywords-Plus = {{NUCLEAR-FORCES}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Multidisciplinary}},
Author-Email = {{earriola@ugr.es
szpigel@mackenzie.com.br
varese@ft.unicamp.br}},
ResearcherID-Numbers = {{Ruiz Arriola, Enrique/A-9388-2015
Szpigel, Sergio/F-5349-2012}},
ORCID-Numbers = {{Ruiz Arriola, Enrique/0000-0002-9570-2552
Szpigel, Sergio/0000-0003-2529-2225}},
Funding-Acknowledgement = {{Spanish DGI {{}}FIS2011-24149}}; Junta de Andalucia {{}}
FQM225}}; FAPESP
{{}}2011/18211-2}}; FAEPEX; CNPq}},
Funding-Text = {{E.R.A. would like to thank the Spanish DGI (Grant FIS2011-24149) and
Junta de Andalucia (Grant FQM225). S. S. is partially supported by
FAPESP and V. S. T. thanks FAEPEX, FAPESP and CNPq for financial
support. Computational power provided by FAPESP Grant 2011/18211-2.}},
Number-of-Cited-References = {{8}},
Times-Cited = {{5}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{2}},
Journal-ISO = {{Few-Body Syst.}},
Doc-Delivery-Number = {{AM4MO}},
Unique-ID = {{ISI:000339828900084}},
DA = {{2019-06-24}},
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@article{ ISI:000339828900100,
Author = {Batista, E. F. and Szpigel, S. and Timoteo, V. S.},
Title = {{Renormalizing N3LO Nucleon-Nucleon Interactions with Multiple
Subtractions and Infinite Cutoff: The (3) F (4) -(3) H (4) and the (3) G
(5)- (3) I (5) Coupled Channels}},
Journal = {{FEW-BODY SYSTEMS}},
Year = {{2014}},
Volume = {{55}},
Number = {{8-10}},
Pages = {{1049-1050}},
Month = {{AUG}},
Note = {{The 22nd European Conference on Few-Body Problems in Physics,
Jagiellonian Univ, Cracow, POLAND, SEP 09-13, 2013}},
Abstract = {{We apply five subtractions to the scattering equation to renormalize the
nucleon-nucleon interaction in coupled channels. We take as an example
the coupled channels with total angular momentum J = (4, 5) for the
interactions N3LO-EM and N3LO-EGM. The waves with L = J - 1 and the
mixing angles are rather independent of the renormalization scale while
the waves with L = J + 1 show a slower convergence as the
renormalization scale increases, but become scale invariant at mu
similar to 1 fm(-1).}},
Publisher = {{SPRINGER WIEN}},
Address = {{SACHSENPLATZ 4-6, PO BOX 89, A-1201 WIEN, AUSTRIA}},
Type = {{Article; Proceedings Paper}},
Language = {{English}},
Affiliation = {{Timoteo, VS (Reprint Author), Univ Estadual Campinas UNICAMP, Grp Opt
& Modelagem Numer GOMNI, FT, BR-13484332 Limeira, SP, Brazil.
Batista, E. F., Univ Estadual Sudoeste Bahia, Dept Ciencias Exatas \& Nat,
BR-45700000 Itapetinga, BA, Brazil.
Szpigel, S., Univ Presbiteriana Mackenzie, Fac Comp \& Informat, BR-01302907 Sao
Paulo, Brazil.
Timoteo, V. S., Univ Estadual Campinas UNICAMP, Grp Opt \& Modelagem Numer GOMNI,
FT, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1007/s00601-013-0780-4}},
ISSN = {{0177-7963}},
EISSN = {{1432-5411}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Multidisciplinary}},
Author-Email = {{efbatista@uesb.edu.br
szpigel@mackenzie.com.br
varese@ft.unicamp.br}},
}

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ResearcherID-Numbers = {{Szpigel, Sergio/F-5349-2012}},
ORCID-Numbers = {{Szpigel, Sergio/0000-0003-2529-2225}},
Funding-Acknowledgement = {{FAEPEX; FAPESP; CNPq}},
Funding-Text = {{The authors would like to thank FAEPEX, FAPESP and CNPq for financial
  support.}},
Number-of-Cited-References = {{5}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{1}},
Journal-ISO = {{Few-Body Syst.}},
Doc-Delivery-Number = {{AM4MO}},
Unique-ID = {{ISI:000339828900100}},
DA = {{2019-06-24}},
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@article{ ISI:000339692700039,
  Author = {de Luna, Luis A. V. and da Silva, Thiago H. G. and Pupo Nogueira, Raquel
    F. and Kummrow, Fabio and Umbuzeiro, Gisela A.},
  Title = {{Aquatic toxicity of dyes before and after photo-Fenton treatment}},
  Journal = {{JOURNAL OF HAZARDOUS MATERIALS}},
  Year = {{2014}},
  Volume = {{276}},
  Pages = {{332-338}},
  Month = {{JUL 15}},
  Abstract = {{This study evaluated the ecotoxicity of five dyes to freshwater
    organisms before and during their photo-Fenton degradation. EC50 (48 h)
    of the five tested dyes ranged from of 6.9 to >1000 mg L-1 for Daphnia
    similis. In the chronic tests IC50 (72 h) varied from 65 to >100 mg L-1
    for Pseudokirchneriella subcapitata and IC50 (8 days) from 0.5 to 410 mg
    L-1 for Ceriodaphnia dubia. Toxicity tests revealed that although the
    applied treatment was effective for decolorization of the dye, the
    partial mineralization may be responsible for the presence of
    degradation products which can be either more toxic than the original
    dye, as is the case of Vat Green 3 and Reactive Black 5, lead to
    initially toxic products which may be further degraded to non toxic
    products (acid Orange 7 and Food Red 17), or generate non toxic products
    as in the case of Food Yellow 3. The results highlighted the importance
    of assessing both acute and chronic toxicity tests of treated sample
    before effluent discharge. (C) 2014 Elsevier B.V. All rights reserved.}},
  Publisher = {{ELSEVIER SCIENCE BV}},
  Address = {{PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS}},
  Type = {{Article}},
  Language = {{English}},
  Affiliation = {{Nogueira, RFP (Reprint Author), Univ Estadual Paulista, UNESP, Dept
    Quim Anal, Inst Quim Araraquara, BR-14800900 Sao Paulo, SP, Brazil.
    de Luna, Luis A. V.; Kummrow, Fabio; Umbuzeiro, Gisela A., Univ Estadual Campinas,
    UNICAMP, Fac Technol, BR-13484332 Limeira, SP, Brazil.
    da Silva, Thiago H. G.; Pupo Nogueira, Raquel F., Univ Estadual Paulista, UNESP,
    Dept Quim Anal, Inst Quim Araraquara, BR-14800900 Sao Paulo, SP, Brazil.
    Kummrow, Fabio, Univ Fed Sao Paulo, Inst Ciencias Ambientais Quim \& Farmaceut,
    BR-09972270 Diadema, SP, Brazil.}},
  DOI = {{10.1016/j.jhazmat.2014.05.047}},
  ISSN = {{0304-3894}},
  EISSN = {{1873-3336}},
  Keywords = {{Reactive Black 5; Vat Green 3; Acid Orange 7; Food Yellow 3; Food Red
    17}},
  Keywords-Plus = {{ADVANCED OXIDATION; AZO DYES; DEGRADATION; PRODUCTS; WATER; ACID;
    2,4-DICHLOROPHENOL; BIODEGRADABILITY; PHOTODEGRADATION; SULFAMETHOXAZOLE}},
  Research-Areas = {{Engineering; Environmental Sciences \& Ecology}},
  Web-of-Science-Categories = {{Engineering, Environmental; Environmental Sciences}},
  Author-Email = {{luisvisani@gmail.com
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    fkummrow@unifesp.br
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  ResearcherID-Numbers = {{Umbuzeiro, Gisela A./H-4603-2011
    Kummrow, Fabio/A-6168-2013
    Nogueira, Raquel/B-3732-2013
    Gomes da Silva, Thiago Henrique/D-4782-2015
  }},
  ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200
    Kummrow, Fabio/0000-0003-2977-0108
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Nogueira, Raquel/0000-0003-1237-4571
Gomes da Silva, Thiago Henrique/0000-0002-2141-9754
Visani de Luna, Luis Augusto/0000-0003-0375-1064}},
Funding-Acknowledgement = {{FAPESP {[[]2010/12991-3, 2010/13874-0, 2008/10449-7]}},
Funding-Text = {{The authors thank FAPESP (2010/12991-3, 2010/13874-0 and 2008/10449-7)
for financial support and Maria Valnice Boldrin Zanoni for the
suggestions.}},
Number-of-Cited-References = {{40}},
Times-Cited = {{60}},
Usage-Count-Last-180-days = {{5}},
Usage-Count-Since-2013 = {{96}},
Journal-ISO = {{J. Hazard. Mater.}},
Doc-Delivery-Number = {{AM2PG}},
Unique-ID = {{ISI:000339692700039}},
DA = {{2019-06-24}},
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Author = {dos Santos, Tuane Cristina and Zocolo, Guilherme Juliao and Morales,
Daniel Alexandre and Umbuzeiro, Gisela de Aragao and Boldrin Zanoni,
Maria Valnice},
Title = {{Assessment of the breakdown products of solar/UV induced photolytic
degradation of food dye tartrazine}},
Journal = {{FOOD AND CHEMICAL TOXICOLOGY}},
Year = {{2014}},
Volume = {{68}},
Pages = {{307-315}},
Month = {{JUN}},
Abstract = {{The food dye tartrazine (CI 19140) was exposed to UV irradiation from an
artificial source, a mercury vapor lamp, and a natural one, sunlight. It
was observed that conditions such as energy dose, irradiation time, pH
and initial dye concentration affected its discoloration. There was
100\% of color removal, after 30 min of irradiation, when a dye solution
1 x 10(-5) mol L-1 was submitted to an energy dose of 37.8 J cm(-2).
Liquid Chromatography coupled to Diode Array Detection and Mass
Spectrometry confirmed the cleavage of the chromophore group and the
formation of five by-products at low concentration. Although by-products
were formed, the Salmonella/microsome mutagenicity assay performed for
both, the dye solution at a dose of 5.34 mg/plate and the solutions
obtained after exposure to UV irradiation, did not present mutagenic
activity for TA98 and TA100 with and without S9. (C) 2014 Elsevier Ltd.
All rights reserved.}},
Publisher = {{PERGAMON-ELSEVIER SCIENCE LTD}},
Address = {{THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{(dos Santos, TC (Reprint Author), UNESP, Inst Chem, Dept Analyt Chem,
Rua Francisco Degni 55, BR-14800900 Bairro Quitandinha, Araraquara, Brazil.
dos Santos, Tuane Cristina; Zocolo, Guilherme Juliao; Boldrin Zanoni, Maria
Valnice, UNESP, Inst Chem, Dept Analyt Chem, BR-14800900 Bairro Quitandinha,
Araraquara, Brazil.
Morales, Daniel Alexandre; Umbuzeiro, Gisela de Aragao, Univ Estadual Campinas,
Inst Technol, BR-13484332 Limeira, Brazil.)}},
DOI = {{10.1016/j.fct.2014.03.025}},
ISSN = {{0278-6915}},
EISSN = {{1873-6351}},
Keywords = {{Dye photolysis; Tartrazine; Breakdown products; Mutagenicity; LC-MS/MS}},
Keywords-Plus = {{IONIZATION MASS-SPECTRA; AZO DYES; FENTON PROCESS; SPECTROMETRY;
MUTAGENICITY; ELECTROSPRAY; ADDITIVES; ASSAY}},
Research-Areas = {{Food Science \& Technology; Toxicology}},
Web-of-Science-Categories = {{Food Science \& Technology; Toxicology}},
Author-Email = {{snts.tuane@gmail.com}},
ResearcherID-Numbers = {{Umbuzeiro, Gisela A./H-4603-2011
Zocolo, Guilherme/D-2621-2013
Morales, Daniel/D-9553-2015
boldrin zanoni, maria valnice/D-4251-2013}},
ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200
Zocolo, Guilherme/0000-0001-8835-0184
boldrin zanoni, maria valnice/0000-0002-2296-1393}},
Number-of-Cited-References = {{31}},
Times-Cited = {{19}},
Usage-Count-Last-180-days = {{0}},
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Usage-Count-Since-2013 = {{26}},  
Journal-ISO = {{Food Chem. Toxicol.}},  
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Unique-ID = {{ISI:000337653000033}},  
DA = {{2019-06-24}},  
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  Author = {Coluci, Vitor R. and Martinez, Diego Stefani T. and Honorio, Jaqueline  
    G. and de Faria, Andreia F. and Morales, Daniel A. and Skaf, Munir S.  
    and Alves, Oswaldo L. and Umbuzeiro, Gisela A.},  
  Title = {{Noncovalent Interaction with Graphene Oxide: The Crucial Role of  
    Oxidative Debris}},  
  Journal = {{JOURNAL OF PHYSICAL CHEMISTRY C}},  
  Year = {{2014}},  
  Volume = {{118}},  
  Number = {{4}},  
  Pages = {{2187-2193}},  
  Month = {{JAN 30}},  
  Abstract = {{Graphene oxide (GO) is a very promising material because it is easy to  
    process, water-soluble, and chemically versatile due to the presence of  
    oxygenated groups on its surface. GO has been used in different areas  
    such as electronics, biosensing, and environmental remediation. To  
    design efficient materials, especially for biosensing and for  
    remediating pollutants, the knowledge of surface noncovalent interaction  
    and functionalization is crucial. Recently, it has been suggested  
    revisions on the structural models of GO because the presence of highly  
    oxidized polyaromatic carboxylated fragments (oxidative debris) on the  
    GO surfaces. These debris are produced during acid treatments commonly  
    employed in GO synthesis and purification. Here we applied chemical  
    analysis, bioassays, and atomistic simulations to study the influence of  
    oxidative debris on the noncovalent interaction of GO sheets with an  
    important organic pollutant (e.g., 1-nitropyrene). GO samples without  
    oxidative debris were found to be 75% more effective to adsorb  
    1-nitropyrene than samples with debris. Our results suggest that small  
    (similar to 1 nm) oxidative debris are responsible for preventing  
    adsorption sites on GO surfaces from being reached by potentially  
    adsorbate molecules.}},  
  Publisher = {{AMER CHEMICAL SOC}},  
  Address = {{1155 16TH ST, NW, WASHINGTON, DC 20036 USA}},  
  Type = {{Article}},  
  Language = {{English}},  
  Affiliation = {{Coluci, VR (Reprint Author), Univ Campinas UNICAMP, Sch Technol,  
    BR-13484332 Limeira, SP, Brazil.  
    Coluci, Vitor R.; Honorio, Jaqueline G.; Morales, Daniel A.; Umbuzeiro, Gisela A.,  
    Univ Campinas UNICAMP, Sch Technol, BR-13484332 Limeira, SP, Brazil.  
    Martinez, Diego Stefani T.; de Faria, Andreia F.; Alves, Oswaldo L., Univ Campinas  
    UNICAMP, Inst Chem, Solid State Chem Lab, BR-13081970 Campinas, SP, Brazil.  
    Skaf, Munir S., Univ Campinas UNICAMP, Inst Chem, BR-13084862 Campinas, SP,  
    Brazil.}},  
  DOI = {{10.1021/jp409501g}},  
  ISSN = {{1932-7447}},  
  Keywords-Plus = {{REACTIVE FORCE-FIELD; MOLECULAR-DYNAMICS; REMOVAL; REAXFF; FILMS;  
    MUTAGENICITY; NANOSHEETS; BACTERIA; SHEETS; WATER}},  
  Research-Areas = {{Chemistry; Science & Technology - Other Topics; Materials  
    Science}},  
  Web-of-Science-Categories = {{Chemistry, Physical; Nanoscience & Nanotechnology;  
    Materials Science,  
    Multidisciplinary}},  
  Author-Email = {{vitor@ft.unicamp.br}},  
  ResearcherID-Numbers = {{de Faria, Andreia/A-1798-2014  
    Skaf, Munir/B-1614-2013  
    Martinez, Diego/K-8310-2012  
    Umbuzeiro, Gisela A./H-4603-2011  
    UNICAMP, CCES -/J-7787-2015  
    Morales, Daniel/D-9553-2015  
    Alves, Oswaldo/J-7124-2012  
    Coluci, Vitor/E-1079-2012}},  
  ORCID-Numbers = {{de Faria, Andreia/0000-0001-7473-040X  
    Skaf, Munir/0000-0001-7485-1228  
    Martinez, Diego/0000-0002-0086-3055  
    Umbuzeiro, Gisela A./0000-0002-8623-5200
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Alves, Oswaldo/0000-0002-1518-2092
Coluci, Vitor/0000-0001-5179-6182}},
Funding-Acknowledgement = {{CIGENANOTOX; INOMAT; CNPq; CAPES; FAPESP {{}}2010/50646-6,
2013/13640-8}}},
Funding-Text = {{This work was supported by CIGENANOTOX, INOMAT, CNPq, CAPES, and
FAPESP
(grants 2010/50646-6 and 2013/13640-8). The authors thank Dr. Amauri J.
Paula for TEM analyses.}},
Number-of-Cited-References = {{43}},
Times-Cited = {{36}},
Usage-Count-Last-180-days = {{2}},
Usage-Count-Since-2013 = {{120}},
Journal-ISO = {{J. Phys. Chem. C}},
Doc-Delivery-Number = {{302NC}},
Unique-ID = {{ISI:000330610200051}},
DA = {{2019-06-24}},
}

@inproceedings{ ISI:000359818003043,
Author = {Conti, Jose E. C. and Faria, Fabio A. and Almeida, Jurandy and Alberton,
Bruna and Morellato, Leonor P. C. and Camolesi, Jr., Luiz and Torres,
Ricardo da S.},
Book-Group-Author = {{IEEE}},
Title = {{Evaluation of Time Series Distance Functions in the Task of Detecting
Remote Phenology Patterns}},
Booktitle = {{2014 22ND INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION (ICPR)}},
Series = {{International Conference on Pattern Recognition}},
Year = {{2014}},
Pages = {{3126-3131}},
Note = {{22nd International Conference on Pattern Recognition (ICPR), Swedish Soc
Automated Image Anal, Stockholm, SWEDEN, AUG 24-28, 2014}},
Organization = {{IEEE Comp Soc; IAPR; Linkopings Univ; Lunds Univ; Uppsala Univ; e Sci
Collaborat; Swedish Soc Automated Image Anal; Stockhoms Stad; Swedish e
Sci Res Ctr; SICK; Autoliv; IBM Res; Int Journal Automat \& Comp}},
Abstract = {{Phenology is the study of periodic natural phenomena and their
relationship to climate. Usually, phenology studies consider the
identification of patterns on temporal data. In those studies, several
phenological change patterns are often encoded in time series for
analysis and knowledge extraction. In this paper, we evaluate the
effectiveness of several time series similarity functions in the task of
classifying time series related to phenological phenomena characterized
by near-surface vegetation indices extracted from images. In addition,
we performed a correlation analysis to identify potential candidates for
combination.}},
Publisher = {{IEEE COMPUTER SOC}},
Address = {{10662 LOS VAQUEROS CIRCLE, PO BOX 3014, LOS ALAMITOS, CA 90720-1264 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Conti, JEC (Reprint Author), Univ Campinas UNICAMP, Fac Technol,
BR-13484332 Limeira, SP, Brazil.
Conti, Jose E. C.; Camolesi, Luiz, Jr., Univ Campinas UNICAMP, Fac Technol,
BR-13484332 Limeira, SP, Brazil.
Faria, Fabio A.; Almeida, Jurandy; Torres, Ricardo da S., Univ Campinas UNICAMP,
Inst Comp, RECOD Lab, BR-13083852 Campinas, SP, Brazil.
Alberton, Bruna; Morellato, Leonor P. C., Sao Paulo State Univ UNESP, Dept Bot,
Phenol Lab, BR-13506900 Rio Claro, SP, Brazil.
Almeida, Jurandy, Fed Univ Sao Paulo UNIFESP, Inst Sci \& Technol, BR-12231280 Sao
Jose Dos Campos, SP, Brazil.}},
DOI = {{10.1109/ICPR.2014.539}},
ISSN = {{1051-4651}},
ISBN = {{978-1-4799-5208-3}},
Keywords-Plus = {{TRACK; GREEN}},
Research-Areas = {{Computer Science; Engineering}},
Web-of-Science-Categories = {{Computer Science, Artificial Intelligence; Computer
Science, Theory \&
Methods; Engineering, Electrical \& Electronic}},
Author-Email = {{conti30@gmail.com
ffaria@ic.unicamp.br
jurandy.almeida@unifesp.br
bru.alberton@gmail.com
pmorella@rc.unesp.br
camolesi@ft.unicamp.br}}
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    rtorres@ic.unicamp.br}},
ResearcherID-Numbers = {{Morellato, Patricia/B-6026-2013
    Almeida, Jurandy/I-2177-2012
}},
ORCID-Numbers = {{Morellato, Patricia/0000-0001-5265-8988
    Almeida, Jurandy/0000-0002-4998-6996
    Alberton, Bruna/0000-0003-4835-8389
    Camolesi Junior, Luiz/0000-0001-5295-3514}},
Number-of-Cited-References = {{21}},
Times-Cited = {{5}},
Usage-Count-Last-180-days = {{0}},
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Doc-Delivery-Number = {{BD3KX}},
Unique-ID = {{ISI:000359818003043}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000355255900038,
Author = {Pinto, Tiago W. and de Carvalho, Marco A. G. and Pedronette, Daniel C.
    G. and Martins, Paulo S.},
Book-Group-Author = {{IEEE}},
Title = {{Image Segmentation through Combined Methods: Watershed Transform,
    Unsupervised Distance Learning and Normalized Cut}},
Booktitle = {{2014 IEEE SOUTHWEST SYMPOSIUM ON IMAGE ANALYSIS AND INTERPRETATION
    (SSIAI 2014)}},
Series = {{IEEE Southwest Symposium on Image Analysis and Interpretation}},
Year = {{2014}},
Pages = {{153-156}},
Note = {{IEEE Southwest Symposium on Image Analysis and Interpretation (SSIAI),
    San Diego, CA, APR 06-08, 2014}},
Organization = {{Inst Elect \& Elect Engineers; IEEE Comp Soc}},
Abstract = {{Research on image processing has shown that combining segmentation
    methods may lead to a solid approach to extract semantic information
    from different sort of images. Within this context, the Normalized Cut
    (NCut) is usually used as a final partitioning tool for graphs modeled
    in some chosen method. This work explores the Watershed Transform as a
    modeling tool, using different criteria of the hierarchical Watershed to
    convert an image into an adjacency graph. The Watershed is combined with
    an unsupervised distance learning step that redistributes the graph
    weights and redefines the Similarity matrix, before the final
    segmentation step using NCut. Adopting the Berkeley Segmentation Data
    Set and Benchmark as a background, our goal is to compare the results
    obtained for this method with previous work to validate its performance.}},
Publisher = {{IEEE}},
Address = {{345 E 47TH ST, NEW YORK, NY 10017 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Pinto, TW (Reprint Author), Univ Estadual Campinas, Sch Technol,
    BR-13484332 Sao Paulo, Brazil.
    Pinto, Tiago W.; de Carvalho, Marco A. G.; Martins, Paulo S., Univ Estadual
    Campinas, Sch Technol, BR-13484332 Sao Paulo, Brazil.
    Pedronette, Daniel C. G., Univ Estadual Paulista, Dept Stat Appl Math \& Comp,
    BR-13506900 Sao Paulo, Brazil.}},
ISSN = {{1550-5782}},
ISBN = {{978-1-4799-4053-0}},
Keywords = {{image segmentation; watershed transform; graph partitioning; normalized
    cut; unsupervised distance learning}},
Research-Areas = {{Computer Science; Imaging Science \& Photographic Technology}},
Web-of-Science-Categories = {{Computer Science, Artificial Intelligence; Imaging
    Science \&
    Photographic Technology}},
Author-Email = {{t025323@dac.unicamp.br
    magic@ft.unicamp.br
    daniel@rc.unesp.br
    paulo@ft.unicamp.br}},
ORCID-Numbers = {{Pedronette, Daniel/0000-0002-2867-4838}},
Number-of-Cited-References = {{10}},
Times-Cited = {{2}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{5}},
Doc-Delivery-Number = {{BC7WP}},
Unique-ID = {{ISI:000355255900038}},
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DA = {{2019-06-24}},
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@inproceedings{ ISI:000346757600134,
Author = {Pereira, Matheus F. and Pozza, Simone A. and Timoteo, Varese S.},
Editor = {{Varbanov, PS and Klemes, JJ and Liew, PY and Yong, JY and Stehlik, P}},
Title = {{Numerical Methods for the Evaluation of Pollutant Dispersion Based on
Advection-Diffusion Equation}},
Booktitle = {{PRES 2014, 17TH CONFERENCE ON PROCESS INTEGRATION, MODELLING AND
OPTIMISATION FOR ENERGY SAVING AND POLLUTION REDUCTION, PTS 1-3}},
Series = {{Chemical Engineering Transactions}},
Year = {{2014}},
Volume = {{39}},
Pages = {{799-804}},
Note = {{17th Conference on Process Integration, Modelling and Optimisation for
Energy Saving and Pollution Reduction (PRES 2014), Prague, CZECH
REPUBLIC, AUG 23-27, 2014}},
Organization = {{Italian Assoc Chem Engn; Czech Soc Chem Engn}},
Abstract = {{Several pollutant dispersion models have been developed to provide
subsidies for environmental impact assessment and monitoring of natural
resources such as air, soil and water. In this work, we solve the
one-dimensional advection-diffusion equation using an adaptive-step
algorithm for the analysis of pollutant dispersion and compare it with
other recent work, obtaining very similar results for two solute
dispersion scenarios, one along steady flow through inhomogeneous medium
and another along uniform flow through homogeneous medium. Our method is
characterized by low computational time and simplicity of the code, and
may contribute as a numerical background for pollutant source
management.}},
Publisher = {{AIDIC SERVIZI SRL}},
Address = {{VIA GIUSEPPE COLOMBO 81/A, MILANO, MI 20133, ITALY}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Pereira, MF (Reprint Author), Univ Estadual Campinas UNICAMP, Grp Opt
& Modelagem Numer, Fac Tecnol, Rua Paschoal Marmo 1888, BR-13484332 Limeira, SP,
Brazil.
Pereira, Matheus F.; Pozza, Simone A.; Timoteo, Varese S., Univ Estadual Campinas
UNICAMP, Grp Opt & Modelagem Numer, Fac Tecnol, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.3303/CET1439134}},
ISSN = {{1974-9791}},
ISBN = {{978-88-95608-30-3}},
Research-Areas = {{Engineering}},
Web-of-Science-Categories = {{Engineering, Environmental; Engineering, Chemical}},
Author-Email = {{m045339@dac.unicamp.br}},
ORCID-Numbers = {{Pozza, Simone/0000-0001-7423-0982}},
Number-of-Cited-References = {{13}},
Times-Cited = {{0}},
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DA = {{2019-06-24}},
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Author = {Batista, E. F. and Szpigiel, S. and Timoteo, V. S.},
Editor = {{Tabacniks, MH and DeOliveira, JRB and Higa, R and Shorto, JMB}},
Title = {{Peripheral NN scattering from subtractive renormalization of chiral
interactions}},
Booktitle = {{XXXVI BRAZILIAN WORKSHOP ON NUCLEAR PHYSICS}},
Series = {{AIP Conference Proceedings}},
Year = {{2014}},
Volume = {{1625}},
Pages = {{205-208}},
Note = {{36th Brazilian Workshop on Nuclear Physics, Sao Sebastiao, BRAZIL, SEP
01-05, 2013}},
Organization = {{Brazilian Phys Soc; Fundacao Amparo Pesquisa Sao Paulo; Fundacao
Amparo
Pesquisa Rio de Janeiro; Conselho Nacl Desenvolvimento Cientifico &
Tecnologico; Coordenacao Aperfeicoamento Pessoal Nivel Super; Int Atom
Energy Agcy; SINC Brasil}},
Abstract = {{We apply five subtractions in the Lippman-Schwinger (LS) equation in
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order to perform a non-perturbative renormalization of chiral N3LO nucleon-nucleon interactions. Here we compute the phase shifts for the uncoupled peripheral waves at renormalization scales between 0.1 fm(-1) and 1 fm(-1). In this range, the results are scale invariant and provide an overall good agreement with the Nijmegen partial wave analysis up to at least E-lab = 150 MeV, with a cutoff at Lambda = 30 fm(-1).}},

Publisher = {{AMER INST PHYSICS}},
Address = {{2 HUNTINGTON QUADRANGLE, STE 1N01, MELVILLE, NY 11747-4501 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Batista, EF (Reprint Author), Univ Estadual Sudoeste Bahia, Dept Ciencias Exatas \& Nat, BR-45700000 Itapetinga, BA, Brazil.
Batista, E. F., Univ Estadual Sudoeste Bahia, Dept Ciencias Exatas \& Nat, BR-45700000 Itapetinga, BA, Brazil.
Szpigiel, S., Escola Engenharia Univ Presbiteriana Mackenzie, Cent Radio Astron \& Astrofis Mackenzie, BR-01302907 Sao Paulo, Brazil.
Timoteo, V. S., Univ Estadual Campinas UNICAMP Limeira SP, Grupo Optica Modelagem Numerica GOMNI, Fac Tecnol FT, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.1063/1.4901795}},
ISSN = {{0094-243X}},
ISBN = {{978-0-7354-1262-0}},
Keywords = {{Effective Field Theories; Nucleon-Nucleon Interactions; Renormalization}},
Keywords-Plus = {{NUCLEAR-FORCES; LAGRANGIANS; CONVERGENCE; EXPANSION; PHASES}},
Research-Areas = {{Physics}},
Web-of-Science-Categories = {{Physics, Applied; Physics, Nuclear}},
ResearcherID-Numbers = {{Szpigiel, Sergio/F-5349-2012}},
ORCID-Numbers = {{Szpigiel, Sergio/0000-0003-2529-2225}},
Funding-Acknowledgement = {{FAEPEX; FAPESP [{}2011/18211-2]; CNPq}},
Funding-Text = {{The authors would like to thank FAEPEX, FAPESP and CNPq for financial support. Computational resources provided by FAPESP grant 2011/18211-2.}},
Number-of-Cited-References = {{19}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{0}},
Doc-Delivery-Number = {{BB7RH}},
Unique-ID = {{ISI:000345925600040}},
DA = {{2019-06-24}},
}

@article{ ISI:000340447700019,

Author = {de Oliveira, Ricardo A. G. and Zanoni, Thalita B. and Bessegato, Guilherme G. and Oliveira, Danielle P. and Umbuzeiro, Gisela A. and Zanoni, Maria Valnice B.},

Title = {{THE CHEMISTRY AND TOXICITY OF HAIR DYES.}},

Journal = {{QUIMICA NOVA}},

Year = {{2014}},

Volume = {{37}},

Number = {{6}},

Pages = {{1037-1046}},

Abstract = {{The market for hair dye involves a growing range of products, which requires greater understanding of hair properties, mechanisms of action and color development. In this work, we present a critical analysis of the classification, physical and chemical characteristics, chemical analysis and toxicological/mutagenic potential of dyes used in the hair dyeing process. A compilation of some studies was carried out, focusing on the available knowledge about these dyes and their effects on the environment and human health.}},

Publisher = {{SOC BRASILEIRA QUIMICA}},

Address = {{CAIXA POSTAL 26037, 05599-970 SAO PAULO, BRAZIL}},

Type = {{Review}},

Language = {{Portuguese}},

Affiliation = {{de Oliveira, RAG (Reprint Author), Univ Estadual Paulista, Inst Quim, Dept Quim Analit, BR-14801970 Araraquara, SP, Brazil.

de Oliveira, Ricardo A. G.; Bessegato, Guilherme G.; Zanoni, Maria Valnice B., Univ Estadual Paulista, Inst Quim, Dept Quim Analit, BR-14801970 Araraquara, SP, Brazil.

Zanoni, Thalita B.; Oliveira, Danielle P., Univ Sao Paulo, Fac Ciencias Farmaceut, Dept Anal Clin Toxicol \& Bromatol, BR-14040903 Ribeirao Preto, SP, Brazil.

Umbuzeiro, Gisela A., Univ Estadual Campinas, Fac Tecnol, BR-13484332 Limeira, SP, Brazil.}},

DOI = {{10.5935/0100-4042.20140143}},

ISSN = {{0100-4042}},

EISSN = {{1678-7064}},


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Keywords = {{hair dyes; chemical analysis of hair dyes; toxicity of hair dyes}},
Keywords-Plus = {{PERFORMANCE LIQUID-CHROMATOGRAPHY; P-PHENYLENEDIAMINE; COLORING
PRODUCTS; CHEMILUMINESCENCE DETECTION; ELECTROCHEMICAL DETECTION;
AMPEROMETRIC DETECTION; AROMATIC-AMINES; BLADDER-CANCER; BREAST-CANCER;
RISK}},
Research-Areas = {{Chemistry}},
Web-of-Science-Categories = {{Chemistry, Multidisciplinary}},
Author-Email = {{boldrinv@iq.unesp.br}},
ResearcherID-Numbers = {{Umbuzeiro, Gisela A./H-4603-2011
Zanoni, Thalita/I-5874-2014
boldrin zanoni, maria valnice/D-4251-2013
Oliveira, Ricardo Alexandrino/K-3706-2016
Bessegato, Guilherme Garcia/B-7636-2014
de Oliveira, Danielle P Palma/C-4754-2012}},
ORCID-Numbers = {{Umbuzeiro, Gisela A./0000-0002-8623-5200
Zanoni, Thalita/0000-0001-9558-5504
boldrin zanoni, maria valnice/0000-0002-2296-1393
Oliveira, Ricardo Alexandrino/0000-0001-7251-3727
Bessegato, Guilherme Garcia/0000-0003-4500-1173
de Oliveira, Danielle P Palma/0000-0002-4256-2621}},
Number-of-Cited-References = {{68}},
Times-Cited = {{5}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{50}},
Journal-ISO = {{Quim. Nova}},
Doc-Delivery-Number = {{AN2WW}},
Unique-ID = {{ISI:000340447700019}},
OA = {{DOAJ Gold}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000336639900047,
Author = {Silva, Fabiana Maria and Santos Vania, Regina Ferreira and Ribeiro,
Lubienska Cristina L. J. and Pires Marta, Siviero Guilherme and Lintz
Rosa, Cristina Cecche and Gachet-Barbosa, Luisa Andreia},
Editor = {{Zhang, T and Wang, Y}},
Title = {{Interlocking Tactile Concrete Paver with Addition of Steel Fibers}},
Booktitle = {{MATERIALS SCIENCE AND MECHANICAL ENGINEERING}},
Series = {{Applied Mechanics and Materials}},
Year = {{2014}},
Volume = {{467}},
Pages = {{253-256}},
Note = {{International Conference on Materials Science and Mechanical Engineering
(ICMSME 2013), Kuala Lumpur, MALAYSIA, OCT 27-28, 2013}},
Abstract = {{This work deals with the investigation of the performance of concrete
with addition of steel fibers for production of interlocking paver. Was
accomplished an experimental dosage of concrete and the addition fibers
contents were 40Kg/m(3), the molded pavers with conventional concrete
and with addition of steel fibers and were accomplished tests of
compression strength and water absorption, through the preliminary
results, we verified that are satisfactory and achieve the
specifications of Brazilian standard (ABNT NBR 9781:2013) and some
international (ASTM-C936:1996 e CSA A231.2:1995).}},
Publisher = {{TRANS TECH PUBLICATIONS LTD}},
Address = {{LAUBLSRUTISTR 24, CH-8717 STAFA-ZURICH, SWITZERLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Silva, FM (Reprint Author), Univ Estadual Campinas, Fac Technol,
Paschoal Marmo 1888, BR-13484332 Limeira, SP, Brazil.
Silva, Fabiana Maria; Santos Vania, Regina Ferreira; Ribeiro, Lubienska Cristina L.
J.; Pires Marta, Siviero Guilherme; Lintz Rosa, Cristina Cecche; Gachet-Barbosa, Luisa
Andreia, Univ Estadual Campinas, Fac Technol, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.4028/www.scientific.net/AMM.467.253}},
ISSN = {{1660-9336}},
ISBN = {{978-3-03785-949-0}},
Keywords = {{Concrete; Interlocking paver; Steel fibers}},
Research-Areas = {{Computer Science; Engineering; Materials Science}},
Web-of-Science-Categories = {{Computer Science, Interdisciplinary Applications;
Engineering,
Mechanical; Materials Science, Multidisciplinary}},
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vania\_regina\_ferreira@yahoo.com.br}}
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lubi@ft.unicamp.br
marta@ft.unicamp.br
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gachet@ft.unicamp.br}},
ResearcherID-Numbers = {{LINTZ, ROSA/T-3294-2018}},
Number-of-Cited-References = {{18}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{8}},
Doc-Delivery-Number = {{BA5GT}},
Unique-ID = {{ISI:000336639900047}},
DA = {{2019-06-24}},
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@inproceedings{ ISI:000336639900048,
Author = {Angelin, Andressa Fernanda and Ribeiro, Lubienska Cristina L. J. and
Pires Marta, Siviero Guilherme and Lintz Rosa, Cristina Cecche and
Trautwein, Leandro Mouta and Gachet-Barbosa, Luisa Andreia},
Editor = {{Zhang, T and Wang, Y}},
Title = {{Study of Density and Modulus of Elasticity of Lightweight Concrete with
Brazilian Aggregate}},
Booktitle = {{MATERIALS SCIENCE AND MECHANICAL ENGINEERING}},
Series = {{Applied Mechanics and Materials}},
Year = {{2014}},
Volume = {{467}},
Pages = {{257-261}},
Note = {{International Conference on Materials Science and Mechanical Engineering
(ICMSME 2013), Kuala Lumpur, MALAYSIA, OCT 27-28, 2013}},
Abstract = {{Concrete is one of the oldest building materials and applying known to
humankind. From 1800s, with the advent of Portland cement concrete has
taken a prominent place among the construction materials due to large
values of strength, durability and versatility it offered compared to
other products, allowing the molding of the various architectural forms.
Until the early 80s, the modern concrete remained only as a mixture of
cement, aggregates and water, however, in recent decades, due to the
development of new techniques and products, the concrete has been
undergoing constant changes({{1}}). This article discusses the
application of technology of lightweight aggregates for concrete
production, for use in building elements such as structural panels or
fence. Developed an experimental program for the analysis of concrete,
with the primary objective to characterize the properties of the parts
in the hardened state. The results showed that the lightweight aggregate
concrete with Brazilian expanded clay are extremely suitable for the
production of prefabricated elements slender, mainly due to the
reduction in density and excellent performance in mechanical properties,
especially modulus of elasticity, despite the low toughness of
lightweight aggregate.}},
Publisher = {{TRANS TECH PUBLICATIONS LTD}},
Address = {{LAUBLRUTISTR 24, CH-8717 STAFA-ZURICH, SWITZERLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Angelin, AF (Reprint Author), Univ Estadual Campinas, Fac Technol,
Paschoal Marmo St 1888, BR-13484332 Limeira, SP, Brazil.
Angelin, Andressa Fernanda; Ribeiro, Lubienska Cristina L. J.; Pires Marta, Siviero
Guilherme; Lintz Rosa, Cristina Cecche; Trautwein, Leandro Mouta; Gachet-Barbosa,
Luisa Andreia, Univ Estadual Campinas, Fac Technol, BR-13484332 Limeira, SP, Brazil.}},
DOI = {{10.4028/www.scientific.net/AMM.467.257}},
ISSN = {{1660-9336}},
ISBN = {{978-3-03785-949-0}},
Keywords = {{Construction materials and components; Alternative materials;
Lightweight concrete; Brazilian expanded clay; Density; Modulus of
Elasticity}},
Research-Areas = {{Computer Science; Engineering; Materials Science}},
Web-of-Science-Categories = {{Computer Science, Interdisciplinary Applications;
Engineering,
Mechanical; Materials Science, Multidisciplinary}},
Author-Email = {{andressaangelin@yahoo.com.br
lubi@ft.unicamp.br
marta@ft.unicamp.br
rosacclintz@ft.unicamp.br
leandromt@fec.unicamp.br
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ResearcherID-Numbers = {{Gachet Barbosa, Luisa Andreia/R-9595-2018
LINTZ, ROSA/T-3294-2018
Trautwein, Leandro M/C-3443-2013}},
ORCID-Numbers = {{Gachet Barbosa, Luisa Andreia/0000-0002-1661-2605
Trautwein, Leandro M/0000-0002-4631-9290}},
Number-of-Cited-References = {{10}},
Times-Cited = {{1}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{5}},
Doc-Delivery-Number = {{BA5GT}},
Unique-ID = {{ISI:000336639900048}},
DA = {{2019-06-24}},
}

@inproceedings{ ISI:000336639900107,
Author = {Trautwein, Leandro Mouta and Gachet-Barbosa, Luisa Andreia and Yamamoto,
Cassio Shigeru and Gaspar, Ricardo},
Editor = {{Zhang, T and Wang, Y}},
Title = {{Development of Multimedia Environment for Viewing the State of Stress in
a Differential Element}},
Booktitle = {{MATERIALS SCIENCE AND MECHANICAL ENGINEERING}},
Series = {{Applied Mechanics and Materials}},
Year = {{2014}},
Volume = {{467}},
Pages = {{590+}},
Note = {{International Conference on Materials Science and Mechanical Engineering
(ICMSME 2013), Kuala Lumpur, MALAYSIA, OCT 27-28, 2013}},
Abstract = {{The aim of this work is to present a tool developed in a multimedia
environment of a cilitate the understanding of the state of plane stress
at an infinite simal element, which is directed to lectures in Mechanics
of Materials courses. This multimedia resource was developed in Java 3D
API, liked an applet, as it is a simple language whose programs can run
on all operating system platforms, using the virtual machineconcept. The
multimedia resource determines the strains caused by forces acting in a
solid body. Usingthis tool the learning process can be more efficiently,
and the view of results at an differential element in the state of plane
stress can be easier too.}},
Publisher = {{TRANS TECH PUBLICATIONS LTD}},
Address = {{KREUZSTRASSE 10, 8635 DURNTEN-ZURICH, SWITZERLAND}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Trautwein, LM (Reprint Author), Univ Estadual Campinas, FEC, Av Albert
Einstein 951, BR-13083852 Campinas, SP, Brazil.
Trautwein, Leandro Mouta, Univ Estadual Campinas, FEC, Av Albert Einstein 951,
BR-13083852 Campinas, SP, Brazil.
Gachet-Barbosa, Luisa Andreia, Univ Estadual Campinas, BR-13484332 Campinas, SP,
Brazil.
Yamamoto, Cassio Shigeru; Gaspar, Ricardo, Univ Fed Abc, Santo Andre, SP, Brazil.}},
DOI = {{10.4028/www.scientific.net/AMM.467.590}},
ISSN = {{1660-9336}},
ISBN = {{978-3-03785-949-0}},
Keywords = {{Mechanics of materials; Stress; Strain}},
Research-Areas = {{Computer Science; Engineering; Materials Science}},
Web-of-Science-Categories = {{Computer Science, Interdisciplinary Applications;
Engineering,
Mechanical; Materials Science, Multidisciplinary}},
Author-Email = {{leandromt@fec.unicamp.br
gachet@ft.unicamp.br
ricardo.gaspar@ufabc.edu.br}},
ResearcherID-Numbers = {{Trautwein, Leandro M/C-3443-2013
Gachet Barbosa, Luisa Andreia/R-9595-2018}},
ORCID-Numbers = {{Trautwein, Leandro M/0000-0002-4631-9290
Gachet Barbosa, Luisa Andreia/0000-0002-1661-2605}},
Number-of-Cited-References = {{3}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
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Doc-Delivery-Number = {{BA5GT}},
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DA = {{2019-06-24}},
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@inproceedings{ ISI:000334021800026,
Author = {Melo, S. A. S. and do Nascimento, Jr., A. R. and Arismar Cerqueira, Jr.,
S. and Carvalho, L. H. H. and Pataca, D. M. and Oliveira, J. C. R. F.},
Editor = {{Vodopyanov, KL}},
Title = {{Expanding Frequency Comb by means of Enhanced Multiple Four-Wave Mixing}},
Booktitle = {{NONLINEAR FREQUENCY GENERATION AND CONVERSION: MATERIALS, DEVICES, AND
APPLICATIONS XIII}},
Series = {{Proceedings of SPIE}},
Year = {{2014}},
Volume = {{8964}},
Note = {{Conference on Nonlinear Frequency Generation and Conversion - Materials,
Devices, and Applications XIII, San Francisco, CA, FEB 04-06, 2014}},
Organization = {{SPIE}},
Abstract = {{This works presents an efficient scheme for enhancing multiple four-wave
mixing by using optical feedback, highly nonlinear and erbium-doped
fibers. Numerical results illustrate the efficiency of the proposed
method and its applicability is experimentally demonstrated by expanding
an original frequency comb from 20 to 100 optical mutually coherent
lines.}},
Publisher = {{SPIE-INT SOC OPTICAL ENGINEERING}},
Address = {{1000 20TH ST, PO BOX 10, BELLINGHAM, WA 98227-0010 USA}},
Type = {{Proceedings Paper}},
Language = {{English}},
Affiliation = {{Melo, SAS (Reprint Author), Natl Inst Telecommun Inatel, 510 Av Joao
de Camargo, BR-37540000 Santa Rita Do Sapucaí, MG, Brazil.
Melo, S. A. S.; Arismar Cerqueira, S., Jr., Natl Inst Telecommun Inatel, 510 Av
Joao de Camargo, BR-37540000 Santa Rita Do Sapucaí, MG, Brazil.
do Nascimento, A. R., Jr., Univ Estadual Campinas, BR-13484332 Limcira, SP, Brazil.
Carvalho, L. H. H.; Pataca, D. M.; Oliveira, J. C. R. F., Development \& Res Ctr
Telecommunicat, BR-13086902 Campinas, SP, Brazil.}},
DOI = {{10.1117/12.2036834}},
Article-Number = {{UNSP 89641B}},
ISSN = {{0277-786X}},
ISBN = {{978-0-8194-9877-9}},
Keywords = {{Optical Frequency Comb; Non-linear Optics; Multiple Four-Wave Mixing;
Highly Non-linear Fibers}},
Research-Areas = {{Engineering; Optics; Physics}},
Web-of-Science-Categories = {{Engineering, Electrical \& Electronic; Optics; Physics,
Applied}},
ORCID-Numbers = {{Melo, Suzanne/0000-0002-1550-1671}},
Funding-Acknowledgement = {{CPqD; CNPq; MCTI; FAPEMIG; Draka; Hubner-Shuner; ESSH-
ANSYS; TIM}},
Funding-Text = {{Authors thank the financial support from CPqD, CNPq, MCTI, FAPEMIG,
Draka, Hubner-Shuner and technical support from ESSH- ANSYS and TIM.}},
Number-of-Cited-References = {{3}},
Times-Cited = {{0}},
Usage-Count-Last-180-days = {{0}},
Usage-Count-Since-2013 = {{2}},
Doc-Delivery-Number = {{BA2ZH}},
Unique-ID = {{ISI:000334021800026}},
DA = {{2019-06-24}},
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@article{ ISI:000333453500010,
Author = {Hidalgo, Ieda G. and Fontane, Darrell G. and Lopes, Joao E. G. and
Andrade, Jose G. P. and de Angelis, Andre F.},
Title = {{Efficiency Curves for Hydroelectric Generating Units}},
Journal = {{JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT}},
Year = {{2014}},
Volume = {{140}},
Number = {{1}},
Pages = {{86-91}},
Month = {{JAN 1}},
Abstract = {{This paper presents a methodology for obtaining and adjusting of
efficiency curves for hydroelectric generating units. It is based on
measured data of power, gross head, and water discharge recorded by the
company that manages the plant operation. The objective is to determine
the actual performance characteristics of the set: turbine, generator,
and penstock. In order to obtain the efficiency functions, an iterative
calculation is used. Its input data are the functions currently in use
of turbine efficiency, generator efficiency, and penstock head losses.
For the adjustment of the efficiency functions, the Generalized Reduced
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Gradient optimization method is employed. A case study was applied to the data from a large Brazilian hydroelectric plant whose operation is under the coordination of the Electric System National Operator. The benefits of the proposed methodology are analyzed using a simulation tool for the hydroelectric operation. The simulator is used to reproduce the past operation of the plant, first with current data and second with adjusted data. The results show that the optimal unit efficiency functions significantly contribute to bring the real and simulated operation closer.}}

Publisher = {{ASCE-AMER SOC CIVIL ENGINEERS}},
Address = {{1801 ALEXANDER BELL DR, RESTON, VA 20191-4400 USA}},
Type = {{Article}},
Language = {{English}},
Affiliation = {{Hidalgo, IG (Reprint Author), State Univ Campinas UNICAMP, Fac Technol, BR-13484332 Campinas, SP, Brazil.
Hidalgo, Ieda G.; Andrade, Jose G. P.; de Angelis, Andre F., State Univ Campinas UNICAMP, Fac Technol, BR-13484332 Campinas, SP, Brazil.
Fontane, Darrell G., Colorado State Univ, Fac Civil \& Environm Engr, Ft Collins, CO 80521 USA.
Lopes, Joao E. G., State Univ Campinas UNICAMP, Fac Civil Engr, BR-13083852 Campinas, SP, Brazil.}}},
DOI = {{10.1061/(ASCE)WR.1943-5452.0000258}},
ISSN = {{0733-9496}},
EISSN = {{1943-5452}},
Keywords = {{Hydro power; Optimization; Simulation; Power plants; Hydroelectric operation; Efficiency curves; Generating units; Optimization methods}},
Research-Areas = {{Engineering; Water Resources}},
Web-of-Science-Categories = {{Engineering, Civil; Water Resources}},
Author-Email = {{iedahidalgo@gmail.com
fontane@enr.colostate.edu
jelopes1@gmail.com
josegeraldo@ft.unicamp.br
andre@ft.unicamp.br}},
Funding-Acknowledgement = {{FAPESP, Brazilian government agency}},
Funding-Text = {{The research reported herein was supported by the FAPESP, Brazilian government agency dedicated to the development of science and technology, which has funded the postdoctoral studies of the first author.}},
Number-of-Cited-References = {{15}},
Times-Cited = {{2}},
Usage-Count-Last-180-days = {{1}},
Usage-Count-Since-2013 = {{18}},
Journal-ISO = {{J. Water Resour. Plan. Manage.-ASCE}},
Doc-Delivery-Number = {{AD70M}},
Unique-ID = {{ISI:000333453500010}},
DA = {{2019-06-24}},
}