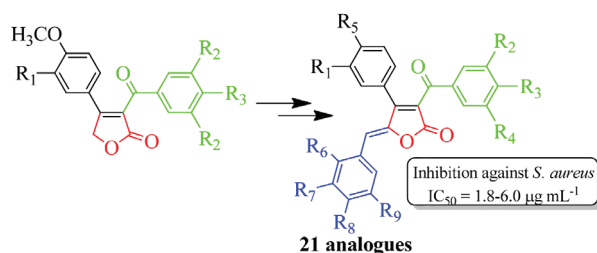


595 Inibição do crescimento de microrganismos patogênicos induzida por butenolídeos análogos aos cadiolídeos

Simone Z. Mairink, Luiz C. A. Barbosa, Célia R. A. Maltha, Jodieh O. S. Varejão, Geane P. Oliveira, Jacqueline A. Takahashi e John Boukouvalas

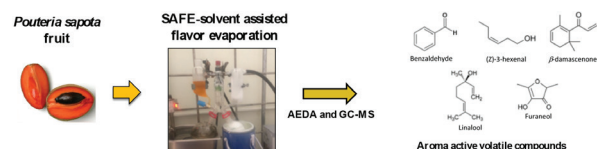
21 compounds analogous to cadiolides were prepared from 4 synthesized butenolides. The compounds were evaluated against 5 pathogenic microorganisms and four of the most active against *S. aureus* presented IC_{50} in the range of 1.8-6.0 $\mu g mL^{-1}$.



607 Identification of aroma-active volatile compounds in *Pouteria sapota* fruit by Aroma Extraction Dilution Analyses (AEDA)

Diana A. Martín and Coralía Osorio

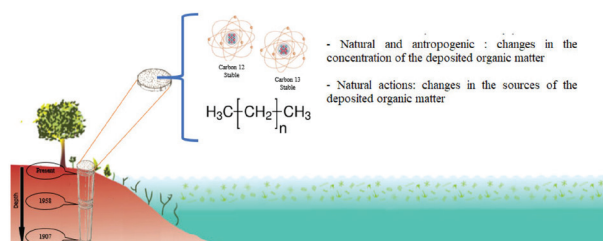
The aroma active volatile compounds of *Pouteria sapota* fruit were identified on the SAFE extract by combination of sensory (AEDA) and instrumental (GC-MS) analyses.



611 Impactos da mudança de vegetação local no aporte de matéria orgânica para um estuário tropical preservado (estuário do rio Itapicuru – BA)

Lucas M. Guimarães, Tiago de A. C. Lima, Elvis J. De França, Gilberto N. de Arruda, José R. B. de Souza e Ana C. R. de Albergaria-Barbosa

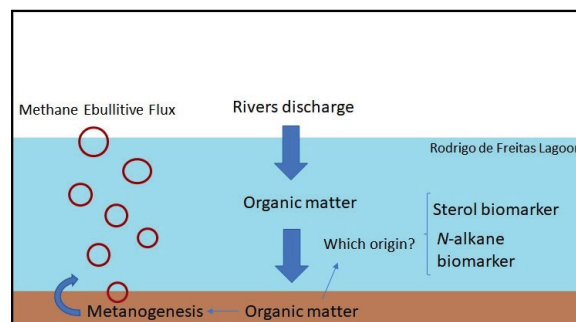
Temporal changes in concentrations and type of organic matter deposited were evaluated by the analysis of *n*-alkanes and stable isotopes ($\delta^{13}C$ and $\delta^{15}N$) in a sediment core collected on the estuary banks.



619 Organic matter composition related to methane ebullitive flux of an urban coastal lagoon, Southeastern Brazil

Alessandra da F. Viana, Marco A. dos Santos, Marcelo C. Bernardes and Marcelo Amorim

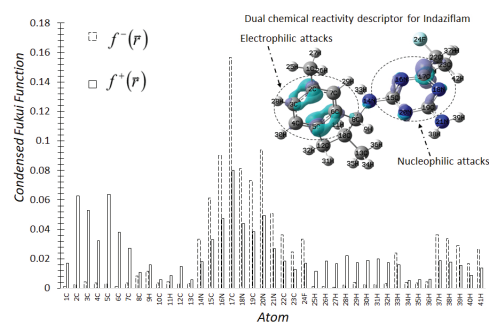
The present study investigates the origin of organic matter that reaches a coastal, urban and eutrophic lagoon in Rio de Janeiro, Brazil and compares with the data from methane ebullitive flux.



- 628 Analysis of the chemical reactivity of indaziflam herbicide and its metabolites through global and local reactivity descriptors

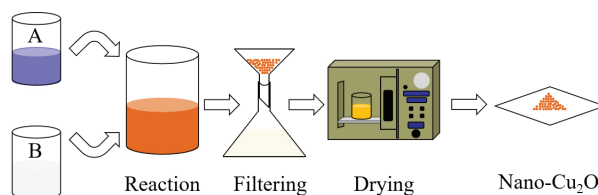
Luis H. Mendoza-Huizar, Clara H. Rios-Reyes, Giaan A. Álvarez-Romero and María E. Pérez-Hernández

Condensed Fukui Function and dual chemical reactivity descriptor for indaziflam. In all cases the isosurfaces were obtained at 0.008 e/u.a.³, broken circles show the more reactive zones in the molecule.



- 638 Cuprous oxide nanoparticles: preparation and evaluation of antifouling activity

Wei-Zhao Shi, Ying-Shuang Liang, Bingxing Lu, Mengting Chen, Yanwei Li and Zhiheng Yang

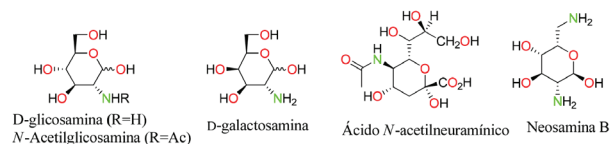


The preparation procedure of Cu₂O nanoparticles.

Revisão

- 642 Avanços recentes na química dos aminoaçúcares: ocorrência, biossíntese, síntese e aplicação

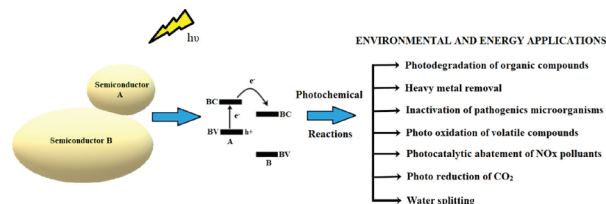
Aldicéia L. de Moura, Bruna M. Guimarães, Josefa A. da C. Lima, Mauricélia M. S. Mata, Jadson F. da Silva, Ronaldo N. Oliveira, Juliano C. R. de Freitas e João R. de Freitas Filho



This review summarizes recent developments, about the occurrence, biosynthesis, synthesis and application of amino sugars.

- 661 Semicondutores heteroestruturados: uma abordagem sobre os principais desafios para a obtenção e aplicação em processos fotoquímicos ambientais e energéticos

Romero T. Bueno, Osmando F. Lopes, Kele T. G. Carvalho, Caue Ribeiro e Henrique A. J. L. Mourão



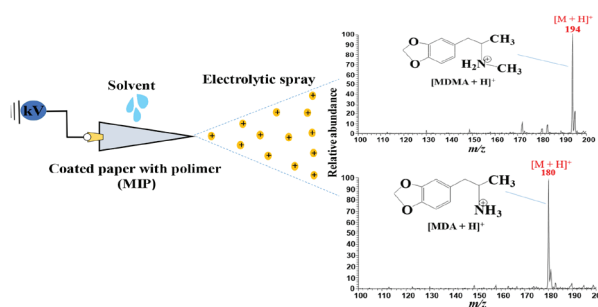
Heterostructured semiconductors used in different photochemical processes for environmental and energy applications. The suitable structural connection enables the charge transfer between the semiconductors.

Nota Técnica

676 Determinação de *designer drugs* em saliva por paper spray mass spectrometry

Lanaia Í. L. Maciel, Thays C. Carvalho, Igor Pereira e Boniek G. Vaz

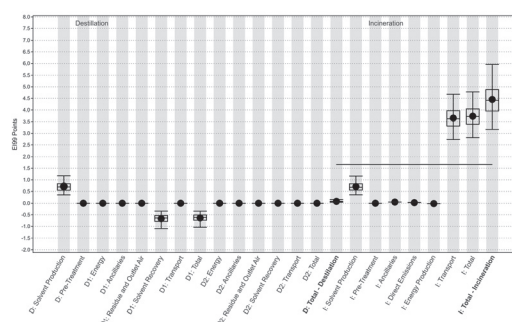
A method has been optimized for quantification of methamphetamine, 3,4-methylenedioxymphetamine (MDA) and 3,4-methylenedioxy-*N*-methylanphetamine (MDMA) from saliva samples. Rapid analysis (~ 1 min) of designer drugs in saliva is demonstrated using PSI-MS with a Molecularly Imprinted Polymer (MIP) coated paper as substrate.



683 Recuperação de acetona em resíduos laboratoriais: uma abordagem sobre aspectos da gestão, operacionais e da eficiência ambiental

Guilherme F. Coletti, Glauco A. Tavares e José A. Bendassolli

Difference of environmental impacts between distillation and incineration using Eco-indicator 99, Ecosolvent software.

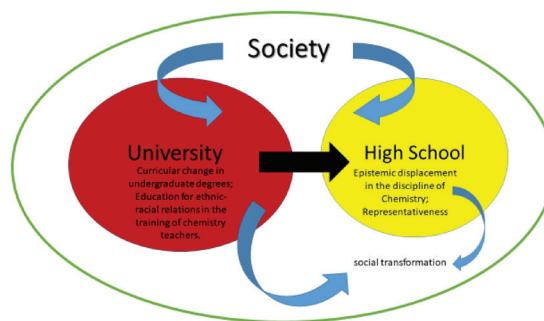


Educação

691 Educação para as relações étnico-raciais na formação de professores de Química: sobre a Lei 10.639/2003 no ensino superior

Marysson J. R. Camargo e Anna M^a C. Benite

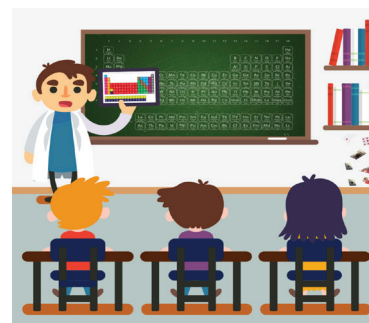
It is the duty of the university to train qualified teachers to implement Education for Ethnic-Racial Relations. This article brings the experience of the Collective Ciata to contribute with discussions pointing theoretical-methodological paths for professors of Chemistry.



702 O Ano Internacional da Tabela Periódica e o Ensino de Química: das cartas ao digital

Bruno S. Leite

This article analyzes in the chemistry journals how the Periodic Table has been used in the Chemistry teaching and what didactic strategies were used.



Carta ao Editor

- 711 Nem uma flor sequer para o fundador da moderna química
de coordenação...
Nicolás A. Rey
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