

1 Desafios superados, novos compromissos

Giovanna Machado, Jorge M. David e Nelson H. Morgon

<http://dx.doi.org/10.21577/0100-4042.20230016>

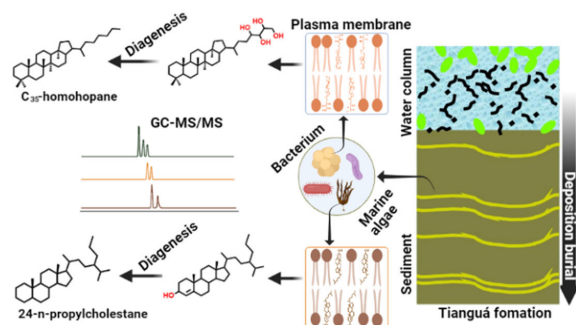
Artigos/Articles

2 Fósseis moleculares da matéria orgânica siluriana da Formação Tianguá (Bacia do Parnaíba), nordeste do Brasil: implicações paleoambientais e maturação térmica

Iara S. de A. Silva, Michel R. de B. Chaves, Ailton da S. Brito, Afonso C. R. Nogueira e Sidney G. de Lima

<http://dx.doi.org/10.21577/0100-4042.20170945>

In this first molecular geochemical study of Tianguá formation, it's outcropping rocks were analyzed by GC-MS and GC-MS/MS regarding their organic matter content, with thermal evolution and depositional environment origin determined by biomarker parameters.

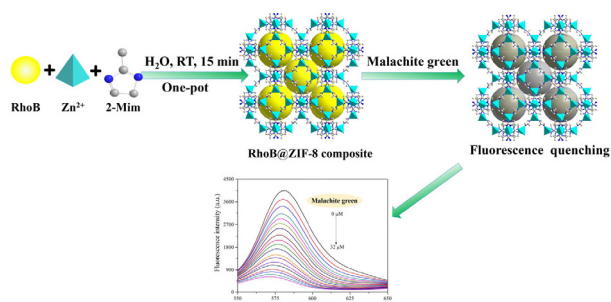


13 One-pot synthesis of a reversible and sensitive fluorescent probe for the detection of malachite green

Jinfeng Zhou and Chunjie Chu

<http://dx.doi.org/10.21577/0100-4042.20170947>

A recyclable and sensitive fluorescent nanoprobe, RhoB@ZIF-8 composite, has been designed and synthesized. This probe can be successfully applied in sensing trace amount of MG in aquaculture water and fish tissue samples.

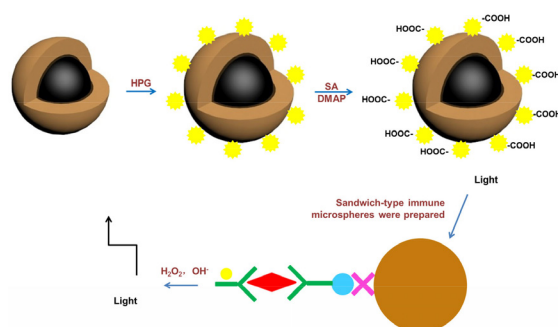


20 Reducing non-specific adsorption of proteins via the HPG modification on the surface of magnetic nanoparticles

Meng Zhou, Chunyu Sun and Hong Zhao

<http://dx.doi.org/10.21577/0100-4042.20170950>

A magnetic polymer composite microsphere which can effectively reduce the non-specific adsorption of proteins has been synthesized and has a good application prospect *in vitro* diagnosis.

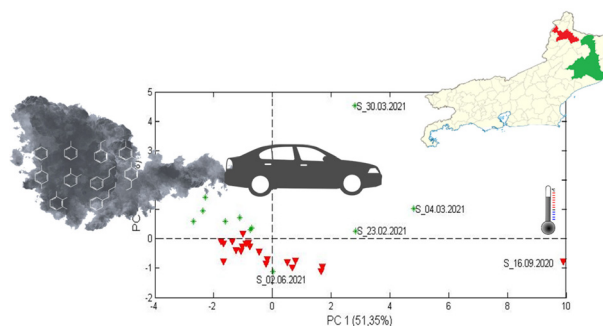


- 29 Avaliação de compostos orgânicos voláteis aromáticos na atmosfera em Campos dos Goytacazes e Itaperuna aplicando a análise multivariada de dados

Hellen G. Vieira, Ana P. de S. Figueiredo, Murilo de O. Souza e M^a Cristina Canela

<http://dx.doi.org/10.21577/0100-4042.20170952>

The exploratory analysis of the data generated allowed identifying the most significant variables in each city and correlate these variables with the primary sources of emission of the compounds.

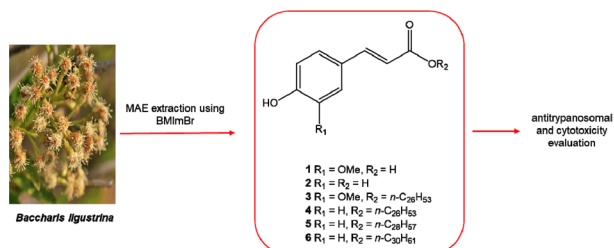


- 39 Fenilpropanoides com ação anti-*Trypanosoma cruzi* isolados de *Baccharis ligustrina* C. DC. (Asteraceae)

Matheus L. Silva, Leila Gimenes, Paulete Romoff, Marisi G. Soares, Fernanda F. Camilo, Erica V. de C. Levatti, Andre G. Tempone e João H. G. Lago

<http://dx.doi.org/10.21577/0100-4042.20170953>

Baccharis ligustrina afforded four acyl C₆C₃ derivatives which were evaluated against amastigote forms of parasite *Trypanosoma cruzi* and NCTC cells.



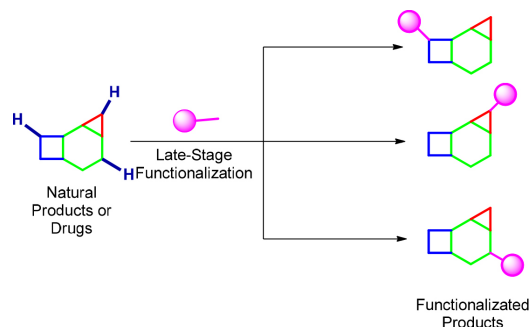
Revisão/Review

- 43 Funcionalização de ligações C—H em estágio tardio em síntese orgânica

Eduardo C. S. Rocha, Yasmin N. Salmazo, Marcio Hayashi, César A. D. Zaragoza e Emilio C. de Lucca Júnior

<http://dx.doi.org/10.21577/0100-4042.20170949>

Novel drugs and natural products derivatives can be accessed using the logic of C—H bond functionalization.



- 77 O potencial da xantona natural α-mangostina no desenvolvimento de novos agentes anti-infecciosos: uma revisão

Douglas C. de A. Pinto, Gabriela A. de Souza, Paulo Pitasse-Santos, Afonso S. M. M. Velez, Debora Decote-Ricardo, Debora R. L. dos Santos, Leonardo Freire-de-Lima Célio G. Freire-de-Lima e Marco E. Freire de Lima

<http://dx.doi.org/10.21577/0100-4042.20170954>

Mangosteen (*Garcinia mangostana*, Linn.) is a tropical fruit native from Asia. The major constituent of its fruits' pericarp is α-mangostin, a natural prenylated xanthone, having potential as a chemotherapeutic agent for the prevention and treatment of several infectious diseases.



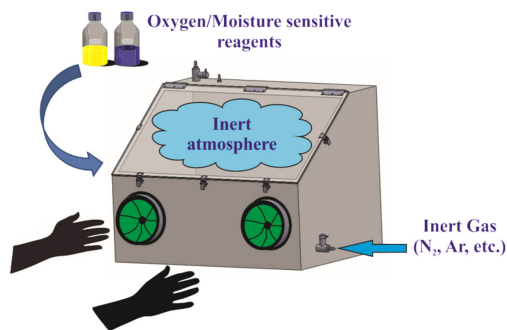
Nota Técnica/Technical Notes

- 95 An accessible glove box project for procedures that require inert conditions

Pedro H. do N. Pereira, Jean C. B. de Andrade, Pedro I. da S. Maia and Geoffroy R. P. Malpass

<http://dx.doi.org/10.21577/0100-4042.20170966>

Working under an inert atmosphere can be a challenge in many laboratories. This is due to the absence of an equipment to handle compounds that are sensitive to atmospheric gases. Here an accessible glove box project is presented to help researchers who need to work under such conditions.



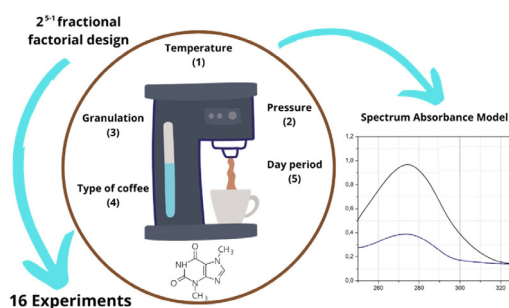
Educação/Education

- 98 Café com Quimiometria: uma aplicação do planejamento fatorial fracionário
- 2^{5-1}

Kaique C. da Silva, Gabriel R. F. Caldeira, Kenya G. Nogueira, M^a Cristina Canela, Paulo R. Filgueiras e Murilo de O. Souza

<http://dx.doi.org/10.21577/0100-4042.20170943>

Caffeine extraction was conducted by a 2^{5-1} fractional factorial design which enabled the screening of five experimental variables. The coffee samples were added in capsules to be extracted by an espresso machine and taken to the UV-Vis spectrophotometer for determination of caffeine.



- 108 Microscópios alternativos construídos a partir de materiais de baixo custo

Guilherme L. S. Borges, Pedro H. S. Borges, Cássia R. Cardoso e Daniel A. Cerqueira

<http://dx.doi.org/10.21577/0100-4042.20170957>

Left: Photographs of different homemade microscopes. Right: Enhancement of the image using focus stacking technique.



- 117 Os currículos dos primeiros cursos de química da Universidade de Coimbra e de universidades brasileiras

Vanessa F. Fonseca, Sérgio P. J. Rodrigues e Maurício S. Pazinato

<http://dx.doi.org/10.21577/0100-4042.20170956>

The University of Coimbra as the only Portuguese university in this period exerted an influence on Brazilian universities in the process of developing of chemical education.



Assuntos Gerais/General Subject

- 126 Currículo Mínimo versus Diretrizes Nacionais de Curso: caminhos divergentes na formação dos profissionais da química

Sérgio de P. Machado, Carlos E. da S. Cortes e Rafael B. Almada

<http://dx.doi.org/10.21577/0100-4042.20170944>



X



The incompatibility between the legislation of the Federal Council of Chemistry and the Ministry of Education makes it difficult to train the chemistry professional.
