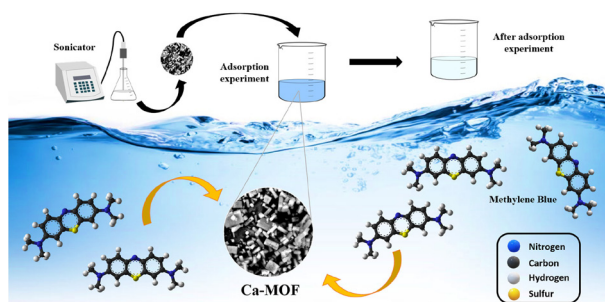


- 507 Síntese, caracterização e aplicação de Ca-MOFs na remoção do azul de metileno por adsorção

Olímpio J. Silva Junior, Camilla V. C. Moreira, Arthur F. F. Monteiro, Victor E. R. Melo, João B. L. Oliveira, Joanna E. Kulesza, Bráulio S. Barros

<http://dx.doi.org/10.21577/0100-4042.20170852>

The synthesis solution was subjected to ultrasonic processing to obtain samples of Ca-MOF. Then, the obtained calcium MOF was applied in the adsorption of methylene blue in an aqueous solution.

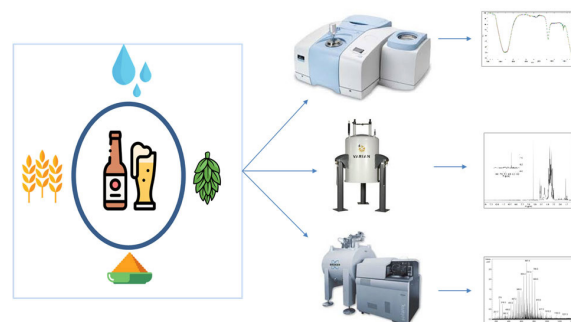


- 518 Estudo do perfil químico de cervejas brasileiras: uma avaliação entre as bebidas artesanais e industriais

Dorval M. Coelho Neto, Laysa L. P. F. Moreira, Eustáquio V. R. de Castro, Warley B. Souza, Paulo R. Filgueiras, Wanderson Romão, Gabriely S. Folli e Valdemar Lacerda Jr.

<http://dx.doi.org/10.21577/0100-4042.20170857>

Analytical techniques of infrared (IR), hydrogen nuclear magnetic resonance (^1H NMR) and mass spectrometry (ESI($\pm$)FT-ICR MS) applied to discriminate craft beers from industrial ones (brands common to the Brazilian market) aimed at building the chemical profile of beverages.

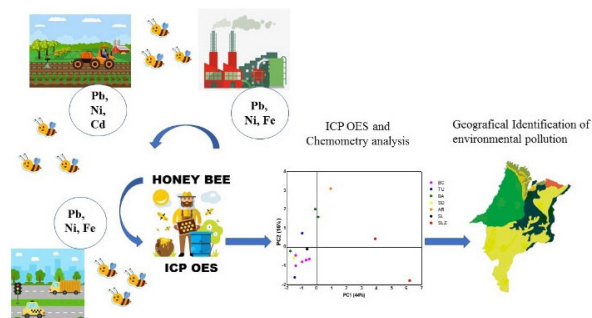


- 531 Perfil de elementos inorgânicos em amostras de mel do Estado do Maranhão como um potencial bioindicador de origem geográfica

Sonaly S. Leal, Eliane R. Sousa, Gilmar Silvério e Paulo C. Lima

<http://dx.doi.org/10.21577/0100-4042.20170856>

The determination of metals by ICP-OES in honey samples proved to be efficient in the application of this matrix as a bioindicator of geographic origin and environmental contamination.

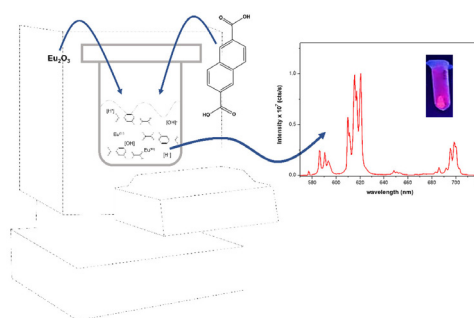


- 537 Uma rota alternativa para obtenção de redes de coordenação via síntese solvotermal utilizando Eu_2O_3 e ácido 2,6-naftalenodicarboxílico

Roberta F. Oliveira, Raphael H. de M. Pereira, Rodrigo da Silva Viana, Severino Alves Júnior e Mônica F. Belian

<http://dx.doi.org/10.21577/0100-4042.20170863>

This article proposes an innovative synthesis with the use of europium(III) oxide, hydrothermal process, generating a luminescent complex. The europium(III) coordination network showed a quantum efficiency of 56%, with triplet states located in the ligand system resonant to the $^5\text{D}_1$ state of the $\text{Eu}(\text{III})$ ion.

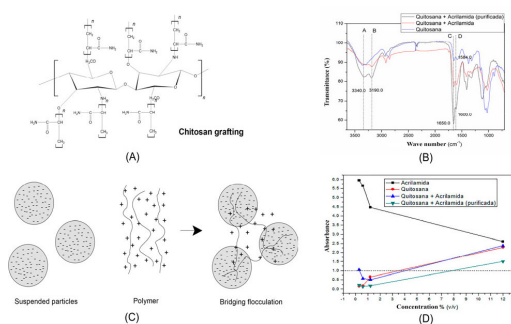


- 543 Aplicação de polímeros na floculação de rejeito de caulim: efeitos da variação de concentração e tipo de floculante

Giuliano S. Martins, Ana Maria M. Batista, Juliano C. de Siqueira, Luciene A. B. Siniscalchi e Rodrigo L. Oréfice

<http://dx.doi.org/10.21577/0100-4042.20170862>

Flocculation in high molecular weight polymers occurs by electrostatic interaction followed by bridging. A) Chitosan grafting; B) Infrared spectroscopy; C) Bridging flocculation process; D) UV-VIS spectroscopy.

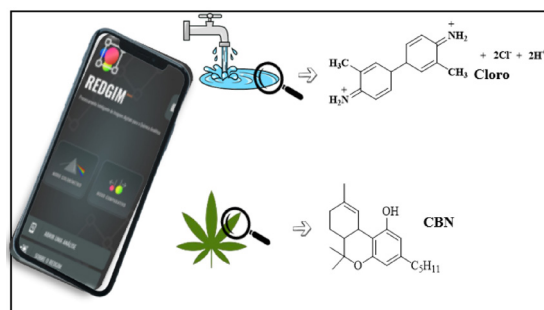


- 550 REDGIM como aplicativo de *smartphone* para aplicações quimiométricas por meio de análise de imagens: um uso em PLS

Thalles R. Rosa, Bruno M. M. Siqueira, Rayana A. Costa, Jadson Z. dos Reis, Wagner L. S. Pacheco, Paulo R. G. de Moura, Wanderson Romão e Paulo R. Filgueiras

<http://dx.doi.org/10.21577/0100-4042.20170861>

REDGIM application for smartphones on the Android platform capable of working with multivariate image analysis using chemometric methods through the luminous intensities of photos and R (red), G (green) and B (blue) channels.



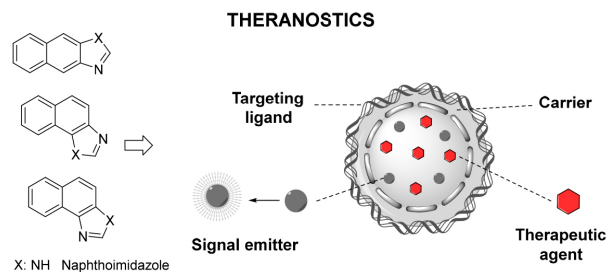
Revisão/Review

- 560 Naftoimidazóis e naftoxazóis - promissores componentes de sistemas teranósticos

Victória L. dos A. Santos, Délis G. Guimarães, Rodolfo H. V. Nishimura, Larissa A. Rolim, Arlan de A. Gonsalves e Cleônia R. M. Araújo

<http://dx.doi.org/10.21577/0100-4042.20170848>

Main constituents of a theranostic system and structures of the naphthoimidazole and naphthoxazole nuclei, promising components for the theranostic system.

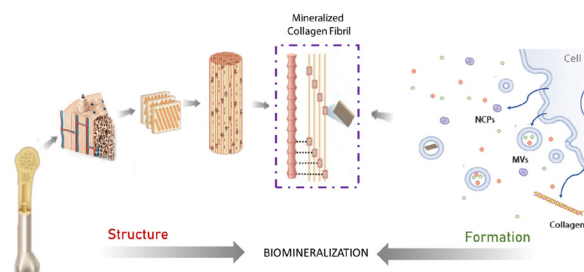


- 578 Aspectos químicos da biomineralização óssea

Marcos A. E. Cruz, Cláudio R. Ferreira, Lucas F. B. Nogueira, Luiz H.S. Andrelli, Ana Lara N. dos Santos, Jeferson M. M. Macedo, Ekeveliny A. Veschi, Bruno Z. Favarin, Heitor G. Sebinelli, Mayte Bolean, Ana Paula Ramos e Pietro Ciancaglini

<http://dx.doi.org/10.21577/0100-4042.20170851>

The hierarchical organization of bone from macroscale to molecular composition. Mineralization is driven by Matrix vesicles (MVs), which are secreted by osteoblasts or chondrocytes. MVs bind to the collagen fibrils and release this precursor mineral phase (CaP) which infiltrates into the staggered and periodic gaps of the collagen matrix. MV can be mimicked in liposomes or proteoliposomes to study biomineralization.

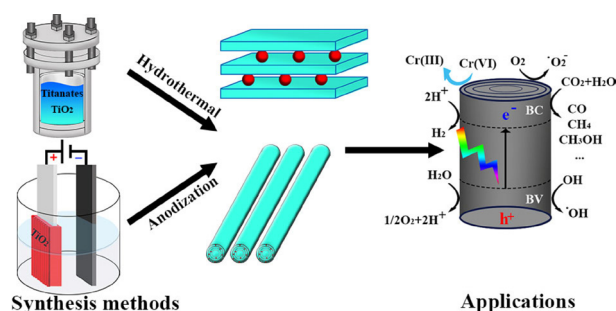


- 594 Materiais lamelares de Ti aplicados em processos fotocatalíticos

Nailma J. Martins, Luele R. S. Barbosa, Vitor E. P. Cota e Henrique A. J. L. Mourão

<http://dx.doi.org/10.21577/0100-4042.20170855>

Representation of the main synthesis methods, photocatalytic applications and charge photogeneration scheme of titanium based lamellar materials.



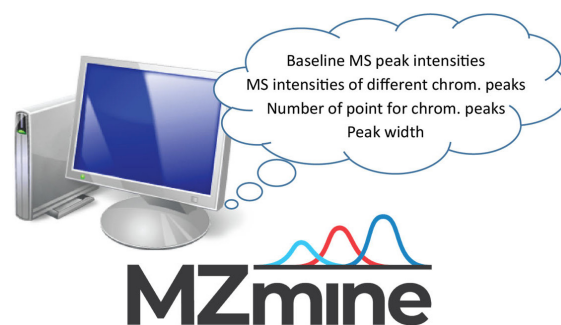
Nota Técnica/Technical Notes

- 608 Guia para processamento de dados de cromatografia acoplada a espectrometria de massas

Ricardo M. Borges, João V. M. Resende, Aldebaran O. de Moraes, Alana K. Pereira, Rafael Garrett, Anelize Bauermeister e Antonio J. R. da Silva

<http://dx.doi.org/10.21577/0100-4042.20170838>

A guided tutorial for LC-MS and GC-MS data processing using the open-source software MZmine2 is described. Examples data from an open-access repository is offered with processing parameters for training.

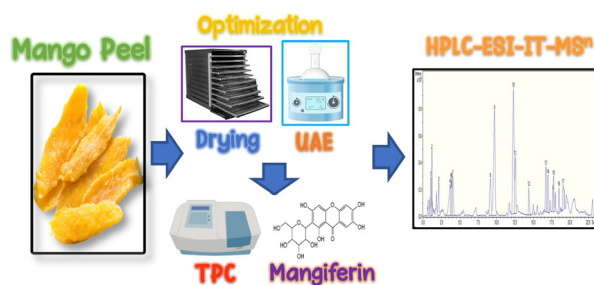


- 621 Optimización de la deshidratación y extracción de compuestos fenólicos de piel de mango

Nicole F. Burneo, María Mora-Medina y Jorge G. Figueroa

<http://dx.doi.org/10.21577/0100-4042.20170842>

In order to maximize the extraction of phenolic compounds in the mango peel, the dehydration process and UAE were optimized. The results obtained may promote the use of this by-product as a source of mangiferin.



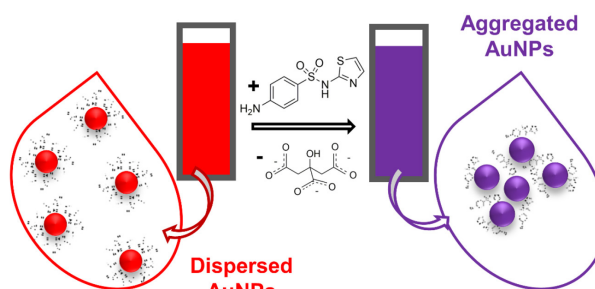
Educação/Education

- 630 Síntese de nanopartículas de ouro e sensoriamento colorimétrico do sulfatiazol: uma prática experimental para aulas interdisciplinares

Elias B. Santos, Letícia C. Matos e Italo O. Mazali

<http://dx.doi.org/10.21577/0100-4042.20170858>

The citrate capped gold nanoparticles (AuNPs) were used as a colorimetric sensor for the detection of sulfathiazole in mixed water/ethanol solution by simple visual inspection and using molecular absorption spectrophotometry.



Assuntos Gerais/General Subject

- 636 As mulheres ganhadoras do Nobel de Química (1901 – 2020)
*Camila Silveira, Clarice D. B. Amaral, Glaucia Pantano
e Tatiana R. G. Simões*

<http://dx.doi.org/10.21577/0100-4042.20170872>

The seven women who have been awarded a Nobel Prize in Chemistry: from the discovery of the elements radium and polonium to the development of a method for genome editing.

