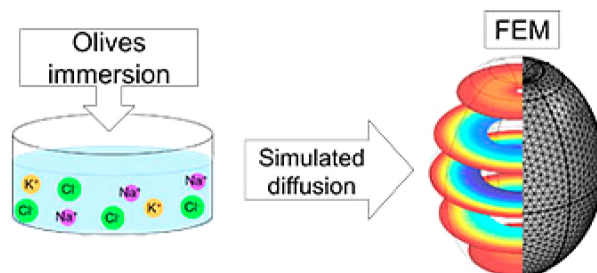


Artigos/Articles

- 229 Simulation of the diffusion process of NaCl and KCl in olive pulp using the finite element method

Marco A. J. Clemente, Heloisa H. P. Silva, Nathan F. Silva, Julia W. Campos, Eduardo G. de Sousa, Hágata C. Silva, Ana C. G. Mantovani, Karina B. Angilelli and Dionisio Borsato

<http://dx.doi.org/10.21577/0100-4042.20230005>

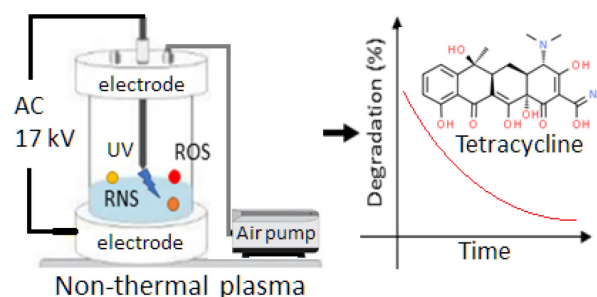


The olive brining process and the influence of the film formed on the surface were simulated by the finite element method.

- 236 Evaluation of antimicrobial sensitivity to tetracycline exposed to non-thermal plasma

Anelise L. V. Cubas, Ana Regina de A. Dutra, Thiago C. Alves, Ritanara T. Bianchet, Adriano A. Rambo and Nito A. Debacher

<http://dx.doi.org/10.21577/0100-4042.20230006>

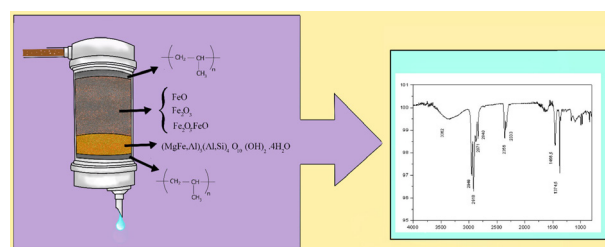


The degradation of tetracycline by non-thermal plasma was over 90% in 10 min and at this stage, the antimicrobial sensitivity test performed by disk diffusion showed no antibiotic activity.

- 241 Caracterização de resíduos sólidos industriais por análise térmica: perspectivas de uso como material filtrante para águas residuárias

Roberta A. P. Beluco, Elias Y. Ionashiro e Núbia N. de Brito

<http://dx.doi.org/10.21577/0100-4042.20230007>

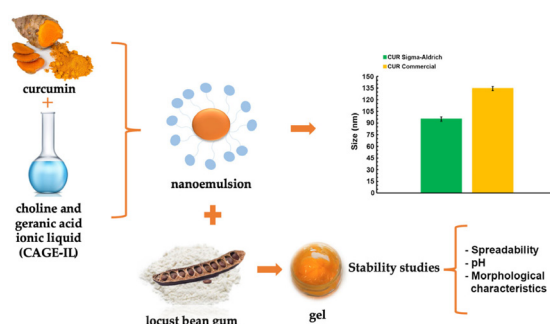


Wastewater Filter constructed with metallurgical residue, vermiculite and commercial synthetic blanket and the analysis used for the component characterization.

- 250 Nanostructured curcumin with choline and geranic acid ionic liquid (CAGE-IL): potential for incorporation into pharmaceutical gel formulations

Marta M. D. C. Vila, Rodrigo Boscariol and Victor M. Balcão

<http://dx.doi.org/10.21577/0100-4042.20230012>



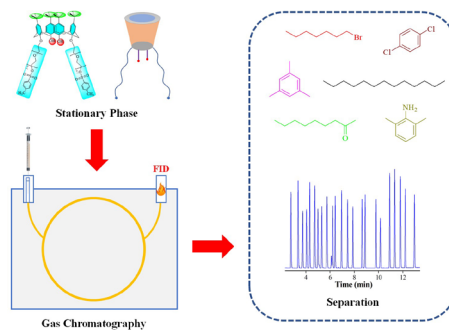
A nanoemulsion of curcumin and choline and geranic acid ionic liquid (CAGE-IL) was prepared. This nanoemulsion was added to locust bean gum to obtain a gel. The samples were kept at 40 ± 2 °C, with $75 \pm 5\%$ relative humidity (HR), and were analyzed at 0 (24 h), 30, 60, 90, and 180 days.

- 257 Separation performance of PEG-linked calix[4]arene as stationary phase for capillary gas chromatography

Wei Zhang, Zhiqiang Cai, Wei Li, Qiuchen Huang, Ruonan Chen, Yiwen Li, Keyun Jin, Yi Zhao and Tao Sun

<http://dx.doi.org/10.21577/0100-4042.20230013>

In this work, a new calixarene derivative (C4A-PEG-2PTSC) was introduced as gas chromatographic stationary phase, and its separation ability and retention behaviors for different types of analytes were investigated. Its excellent separation performance proves its feasibility and good application prospect in the field of gas chromatography.



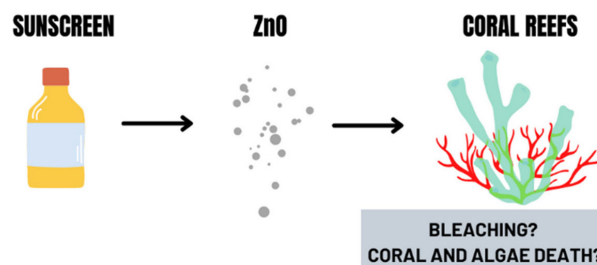
Revisão/Review

- 266 Toxicity of zinc oxide to scleractinian corals and zooxanthellae: a brief review

Lúcio L. Freitas Neto and Breno P. Espósito

<http://dx.doi.org/10.21577/0100-4042.20230003>

Sunscreens may contain zinc oxide (ZnO) that is discharged in coral reef environments. There is a concern that this discharge of ZnO could be a threat to coral health, leading to bleaching or even death of corals and their algal symbionts.

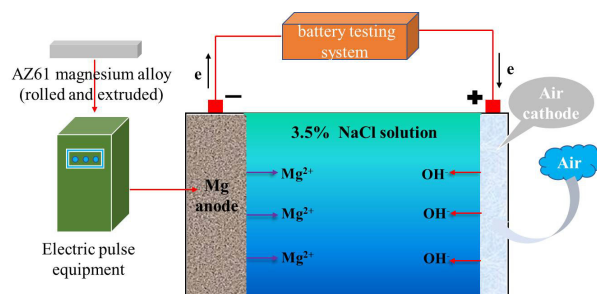


- 273 Effect of electric pulse treatment on microstructure, electrochemical and discharge properties of AZ61 anodes for Mg-air batteries

Jinchao Zou, Tao Zhang, Zhiquan Huang, Chunjiang Zhao and Junpeng Wang

<http://dx.doi.org/10.21577/0100-4042.20230010>

In this work, the effects of electric pulse treatment on the discharge and electrochemical properties of rolled and extruded AZ61 magnesium alloy as anode of Mg-air battery were studied.



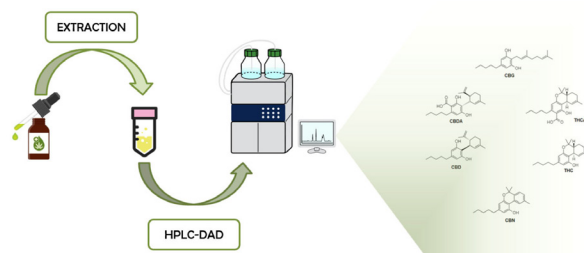
Nota Técnica/Technical Notes

- 282 Desenvolvimento de metodologia para determinação de canabinoides em produtos à base de cannabis para fins medicinais

Anna S. C. L. Dantas, Matheus N. de Souza, Patrícia C. de Lima, Maria E. D. Lima, Daniela S. Santana, Ricardo L. N. Maranhão, André Colonese, Soraya M. Ochs e Mychelle A. Monteiro

<http://dx.doi.org/10.21577/0100-4042.20230001>

Medicinal products based on Cannabis are constantly increasing, therefore new methodologies to control the quality of these products are required. As a way to contribute to this field, this work presents a new methodology for this class of products.



Educação/Education

- 290 Para quê se lê na educação em química? Uma análise de publicações em periódicos de educação em ciências entre 2010 e 2021

Edjames A. Santos e Wilmo E. Francisco Junior

<http://dx.doi.org/10.21577/0100-4042.20170971>

Three main purposes for the reading in chemical education were identified from the analysis of papers published in journals of science education from 2010 to 2021.



Assuntos Gerais/General Subject

- 298 A química na literatura de Primo Levi: Aspectos filosóficos sobre experimentação, matéria e ofício químico

Rafaela Valero, Rafael C. Mori e Luciana Massi

<http://dx.doi.org/10.21577/0100-4042.20230008>

The literature of chemist Primo Levi is pervaded by philosophical considerations on experimentation, the relationship between man and matter, and chemistry as a profession.

