

Editorial/Editorial

1225 Boas Novidades em Química Nova

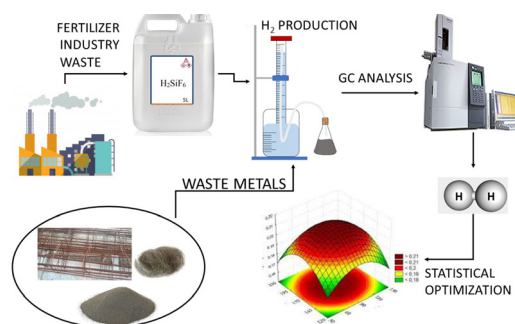
Giovanna Machado, Jorge M. David e Nelson H. Morgon

Artigos/Articles

1226 Feasibility of H_2 production by acid corrosion using H_2SiF_6 and waste Fe sources

Tatiane C. Maeda, Letícia Teixeira, Lorrane C. Caixeta, Raissa Antonelli, Camila F. Pinto, Sandra C. Dantas, Priscila P. Silva, Ana C. Granato, David M. Fernandes and Geoffroy R. P. Malpass

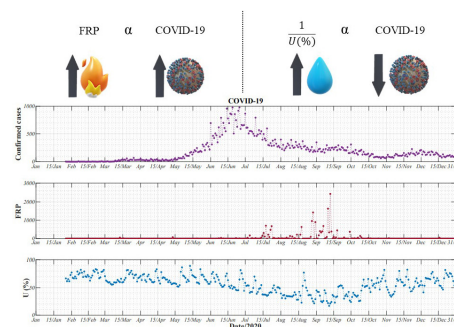
This study investigated the feasibility of H_2 production by acid corrosion, employing a by-product from the fertilizer industry (Hexafluorosilic acid - H_2SiF_6) and waste iron sources. The influence of the variables was evaluated by factorial design, verifying greater production of H_2 for materials with higher contact areas.



1236 Environmental parameters and relationships with COVID-19 cases in central South America

Thais C. Brunelli, Sophia Paiva, Angélica Y. Siqueira, Cleyton E. Santana, Luís O. Curvo, João B. Marques and Thiago R. Rodrigues

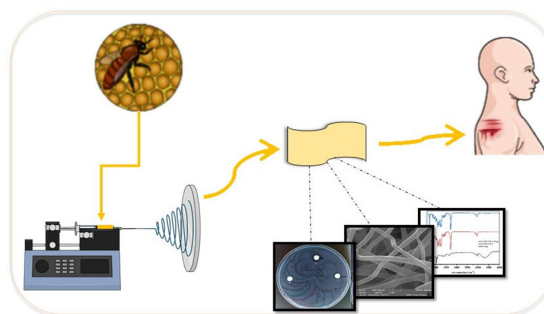
We investigated the correlation between COVID-19 and environmental parameters in central South America. Fire radiative power (FRP) influence the daily cases COVID-19. The relative humidity of the air, (U%), mitigated the COVID-19.



1245 Electrospinning PBAT (poly (butylene-adipate-co-terephthalate))/PCL (poly(ε-caprolactone) blend containing propolis for the preparation of a smart wound dressing

Heloisa G. Zanella, Ariane R. S. Rossin, Janice C. Hardt, Andressa G. Rosenberger, Juliana C. Wiggers, Josiane Caetano and Douglas C. Dragunski

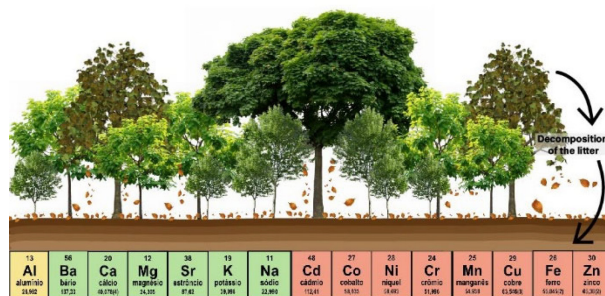
Electrospun matrices generated from electrospinning technique. These were incorporated with propolis for utilization in wound dressing.



1252 Biogeoquímica espaço-temporal da liteira em ambiente de floresta natural na Amazônia Central

Ananda G. de M. Rebêlo, M^a Terezinha F. Monteiro, Sávio J. F. Ferreira, Eduardo A. Ríos Villamizar, Êzio Sargentini Junior, Marcos A. Bolson e Sergio Duvoisin Junior

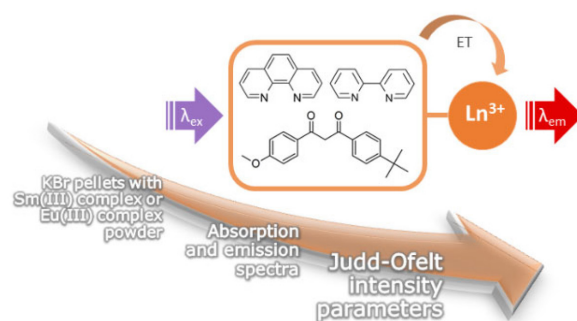
The chemical elements concentration determination in the litter is one of the parameters for assessing the vegetation quality, contributing to serve as a reference value for Amazon tropical areas.



1261 Síntese, caracterização e estudo dos parâmetros de Judd-Ofelt de compostos β -dicetonatos de Eu(III) ou Sm(III)

Maria I. X. Scapolan, Daniel H. de Oliveira, Jorge H. S. K. Monteiro, Marian R. Davolos e Renata D. Adati

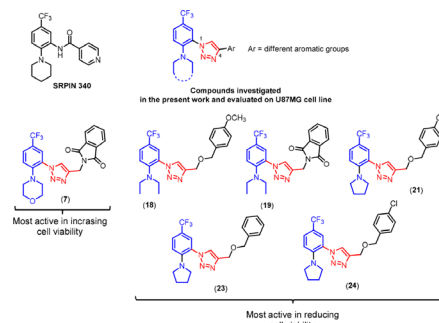
The intensity parameters were calculated using absorption and emission spectra of the Sm(III) or Eu(III) beta-diketone complexes, respectively. Highly intense luminescence from lanthanides compounds enables us to identify the correlation between symmetry environment and spectroscopic properties.



1268 Síntese de novos 1,2,3-triazóis inspirados no SRPIN340 e avaliação de seus efeitos em linhagem celular de glioblastoma humano

Sara M^a R. de Sousa, Róbson R. Teixeira, Adilson V. Costa, Alex R. de Aguiar, Victor da R. Fonseca, Valdemar Lacerda Jr., Wanderson Romão, Laser A. M. Oliveira, Iária M. L. Ribeiro, Katiane de O. P. C. Nogueira, Claudia J. do Nascimento e Jochen Junker

A series of 1,2,3-triazoles inspired on the SRPIN340 was synthesized and had their effects evaluated on human glioblastoma multiform cell line U87MG.

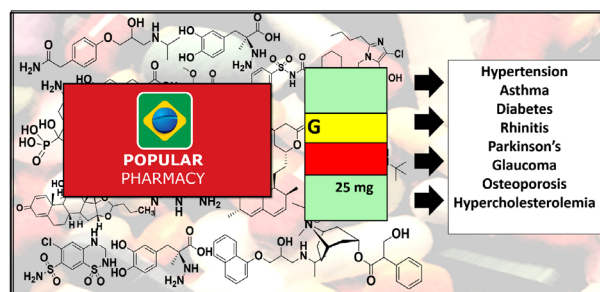


Revisão/Review

1280 A química por trás dos medicamentos distribuídos pelo programa Farmácia Popular no Brasil: rotas sintéticas, relação estrutura-atividade e perspectivas futuras

Giovanny C. dos Santos, Julia L. Rodrigues, Júlia R. de Souza, Luiz C. da Silva-Filho e Bruno H. S. T. da Silva

This paper describes the structure, mechanism of action, synthetic routes, among other parameters related to drugs intended to treat the main diseases in Brazil.



1300 Alternatives for the production of levulinic acid obtained from biomass

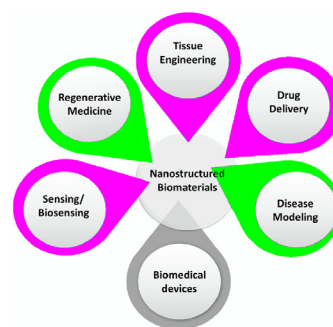
Lucas A. dos Santos, Gabrielle das V. Fraga, Danilo A. Pontes, Leila M. A. Campos, Luiz A. M. Pontes and Leonardo S. G. Teixeira



Levulinic acid is a potential building block for biorefineries to add value to biomass and reduce dependence on the world oil economy.

1311 Processamento e aplicação de biomateriais poliméricos: avanços recentes e perspectivas

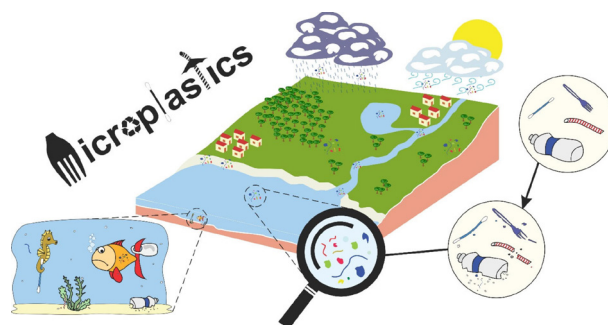
Marcela P. Bernardo, Rafaella T. Paschoalin, Danilo M. dos Santos, Stanley Bilatto, Cristiane S. Farinas, Daniel S. Correa, Osvaldo N. Oliveira Jr. e Luiz H. C. Mattoso



This paper examines the recent advances in the design materials for biomedical applications prepared via electrospinning, solution blow spinning, film preparation methods, and 3D printing techniques.

1328 Microplásticos: ocorrência ambiental e desafios analíticos

Cassiana C. Montagner, Mariana A. Dias, Eduardo M. Paiva e Cristiane Vidal

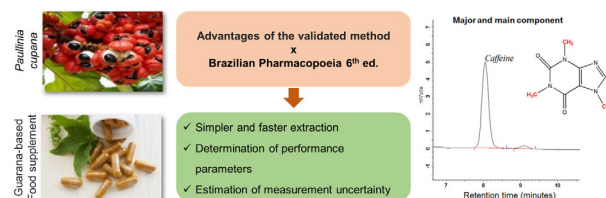


Microplastics are considered ubiquitous contaminants in the environment once they are detected in all compartments. Their characterization is a challenge to the environmental chemistry, especially for those smaller than 1 mm.

Nota Técnica/Technical Notes

1353 Development and validation of a fast and simple HPLC-UV method to determine caffeine in guarana (*Paullinia cupana*) food supplements

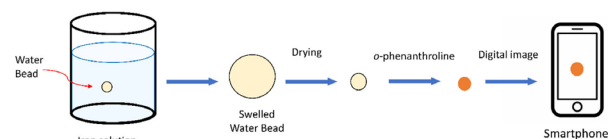
Júlia C. P. Coura, Cláudia A. de O. e Silva, Edvane S. Silva, Sara A. Valladão and M^a Gorette R. Duarte



The proposed method may be used both in health surveillance and monitoring and in quality control of food supplements, especially concerning the confirmation of caffeine content, which must be shown on the labels of products available on the market.

- 1360 Application of water beads as a novel and simple sorbent for smartphone-based colorimetric determination of iron in water

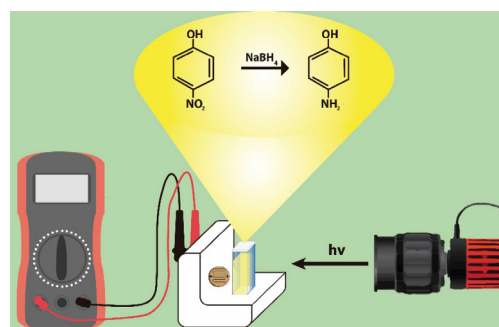
Cristina B. Adamo, Ayandra S. Junger and Dosil P. de Jesus



Commercially available water beads made of superabsorbent sodium polyacrylate can be a simple and inexpensive sorbent for iron concentration before colorimetric assay using digital images.

- 1364 Sistema de baixo custo para execução e monitoramento *on-line* de reações fotocatalíticas: aplicação em redução de nitro-fenol

Bianca S. Salvati, Sirlon F. Blaskiewicz, Patricia G. Corradini e Lucia H. Mascaro



In this technical note, an impedimetric sensor was built from low-cost materials, to monitor online a reduction reaction of an organic contaminant (4-nitrophenol) to a value-added product (4-amino-phenol).

Educação/Education

- 1369 Contribuições à formação de professores de química para atuação em espaço de educação não formal: quadro analítico como facilitador da avaliação

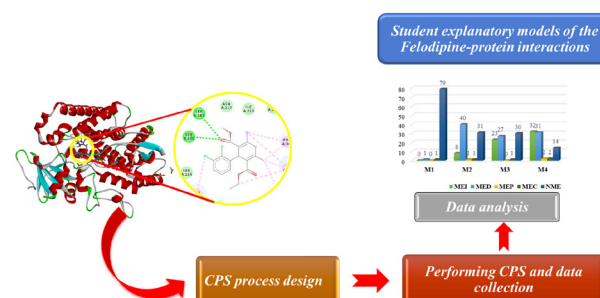
Ariane B. Lourenço, Maria E. Vizotto e Salete L. Queiroz



Teacher education in non-formal educational setting: The Scientific and Cultural Dissemination Center case.

- 1379 Promover modelos explicativos sobre las interacciones químicas del Felodipino-Citocromo P450: una propuesta didáctica basada en la modelización

Rafael Amador-Rodríguez, Daniel Insuasty, Maximiliano Méndez-López y Edgar Márquez

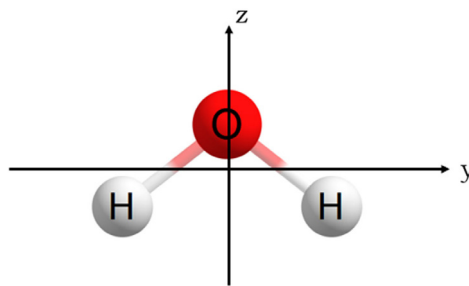


Teaching of chemistry in context and based on modeling favors the construction and reconstruction of student explanatory models.

1388 Cartesian axis and plane conventions in C_{nv} symmetry groups

Lucas A. L. Dias and Roberto B. Faria

The water molecule should be placed on the yz plane, but a survey in the literature shows that this recommendation, made by Mulliken in 1955, is not followed in many textbooks and articles. This affects the label of the asymmetric vibration and of the HOMO as B_1 or B_2 .

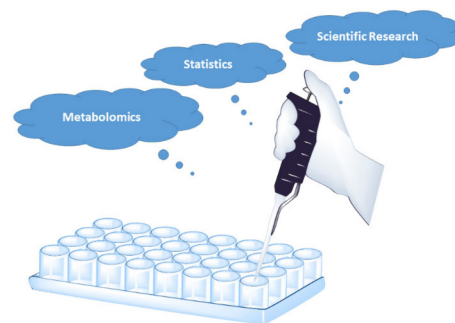


Assuntos Gerais/General Subject

1392 (Des)construindo a metabolômica em produtos naturais: um convite a discussão

Ricardo M. Borges e João V. M. Resende

Should I label this approach I'm following? Should I call it metabolomics to match others? But I've just paid more attention to on the statistics.



1395 Da fama ao ostracismo: oito reagentes que deixaram o ambiente laboratorial

Jéssica F. Paulino e Júlio C. Afonso

An example of replacing an old laboratory procedure (heterogeneous generation of H_2S) by a current one (homogeneous generation of H_2S).

