

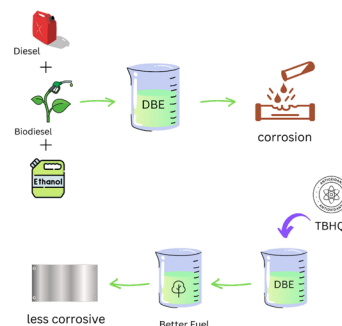
Artigos/Articles

- e-20230083 Effect of diesel-biodiesel-ethanol mixtures on corrosion rate of various metals in the presence of *tert*-butylhydroquinone (TBHQ)

Chaza Joumaa, Ibtissam Saad and Ghassan Younes

<http://dx.doi.org/10.21577/0100-4042.20230083>

Promising diesel-biodiesel-ethanol blends are great alternatives for conventional diesel, but they can be more corrosive. This paper studies the corrosiveness of these blends towards different metals and the inhibition of corrosion by TBHQ antioxidant.

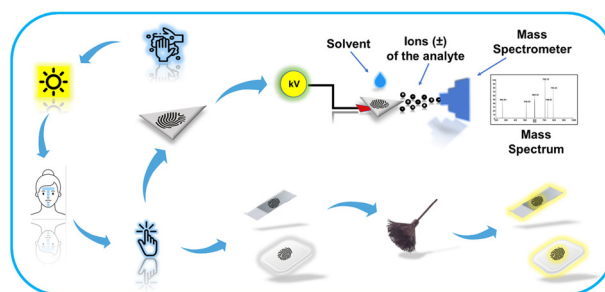


- e-20230085 Estudo de impressões digitais latentes e novos reveladores por *paper spray mass spectrometry* (PS-MS)

Francisco M. Gomes, Claudio M. P. de Pereira, Kristiane C. Mariotti, Thieres M. Pereira, Nayara A. dos Santos, Hildegardo S. França e Wanderson Romão

<http://dx.doi.org/10.21577/0100-4042.20230085>

Representation of the work stages: collection (hand hygiene, drying, and overlapping of sebaceous glands), analysis of latent fingerprints (mass spectrometry), and development (synthetic derivative of curcumin).

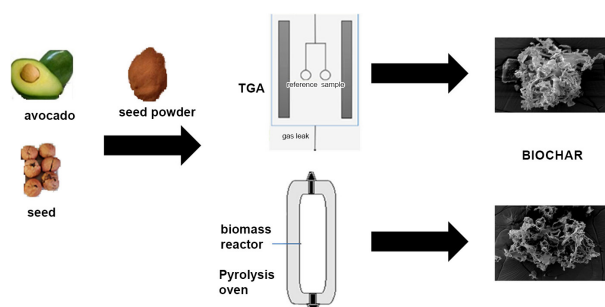


- e-20230086 Avaliação da degradação térmica do caroço de abacate residual para a produção de biocarvões

Régis B. Machado, Silvio L. P. Dias, Julio C. P. Vagheti, Geraldo B. Machado e Otávio Bianchi

<http://dx.doi.org/10.21577/0100-4042.20230086>

The thermal degradation kinetics of residual avocado seed biomass (*Persea americana*) was investigated by thermogravimetry (TGA) and at different slow pyrolysis temperatures to enable the biochar production with tunable properties.

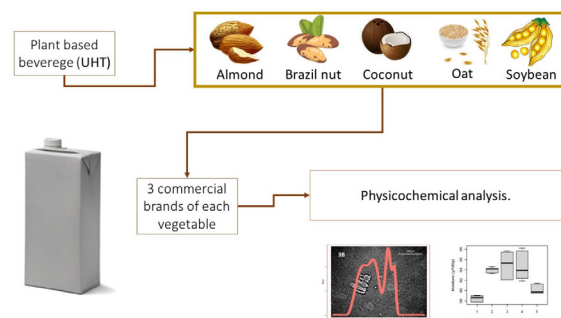


- e-20230089 Physicochemical aspects of industrial plant-based beverages

Júlia d'A. Francisquini, Ramon Altivo, Cristian C. M. Diaz, Juliana de C. da Costa, Daniela Kharfan, Rodrigo Stephani and Ítalo T. Perrone

<http://dx.doi.org/10.21577/0100-4042.20230089>

Three commercial brands of plant-based beverages (almond, Brazil nut, coconut, oat and soybean) produced by UHT treatments were chemical characterized by 14 different physical chemical analyzes.

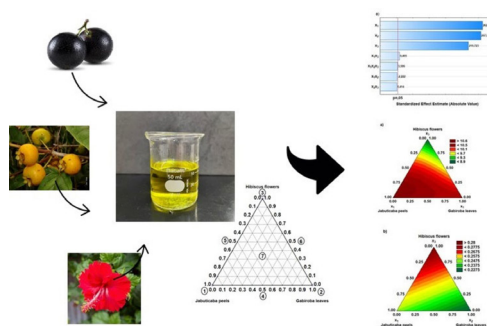


- e-20230090 Mathematical modeling of the biodiesel oxidation process in the presence of natural ethanolic extracts of jabuticaba peels, gabioba leaves, and hibiscus flowers

Isadora G. Branco, Julia W. Campos, Nathan F. Silva, Marco Aurelio J. Clemente, Ana Carolina G. Mantovani, Leticia T. Chendynski and Dionisio Borsato

<http://dx.doi.org/10.21577/0100-4042.20230090>

The natural extracts of jabuticaba peels, gabioba leaves, and hibiscus flowers with antioxidant activity were evaluated in mixture with biodiesel.



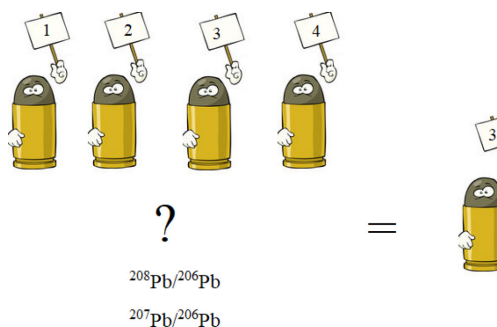
Revisão/Review

- e-20230087 Análise de fragmentos balísticos por meio de exames micro balísticos, determinação da composição química e análise isotópica do chumbo: uma revisão

Emanuella T. V. Bezerra e José M. de O. Godoy

<http://dx.doi.org/10.21577/0100-4042.20230087>

Lead isotopic composition can be applied as a tool for differentiation among bullets fragments. Association to elemental analysis improves the obtained results.

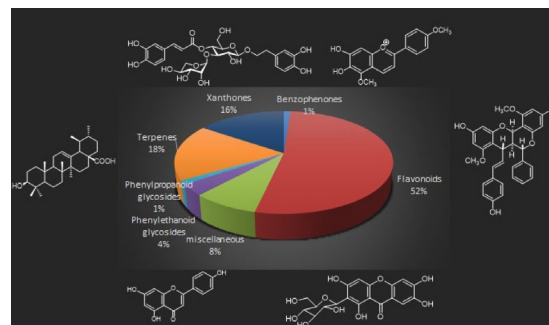


- e-20230088 O gênero *Fridericia* (Bignoniaceae): composição química e potencial biológico

Camila Y. Henrique, Osvaine J. A. Alves, Márcio L. A. e Silva, Wilson R. Cunha, Ana H. Januario e Patrícia M. Pauletti

<http://dx.doi.org/10.21577/0100-4042.20230088>

This review described the chemical structure of isolated compounds, the traditional use, and biological potential of species belonging to *Fridericia* (Bignoniaceae).



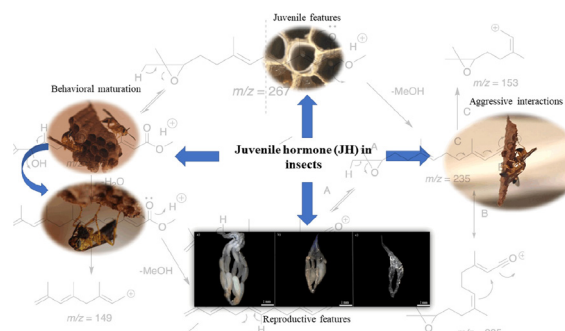
Nota Técnica/Technical Notes

- e-20230091 Juvenile hormone III: source reactions and collision-induced dissociation in ESI-MS/MS

Jacqueline N. Mendonça, Valquíria A. P. Jabor, Gabriel S. Arini, Ricardo R. da Silva, Rafael C. da Silva, Ricardo Vessicchi, Fabio S. do Nascimento and Norberto P. Lopes

<http://dx.doi.org/10.21577/0100-4042.20230091>

The study aimed to characterize the gas phase reactions that occur in the electrospray source (MS) and in the collision-induced activation cell (MS/MS) of juvenile hormone III, to support quantitative studies in chemical ecology.



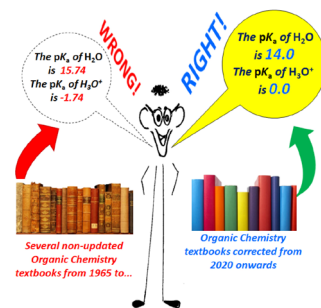
Educação/Education

e-20230093 A propagação do erro do pK_a da água nos livros de química orgânica

Leonardo Antonelli, Rodrigo De Paula e Silvio Cunha

<http://dx.doi.org/10.21577/0100-4042.20230093>

The pK_a values of H_2O and H_3O^+ present in organic chemistry textbooks currently used in Brazil are wrong. The correct values must be taught at undergraduate and graduate levels.



Assuntos Gerais/General Subject

e-20230084 O autismo no Ensino de Química brasileiro: uma reflexão
Layane L. Sabóia e Maria L. S. O. Lima

<http://dx.doi.org/10.21577/0100-4042.20230084>

This article presents a reflection about the relationship between autism and Brazilian Chemical Education. We invite the reader, particularly the teacher, to be aware of their pedagogical practices, making them inclusive of all, especially for the autistic student.

