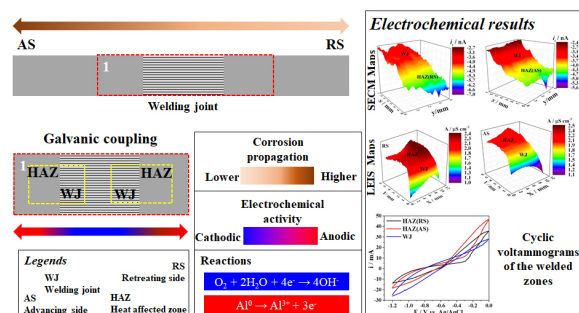


- 307 Investigação da atividade eletroquímica de liga Al-Cu-Li após processo de soldagem por fricção e mistura
Rejane M^a P. da Silva, Mariana X. Milagre, João Victor de S. Araújo, Oscar M. P. Ramirez, Caruline de S. C. Machado, Renato A. Antunes e Isolda Costa

<http://dx.doi.org/10.21577/0100-4042.20230014>

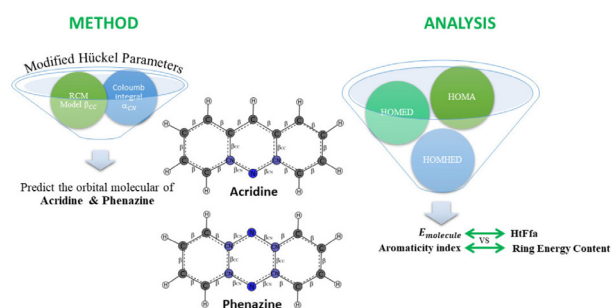
Local electrochemical activity of the zones affected by Friction Stir Welding (FSW) of an Al-Cu-Li alloy.



- 319 Aromaticity of aza aromatic molecules: prediction from Hückel theory with modified parameters
Inge M. Sutjahja, Yuanita P. D. Sudarso, Shofi Dhiya 'Ulhaq and Erik B. Yutomo

<http://dx.doi.org/10.21577/0100-4042.20230017>

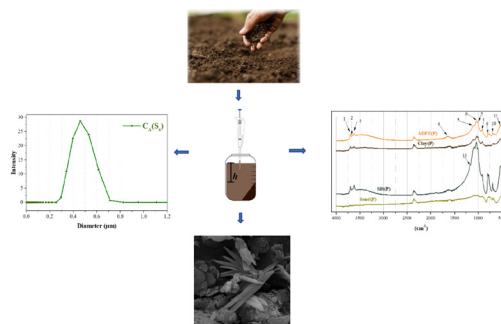
Modified Hückel parameters are proposed for acridine and phenazine. The geometric-based aromatic index is calculated to study the aromaticity of the two non-equivalent rings. The bond energies of the bond lengths are calculated and compared with the experimental heats of formation.



- 329 Quantitative and qualitative characterization of the granulometry of an Inceptisol
Janaina Schadosin, Sérgio C. Saab, André M. Brinatti and Luiz F. Pires

<http://dx.doi.org/10.21577/0100-4042.20230018>

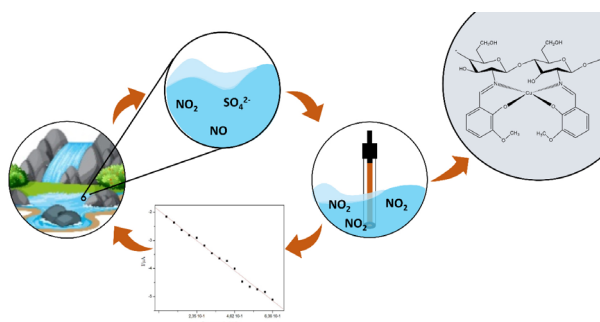
Quantitative and qualitative characterization of the granulometry of a soil and use of dynamic propagation (DLS) aiming to assess the quality of the dimension of the clay fraction.



- 336 Síntese, caracterização de uma base de Schiff de quitosana e complexos de cobre utilizadas como eletrodo modificado
Ana C. F. de B. Pontes, Talita P. de A. Pontes, Nayara G. S. Cavalcante, Francimar L. de Sousa Júnior, Francisco O. N. da Silva e Daniel de L. Pontes

<http://dx.doi.org/10.21577/0100-4042.20230019>

The present study carried out the synthesis and characterization of a coordination compound obtained from the reaction of formation of the Schiff base (chitosan/ortho-vanillin) with copper, aiming at a possible application in the identification of nitrite.

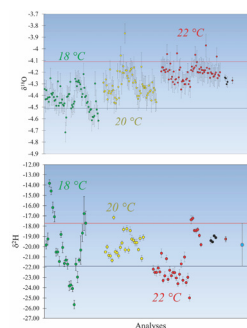


- 343 Stable isotopes of oxygen and hydrogen in water: analytical method evaluation and the determination of $\delta^{18}\text{O}$ and $\delta^2\text{H}$ on a control sample

André A. Martins, Edinei Koester, Leandro R. Rosalino, Ronaldo Bernardo and Felipe P. Leitzke

<http://dx.doi.org/10.21577/0100-4042.20230021>

The graphical abstract shows the $\delta^{18}\text{O}$ and $\delta^2\text{H}$ data acquired on a reference water sample at different ambient temperature conditions, using the equilibrium method. At 20 °C, analyses performed at the LGI control sample presented satisfactory repeatability and reproducibility.



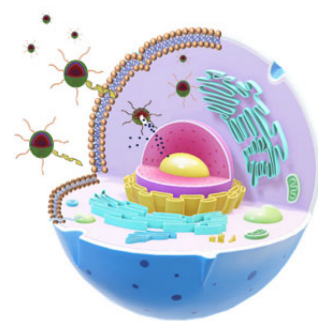
Revisão/Review

- 351 Intelligent delivery of antitumor drugs mediated by polymeric nanomicelles: a review

Raquel dos S. Martins, Adriana P. Duarte and Fernando Cotinguiba

<http://dx.doi.org/10.21577/0100-4042.20230011>

The image illustrates the targeting capacity of the ligands present on the surface of the nanocarriers and their conformational change caused by the specific chemical environment of the tumor environment, facilitating their introduction into the intracellular environment.

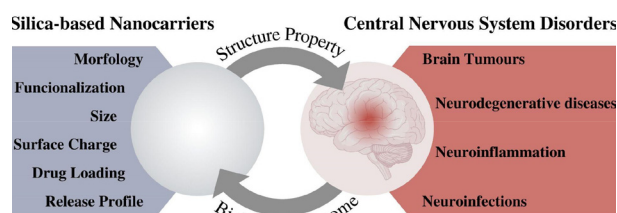


- 362 Nanopartículas de sílica (NPSiO_2) utilizadas para o tratamento de distúrbios associados ao sistema nervoso central (SNC)

João V. R. de Oliveira, Jussânia de A. Gnoatto e Tanira A. S. Aguirre

<http://dx.doi.org/10.21577/0100-4042.20230015>

Silica nanoparticles are reliable systems with advantageous physicochemical properties to the application as drug delivery systems for the treatment of neurological disorders.



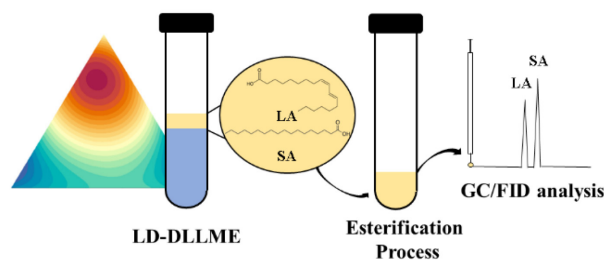
Nota Técnica/Technical Notes

- 375 Validation of an analytical method for the determination of fatty acids in sheep blood serum samples

Matheus J. F. Bazzana, Juliana Garcia, Gabriela F. Vilela, Cleber N. Borges, Letícia R. Faria, Nadja G. Alves and Adelar A. Saczk

<http://dx.doi.org/10.21577/0100-4042.20230009>

Using a chemometric mixture design and a miniaturized sample preparation technique, LA and SA were extracted from sheep blood serum samples. After an esterification process, the extract was analyzed, and the developed method was validated.

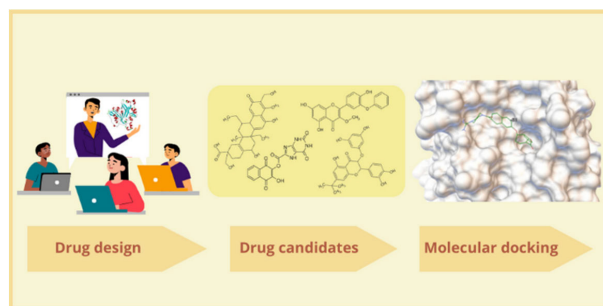


Educação/Education

- 381 Planejamento de fármacos contra COVID-19: uma experiência de ensino remoto de química farmacêutica
Rhanna V. A. da Silva, Larissa M. Monteiro, Carlos H. L. G. T. Branco e Fernanda Guilhon-Simplicio

<http://dx.doi.org/10.21577/0100-4042.20230020>

Virtual screening is a very important tool in Medicinal Chemistry and aims to optimize drug design and development. Thus, molecular *docking* is an alternative for the search for new bioactive molecules against the SARS-CoV-2.



Assuntos Gerais/General Subject

- 390 Questões regulatórias sobre a desinfecção da água e o impacto da geração de DBPs na qualidade da água tratada
Beatriz De Caroli Vizioli e Cassiana C. Montagner

<http://dx.doi.org/10.21577/0100-4042.20230029>

Urban water cycle with DBP generation in DWTPs (drinking water treatment plants) and WWTPs (wastewater treatment plants), and the trade-off between the microbiological and chemical risks.

