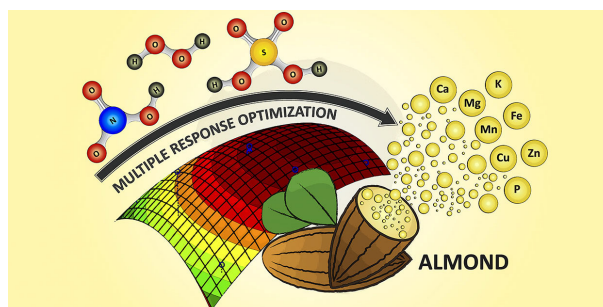


- 797 Chemometric strategy for optimization of an acid decomposition method to determine the mineral composition in almond pulp (*Terminalia catappa* Linn.)

Ana M^a P. dos Santos, Liz O. dos Santos, Lorena de S. Santos, Emmanuelle F. R. Silva, João H. Santos Neto and Geovani C. Brandão

<http://dx.doi.org/10.21577/0100-4042.20170732>

A sample decomposition procedure in digester block using HNO₃, H₂O₂ and H₂SO₄ mixture was optimized by experimental design techniques and multiple response function to determine the mineral composition of almond pulp by Inductively Coupled Plasma Optical Emission Spectrometry (ICP OES).

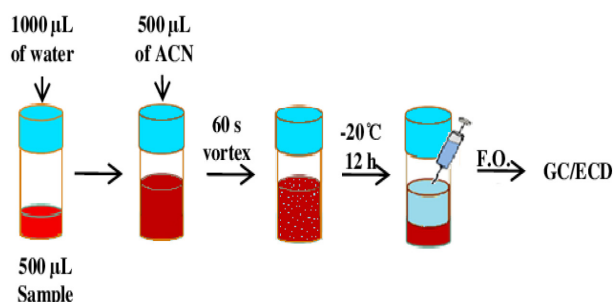


- 804 Miniaturized liquid-liquid extraction with low-temperature partitioning technique (LLE/LTP) for pesticide analysis in a biological matrix by gas chromatography

Thaís L. R. Silva, M^a Eliana L. R. de Queiroz, Antônio A. Neves, Patrícia A. F. Vieira, André F. de Oliveira and M^a Goreti de A. Oliveira

<http://dx.doi.org/10.21577/0100-4042.20170738>

Liquid-liquid microextraction with low temperature partition (LLE/LTP) and gas chromatography analysis was proposed for the determination of pesticide residues in blood serum samples in a single step, without extract cleaning step.

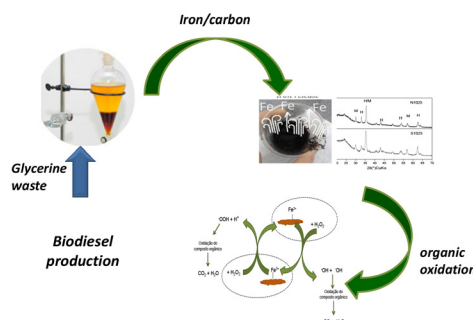


- 809 Preparação de material a base de ferro/carvão a partir de resíduo do biodiesel para aplicação na remoção de contaminantes orgânicos

Rochele F. S. Diniz, Thaís A. P. Mendonça, Raquel A. Domingues e Maráisa Gonçalves

<http://dx.doi.org/10.21577/0100-4042.20170736>

Iron/carbon-based catalysts obtained from biodiesel residues were prepared by thermal carbonization of the polymer in the presence of iron salt for application in the removal of organic contaminants.

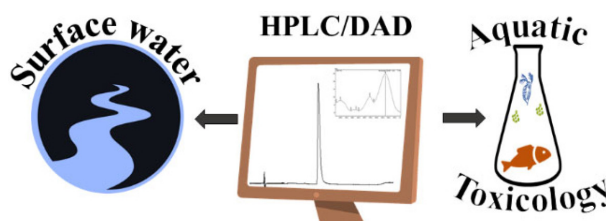


- 817 Método analítico para determinação dos corantes auramina em testes de ecotoxicidade e em águas superficiais

Carina C. J. Azevedo, Marcia K. Kasahara e Cassiana C. Montagner

<http://dx.doi.org/10.21577/0100-4042.20170740>

Development and validation of analytical method to quantify auramine dyes in ecotoxicity tests and in surface water samples in environmental levels using HPLC/DAD.

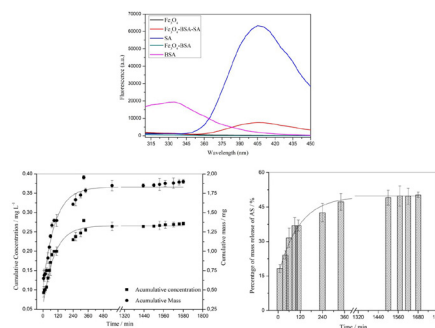


824 Salicylic acid incorporation in Fe_3O_4 -BSA nanoparticles for drug release

Renata P. Neves, Erika S. Bronze-Uhle, Pâmela L. Santos,
Paulo N. Lisboa-Filho and Aroldo G. Magdalena

<http://dx.doi.org/10.21577/0100-4042.20170733>

The incorporation of SA in the Fe_3O_4 -BSA was confirmed with the fluorescence graph, and the controlled release of SA is shown in the graph of cumulative concentration and mass and the percentage of mass release as function of time.



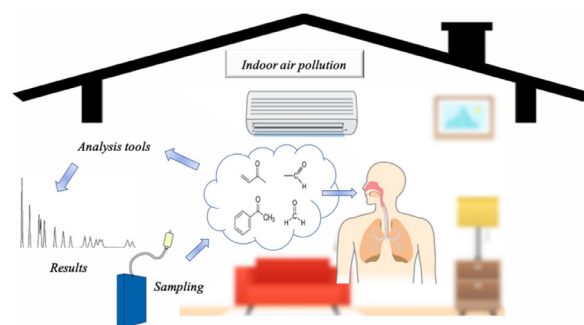
Revisão/Review

830 O estado da arte de compostos carbonílicos voláteis em ambientes internos: impactos à saúde e metodologias de amostragem e análises

Murilo de O. Souza, Hellen G. Vieira, Benigno Sánchez e
Maria C. Canela

<http://dx.doi.org/10.21577/0100-4042.20170741>

This review is about the main volatile carbonyl compounds (CC) found in indoor air, the effects and impacts of the compounds on human health, the sampling methodologies, and the most used instruments for determining these compounds.

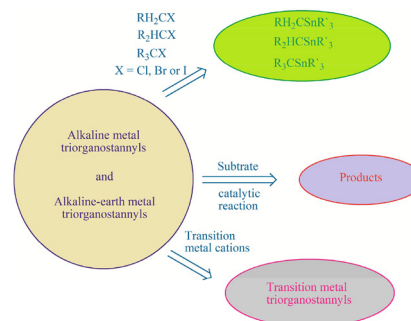


845 Compostos organometálicos de estanho (II) – estanilas de alguns metais representativos

Geraldo M. de Lima

<http://dx.doi.org/10.21577/0100-4042.20170742>

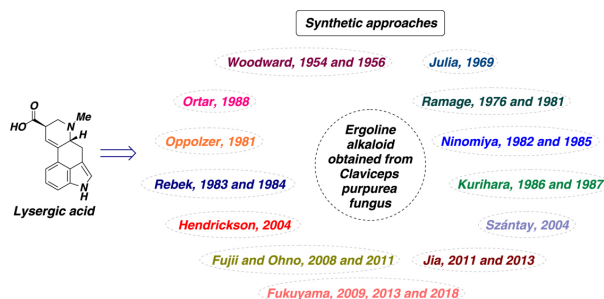
Alkaline and alkaline-earth metal triorganostannyls are important chemicals in a variety of reactions. They can be employed in the preparation of organotin compounds, as catalysts in the preparation of organic substances or in the preparation of transition metal triorganostannyls.



852 Estratégias para a síntese do ácido lisérgico

Tamiris R. C. Silva e Cristiano Raminelli

<http://dx.doi.org/10.21577/0100-4042.20170744>



We chronologically present the total and formal syntheses of lysergic acid, an ergoline alkaloid that is a precursor of substances with pronounced pharmacological properties, separating them into racemic and chiral/asymmetric syntheses.

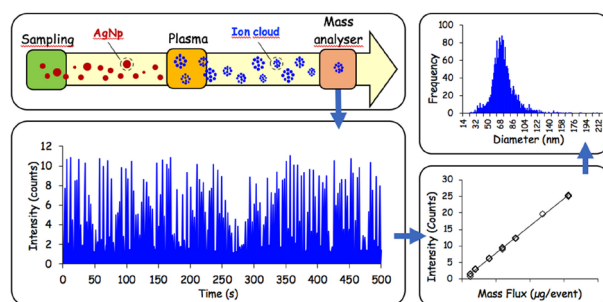
Nota Técnica/Technical Notes

868 Detecção e quantificação de nanopartículas de prata por spICP-MS

Fabio S. Bazilio, Cristiane B. Silva, Lísia M. G. dos Santos, Santos A. Vicentini Neto, Silvana do C. Jacob e Shirley de M. P. Abrantes

<http://dx.doi.org/10.21577/0100-4042.20170735>

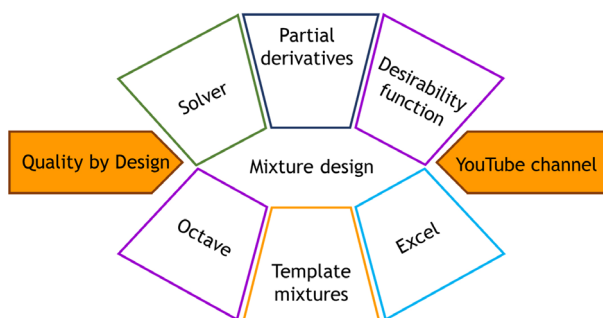
The figure represents a schematic sequence for the detection and quantification of silver nanoparticles by mass spectrometry with inductively coupled plasma performed in single particle mode (spICP-MS).



874 Planejamento de misturas e visualização da região ótima com planilhas no excel: um tutorial

Felipe F. Hilário, Jeyne P. Castro, Tomas E. Barros e Edenir R. Pereira-Filho

<http://dx.doi.org/10.21577/0100-4042.20170750>



Mixture design: identification of optimal condition.

Educação/Education

882 Uma proposta de análise das questões de química no ENADE em função do nível cognitivo de dificuldade

Márcia G. L. Silva, Fernanda M. Mazzé, Jonathan A. F. Silva, Dayana M. Souza e M^a da Guia da S. Medeiros

<http://dx.doi.org/10.21577/0100-4042.20170727>

The image seeks to relate the cognitive operations that emerge from students when carrying out activities in chemistry. From this relationship we seek to categorize in terms of cognitive level of difficulty.

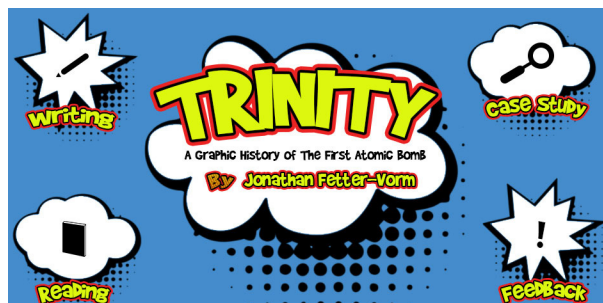


890 Aplicação de uma história em quadrinhos, Trinity, na educação em química

Guilherme B. da Silva, Carolina Sotério e Salete L. Queiroz

<http://dx.doi.org/10.21577/0100-4042.20170734>

The comic strip as an innovative teaching methodology in chemistry higher education.



- 899 Óleos essenciais e vegetais: matérias-primas para fabricação de bioprodutos nas aulas de química orgânica experimental
 Catarina M. A. Bruno e Márcia R. Almeida

<http://dx.doi.org/10.21577/0100-4042.20170722>

Use of natural raw materials of interest to the cosmetics industry for the production of bioproducts in experimental organic chemistry classes.

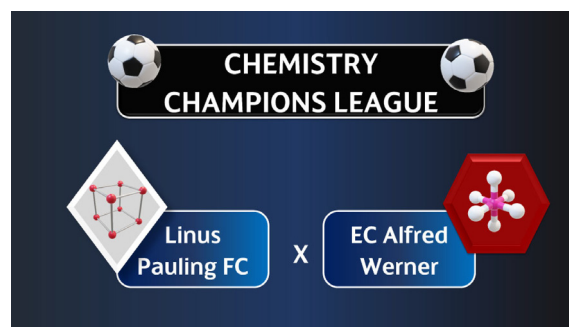


Assuntos Gerais/General Subject

- 908 Seleção que veste a camisa
 Ricardo D. Huelsmann, Lucas R. de Laia e Eduardo Carasek

<http://dx.doi.org/10.21577/0100-4042.20170729>

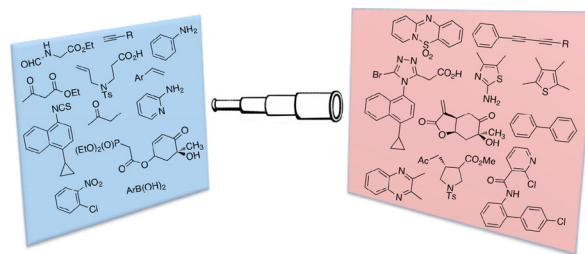
Have you ever thought of a classic by scientists, a meeting of the greatest minds that leveraged Chemistry? What if it was within the four lines of the football field? In this fun strategy, this is possible, scaling the most important chemists/scientists in history to your ideal team.



- 912 A abordagem telescópica como ferramenta da Química Verde
 Vitor S. C. de Andrade e Marcio C. S. de Mattos

<http://dx.doi.org/10.21577/0100-4042.20170731>

Representative examples of telescoped synthesis involving preparation of heterocyclic compounds, cross-coupling and continuous flow reactions.



Carta ao Editor/Letter to the Editor

- 919 Eduardo Motta Alves Peixoto (20/10/1939 – 23/07/2021).
 Idealizador e Fundador da Química Nova
 Henrique E. Toma

<http://dx.doi.org/10.21577/0100-4042.20170799>

