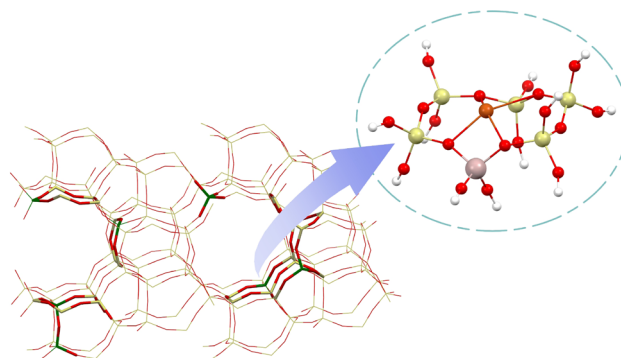




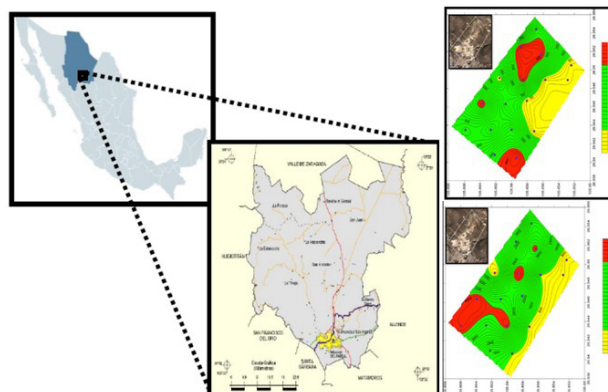
Table of Contents

Articles

- 1-13 **Cluster modeling and coordination structures of Cu⁺ ions in Al-incorporated Cu-MEL catalysts – a density functional theory study**
*Mehdi Ghambarian, Zahra Azizi, and Mohammad Ghashghae**



- 14-22 **Policy Proposal for Metals Speciation in Tailings Contaminated Soils: A Case Study in Chihuahua, Mexico**
Irma Cruz Gavilán García, Georgina Fernández Villagómez, Alejandro Menchaca Pérez, Luis Adrian Barraza Torres and Arturo Gavilán García*



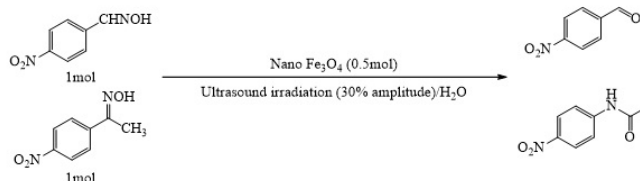
- 23-27 **General Method for Selective Mono-Boc Protection of Diamines and Thereof**
*Felipe Antonio Servín, José Alfonso Romero, Gerardo Aguirre, Douglas Grotjahn, Ratnasamy Somanathan, and Daniel Chávez**



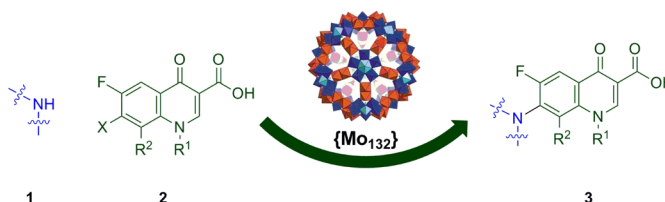
* The asterisk indicates the name of the author to whom inquiries about the paper should be addressed.

Table of Contents

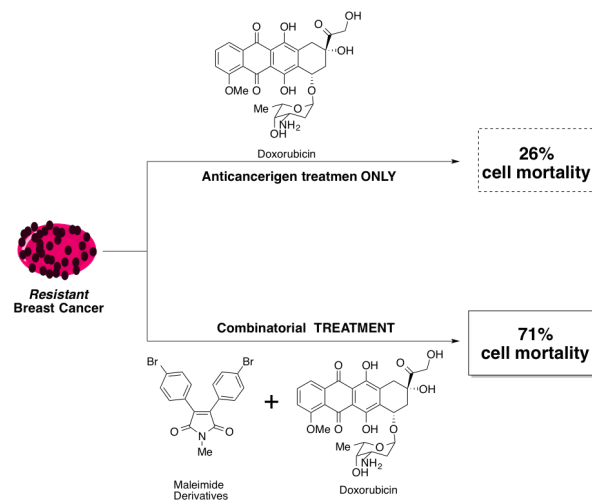
- 28-34 **Nano Fe₃O₄ as Green Catalyst for Beckmann Rearrangement under Ultrasound Irradiation**
Mostafa KarimKoshteh and Marziyeh Bagheri*



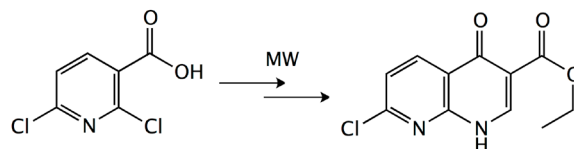
- 35-40 **Fast and Green Method to Synthesis of Quinolone Carboxylic Acid Derivatives Using Giant-Ball Nanoporous Isopolyoxomolybdate as Highly Efficient Recyclable Catalyst in Refluxing Water**
Yahya Mirzaie, Jalil Lari, Hooshang Vahedi, Mohammad Hakimi, Ahmad Nakhaei and Abdolreza Rezaeifard*



- 41-49 **Synthesis and Biological Evaluation of New 3,4-diarylmaleimides as Enhancers (modulators) of Doxorubicin Cytotoxic Activity on Cultured Tumor Cells from a Real Case of Breast Cancer**
Jessica R. Gutierrez-Cano, Pradip D. Nahide, Velayudham Ramadoss, Yuvraj Satkar, Rafael Ortiz-Alvarado, Clara Alba-Betancourt, Claudia L. Mendoza-Macias* and César R. Solorio-Alvarado**



- 50-53 **Microwave-assisted synthesis of ethyl 7-chloro-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylate by the Grohe-Heitzer reaction**
Socorro Leyva-Ramos, Elisa Leyva, Jaime Cardoso-Ortiz and Hiram Hernández-López*



- 54-59 **Transformation of Ferulic Acid and Vanillin by Isolated Placentas of *Capsicum chinense* and *Capsicum annuum***
Felipe Vázquez-Flota, Miriam Monforte-González, María de Lourdes Miranda-Ham and Lizbeth A. Castro-Concha*

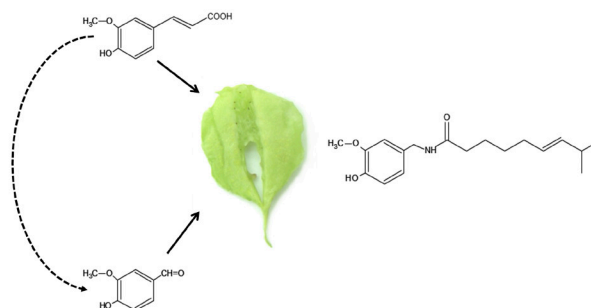
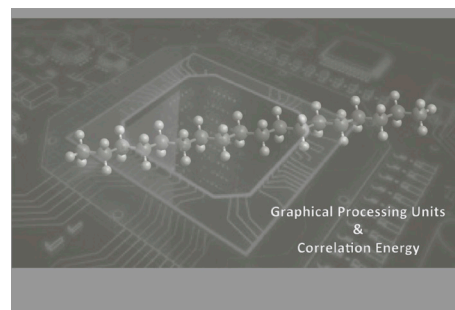


Table of Contents

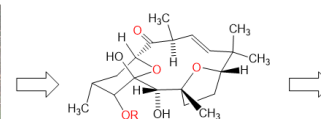
- 60-66 **GPU Algorithm for the Scaled Opposite-Spin (SOS) MP2 Energy Evaluation**
*Luis Ángel Martínez-Martínez and Carlos Amador-Bedolla**



- 67-74 **Tonantzitlolone A and other cytotoxic constituents of *Sapium macrocarpum* (Euphorbiaceae)**
*Fernando Novillo, Verónica Rosero, María Isabel Chávez, Simón Hernández-Ortega, Esteban M. Martínez and Guillermo Delgado**



Sapium macrocarpum
(Euphorbiaceae)



Tonantzitlolone A
(NMR reassignments)
and other secondary constituents

% inhibition
in human
cancer cell lines

PC-3
(36.8)
K562
(64.5)
HCT-15
(32.1)
MCF7
(38.1)