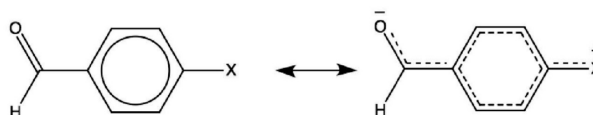


SCIENTIFIC ARTICLES

ORIGINAL SCIENTIFIC ARTICLE

Rotational Barrier and Quantification of Electron-Donating Substituent Effects: a Computational Study of *para*-Substituted Benzaldehydes

Ali Hussain Yateem



X : *e*-donating substituent

H, ---, CH<sub>3</sub>, ---, SH, ---, OCH<sub>3</sub>, ---, NHCH<sub>3</sub>, ---, O<sup>-</sup>

Rotational Barrier

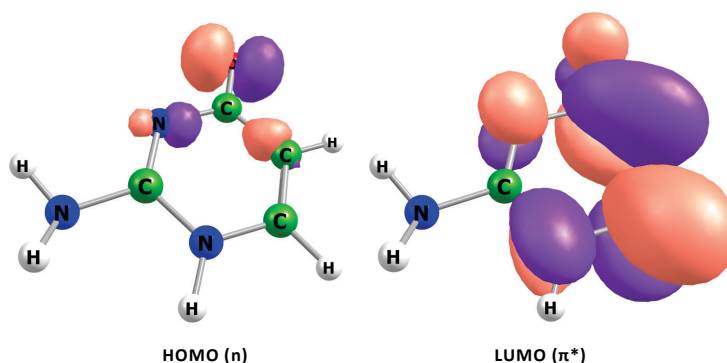
Croat. Chem. Acta 2020, 93(2), 85–95

DOI: 10.5562/cca3672

ORIGINAL SCIENTIFIC ARTICLE

Photo-induced Dissociation of the N1–H Bond in the Imino Tautomers of Isocytosine in Water Medium

Blagovest H. Dimitrov, Vassil B. Delchev



HOMO (n)

LUMO (π\*)

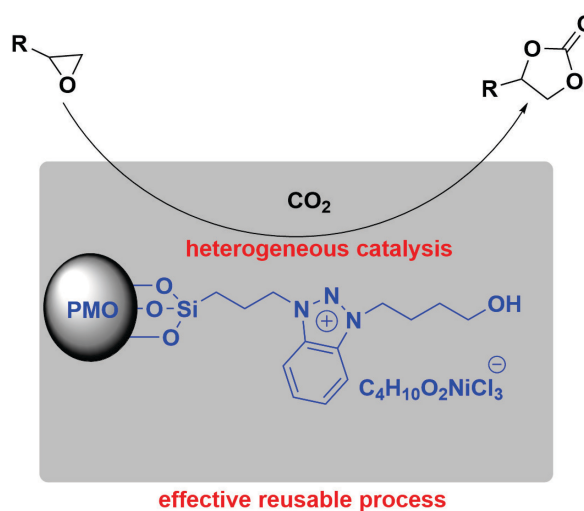
Croat. Chem. Acta 2020, 93(2), 97–104

DOI: 10.5562/cca3659

ORIGINAL SCIENTIFIC ARTICLE

Benzotriazolium Ionic Liquid Immobilized on Periodic Mesoporous Organosilica as an Effective Reusable Catalyst for Chemical Fixation of CO<sub>2</sub> into Cyclic Carbonates

Jing Rui Li, Yu Lin Hu

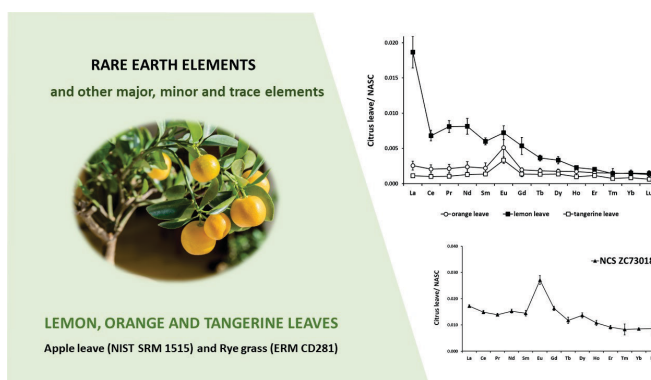


Croat. Chem. Acta 2020, 93(2), 105–110

DOI: 10.5562/cca3668

### Distribution of Rare Earth Elements in Citrus Leaves and Reference Materials (NIST SRM 1515 and ERM CD281)

Željka Fiket, Martina Furdek Turk

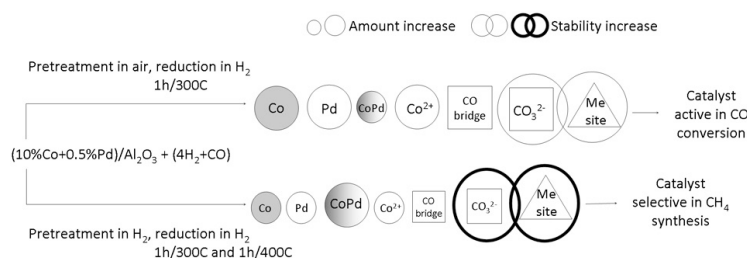


*Croat. Chem. Acta* **2020**, *93*(2), 111–120

DOI: 10.5562/cca3663

### Role of the Various Surface Sites and Species in CO Hydrogenation Over Alumina-supported Co-Pd Catalysts

Maya G. Shopska, Iskra Z. Shtereva, Hristo G. Kolev, Krasimir K. Tenchev, Silviya Z. Todorova, Georgi B. Kadinov

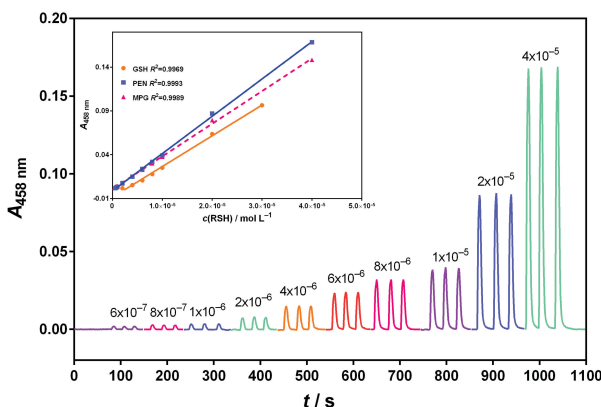


*Croat. Chem. Acta* **2020**, *93*(2), 121–131

DOI: 10.5562/cca3649

### Flow-injection Determination of Glutathione, Penicillamine and Tiopronin Based on the Reduction of Copper(II)-neocuproine Reagent

Lea Kukoc-Modun, Maja Biocic, Njegomir Radić

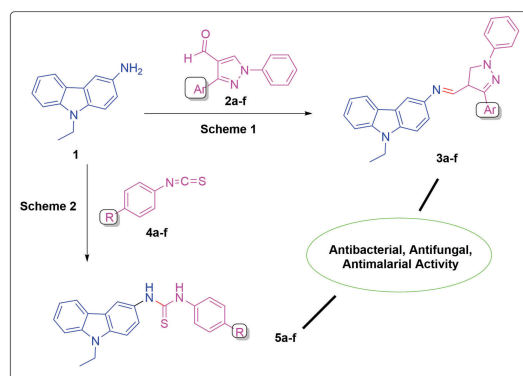


*Croat. Chem. Acta* **2020**, *93*(2), 133–138

DOI: 10.5562/cca3688

### Synthesis and Biological Assessment of Carbazole Linked Pyrazole Schiff bases and Diarylthiourea Derivatives

Gopinath D. Shirole, Gajanan R. Pandhare, Anil G. Gadhave, Bhagawat K. Uphade, Dilip S. Aute, Vijay A. Kadnor

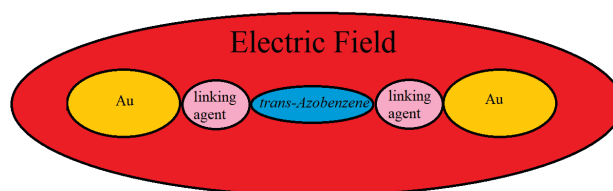


*Croat. Chem. Acta* **2020**, *93*(2), 139–146

DOI: 10.5562/cca3700

## A DFT Study on the Efficacy of Linking Agents (Sulfur and Nitrogen) to Connect Trans-azobenzene Sandwiched Between Two Gold Electrodes

C. Karthika, R. Praveena, S. Ramachandran, K. Sadasivam, G. Salgado, P. Muñoz, L. Gerli, L. H. Mendoza-Huizar



*Croat. Chem. Acta* **2020**, 93(2), 147–155

DOI: 10.5562/cca3695

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CONFERENCE NEWS

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Predrag Novak

*Croat. Chem. Acta* **2020**, 93(2), 157–158

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