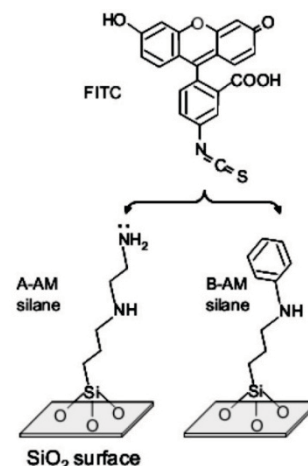


SCIENTIFIC ARTICLES

SHORT REVIEW

**Determination of Au Film Thiolation and Silane Bonding Onto SiO<sub>2</sub> Films Within the Frame of Biosensor Surface Functionalization – an Analysis of Best Practices and Techniques**

Leda G. Bousiakou, Stefanos Karapetis



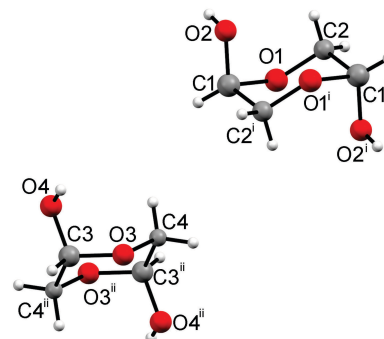
Croat. Chem. Acta 2020, 93(1), 1–14

DOI: 10.5562/cca3640

ORIGINAL SCIENTIFIC ARTICLE

**Structural Characterization of β-Glycolaldehyde Dimer**

Vlasta Mohaček-Grošev, Biserka Prugovečki, Stjepan Prugovečki



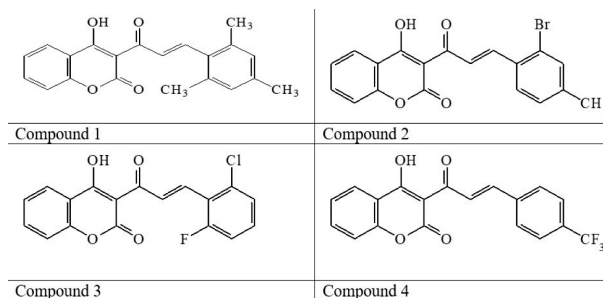
Croat. Chem. Acta 2020, 93(1), 15–22

DOI: 10.5562/cca3606

ORIGINAL SCIENTIFIC ARTICLE

**Synthesis, Microbiological Activity and *In Silico* Investigation for Some Synthesized Coumarin Derivatives**

Selma Špirtović-Halilović, Elma Veljović, Mirsada Salihović, Amar Osmanović, Aida Šapčanin, Dženita Softić, Sunčica Roca, Snežana Trifunović, Nihada Škrijelj, Selma Škrbo, Aida Selmanagić, Davorka Završnik



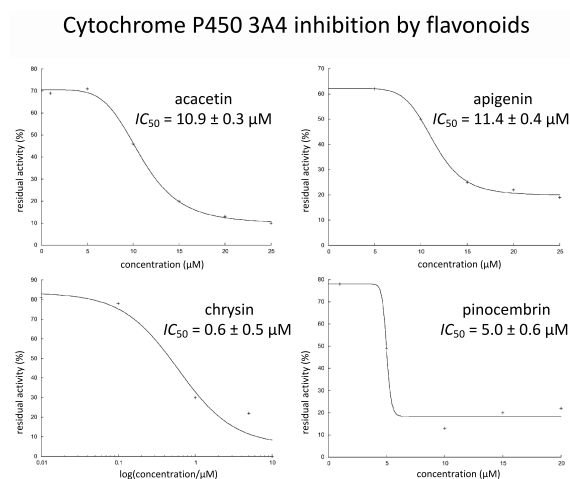
Croat. Chem. Acta 2020, 93(1), 23–31

DOI: 10.5562/cca3637

### Inhibitory Effect of Acacetin, Apigenin, Chrysin and Pinocembrin on Human Cytochrome P450 3A4

Martin Kondža, Hrvoje Rimac, Željko Maleš, Petra Turčić, Ivan Čavar, Mirza Bojić

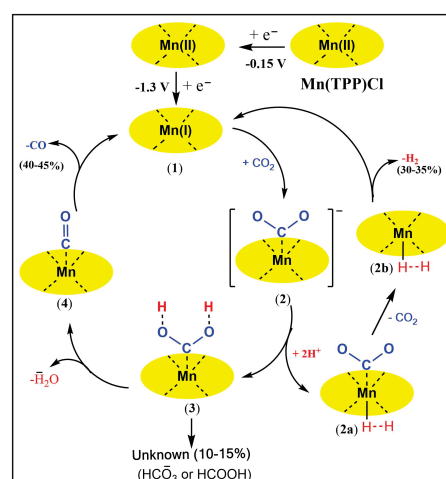
*Croat. Chem. Acta* **2020**, *93*(1), 33–39  
DOI: 10.5562/cca3652



### Mn(III) Catalyzed Electrochemical Reduction of CO<sub>2</sub> on Carbon Electrodes

Khalaf M. Alenezi

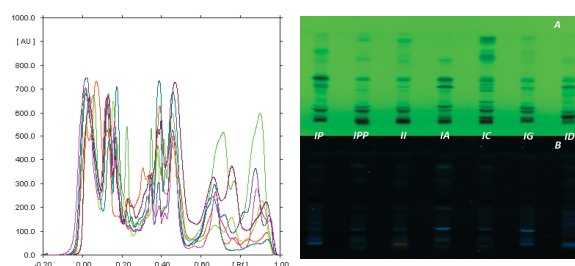
*Croat. Chem. Acta* **2020**, *93*(1), 41–47  
DOI: 10.5562/cca3614



### Chemical Fingerprinting, Total Phenolics and Antioxidant Activity of Some *Iris* Taxa

Ivan Duka, Željko Maleš, Mirza Bojić, Dario Hruševar, Božena Mitić

*Croat. Chem. Acta* **2020**, *93*(1), 49–56  
DOI: 10.5562/cca3673



### HPLC Analysis of Citric and Tartaric Acids in Fruit Nectars and Juices

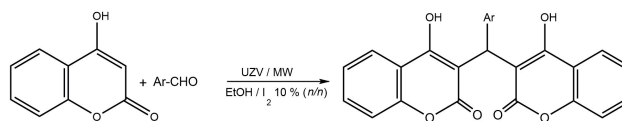
Suzana Inić, Maja Ljepović, Ana-Marija Domijan, Sabina Steiner Srdarević, Jasna Jablan, Ksenija Markov

*Croat. Chem. Acta* **2020**, *93*(1), 57–62  
DOI: 10.5562/cca3662



### Green Chemistry Approach to the Synthesis of Biscoumarins from 4-Hydroxycoumarin

Mirjana Lončar, Marija Kovač, Maja Molnar

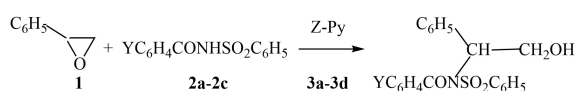


*Croat. Chem. Acta* **2020**, *93*(1), 63–66

DOI: 10.5562/cca3643

### Non-additive Effects of Structural Factors in Pyridine Catalyzed Reactions of Phenylloxirane with *N*-arylsulfonamides

Igor Shpan'ko, Irina Sadovaya



Y = 4-Me (**2a**), H (**2b**), 4-NO<sub>2</sub> (**2c**); Z = 4-Et (**3a**), H (**3b**), 3-COOEt (**3c**), 4-CN (**3d**)

$$\log k_{YZ} = -5.20 + 1.20\sigma_Y - 0.89\sigma_Z + 0.47\sigma_Y\sigma_Z$$

$$\sigma_Y^{\text{IP}} = 1.89 \quad \sigma_Z^{\text{IP}} = -2.55$$

*Croat. Chem. Acta* **2020**, *93*(1), 67–71

DOI: 10.5562/cca3658

## OTHER PAPERS

### Vitomir Šunjić and Krunoslav Kovačević Organic Stereochemistry in Croatia and Prelog School

Mladen Žinić



*Croat. Chem. Acta* **2020**, *93*(1), 73–76

DOI: 10.5562/cca3666

### A diverse view of science to catalyse change

C. A. Urbina-Blanco, S. Z. Jilani, I. R. Speight, M. J. Bojdys, T. Friščić, J. Fraser Stoddart, T. L. Nelson, J. Mack, R. A. S. Robinson, E. A. Waddell, J. L. Lutkenhaus, M. Godfrey, M. I. Abboud, S. O. Aderinto, D. Aderohunmu, L. Bibič, J. Borges, V. M. Dong, L. Ferrins, F. Man Fung, T. John, F. P. L. Lim, S. L. Masters, D. Mambwe, P. Thordarson, M.-M. Titirici, G. D. Tormet-González, M. M. Unterlass, A. Wadle, V. W.-W. Yam, Y. Wei Yang



*Croat. Chem. Acta* **2020**, *93*(1), 77–81

DOI: 10.5562/diversity2020

### In Memoriam: Josip Kratochvil (1928 – 2020)

Vlasta Pinkston

*Croat. Chem. Acta* **2020**, *93*(1), 83