

Списък с публикации на доц. д-р Свилен Пламенов Симеонов

Общ брой публикации 38, подредени хронологично. Публикации 28, 31-33 и 38 (отбелязани с **B**) са представени за участие в конкурса за академичната степен „професор”, по показател В. Публикации 22-27, 29,30, 34-37 (отбелязани с **Г**) са представени за участие в конкурса за академичната степен „професор”, по показател Г.

- 1) Simeonov, S.; Kurteva, V.; Bontchev, R. One-pot solvent-free synthesis of symmetrical azines under microwave irradiation. *Bul. Chem. Comm.*, **2008**, 40, 409-417.
- 2) Antonov, L.; Deneva, V.; Simeonov, S.; Kurteva, V.; Nedeltcheva, D.; Wirz, J. Exploiting tautomerism for switching and signaling. *Angew. Chem.*, **2009**, 48, 7875-7878.
- 3) Simeonov, S.; Simeonov A.; Todorov A.; Kurteva, V. Enantioresolution of a series of chiral benzyl alcohols by hplc on a dinitrobenzoylphenylglycine stationary phase after achiral pre-column derivatization, *American Journal of Analytical Chemistry*, **2010**, 1, 1-3.
- 4) Kurteva V.; Simeonov S.; Stoilova-Disheva M. Symmetrical acyclic aryl aldazines with antibacterial and antifungal activity, *Pharmacology&Pharmacy*, **2010**, 2, 63-71.
- 5) Antonov, L.; Kurteva, V.; Simeonov, S.; Deneva, V.; Crochet, A.; Fromm, K. Tautocrowns: a concept for a sensing molecule with an active side-arm. *Tetrahedron*, **2010**, 66, 4292-4297.
- 6) Rosatella, A.; Simeonov, S.; Frade, R.; Afonso, C. 5-Hydroxymethylfurfural (HMF) as a building block platform: Biological properties, synthesis and synthetic applications. *Green Chem.*, **2011**, 13, 754-793.
- 7) Albo, J.; Santos, E.; Neves, L. A.; Simeonov, S.; Afonso, C.; Crespo, J.; Irabien, A. Separation performance of CO₂ through supported magnetic ionic liquid membranes (SMILMs). *Sep. Purif. Technol.*, **2012**, 97, 26-33.
- 8) Simeonov, S.; Coelho, J.; Afonso, C. An integrated approach for the production and isolation of 5-hydroxymethylfurfural from carbohydrates. *ChemSusChem*, **2012**, 5, 1388-1391.
- 9) Ahmedova, A.; Simeonov, S.; Kurteva, V.; Antonov, L. Tautomerism of 4,4'-dihydroxy-1,1'-naphthaldazine studied by experimental and theoretical methods. *Chem. Cent. J.*, **2013**, 7.
- 10) De Pedro, I.; García-Saiz, A.; González, J.; Ruiz De Larramendi, I.; Rojo, T.; Afonso, C.; Simeonov, S.; Waerenborgh, J.; Blanco, J.; Ramajo, B.; Fernández, J. Magnetic ionic plastic crystal: Choline[FeCl₄]. *Phys. Chem. Chem. Phys.*, **2013**, 15, 12724-12733.
- 11) Frade, R.; Simeonov, S.; Rosatella, A.; Siopa, F.; Afonso, C. Toxicological evaluation of magnetic ionic liquids in human cell lines. *Chemosphere*, **2013**, 92, 100-105.
- 12) Simeonov, S.; Afonso, C. Batch and flow synthesis of 5-hydroxymethylfurfural (HMF) from fructose as a bioplatfrom intermediate: An experiment for the organic or analytical laboratory. *J. Chem. Educ.*, **2013**, 90, 1373-1375.

- 13) Simeonov, S.; Coelho, J.; Afonso, C. Integrated chemo-enzymatic production of 5-hydroxymethylfurfural from glucose. *ChemSusChem*, **2013**, *6*, 997-1000.
- 14) Subbiah, S.; Simeonov, S.; Esperança, J.; Rebelo, L.; Afonso, C. Direct transformation of 5-hydroxymethylfurfural to the building blocks 2,5-dihydroxymethylfurfural (DHMF) and 5-hydroxymethyl furanoic acid (HMFA) via Cannizzaro reaction. *Green Chem.*, **2013**, *15*, 2849-2853.
- 15) Zakrzewska, M.; Rosatella, A.; Simeonov, S.; Afonso, C.; Najdanovic-Visak, V.; Nunes da Ponte, M. Solubility of carbon dioxide in ammonium based CO₂-induced ionic liquids. *Fluid Ph. Equilibria*, **2013**, *354*, 19-23.
- 16) Frade, R.; Coelho, J.; Simeonov, S.; Afonso, C. An emerging platform from renewable resources: Selection guidelines for human exposure of furfural-related compounds. *Toxicol. Res.*, **2014**, *3*, 311-314.
- 17) Martins, A.; Simeonov, S.; Frija, L.; Viveiros, R.; Lourenço, A.; Silva, M.; Casimiro, T.; Afonso, C. Isolation, analytical quantification and seasonal variation of labdanolic acid from the Portuguese-grown *Cistus ladaniferus*. *Ind. Crops Prod.*, **2014**, *60*, 226-232.
- 18) Antonov, L.; Deneva, V.; Simeonov, S.; Kurteva, V.; Crochet, A.; Fromm, K. M.; Shivachev, B.; Nikolova, R.; Savarese, M.; Adamo, C. Controlled tautomeric switching in azonaphthols tuned by substituents on the phenyl ring. *ChemPhysChem*, **2015**, *16*, 649-657.
- 19) Simeonov, S.; Afonso, C. Basicity and stability of urea deep eutectic mixtures. *RSC Adv.*, **2016**, *6*, 5485-5490.
- 20) Simeonov, S.; Coelho, J.; Afonso, C. Synthesis of 5-(Hydroxymethyl)furfural (HMF). *Organic Syntheses*, **2016**, *93*, 29-36.
- 21) Simeonov, S. P.; Nunes, J. P. M.; Guerra, K.; Kurteva, V. B.; Afonso, C. A. M. Synthesis of chiral cyclopentenones. *Chem. Rev.*, **2016**, *116*, 5744-5893.
- Γ 22) Gawali, V.; Simeonov, S.; Drescher, M.; Knott, T.; Scheel, O.; Kudolo, J.; Kählig, H.; Hohenegg, U.; Roller, A.; Todt, H.; Maulide, N. C₂-modified sparteine derivatives are a new class of potentially long-acting sodium channel blockers. *ChemMedChem*, **2017**, *12*, 1819-1822.
- Γ 23) Ravasco, J.; Coelho, J.; Simeonov, S.; Afonso, C. bifunctional Cr³⁺ modified ion exchange resins as efficient reusable catalysts for the production and isolation of 5-hydroxymethylfurfural from glucose. *RSC Adv.*, **2017**, *7*, 7555-7559.
- Γ 24) Simeonov, S.; Simova, S.; Shivachev, B.; Nikolova, R.; Kurteva, V. Solution and solid state characterization of “sparteine surrogate” (+)-(1R,5S,11aS)-tetrahydrodeoxocytisine. *Bul. Chem. Comm.*, **2017**, *49*, 103-110.
- Γ 25) Vicente, A.; Coelho, J.; Simeonov, S.; Lazarova, H.; Popova, M.; Afonso, C. Oxidation of 5-Chloromethylfurfural (CMF) to 2,5-Diformylfuran (DFF). *Molecules* **2017**, *22*, art. No 329.
- Γ 26) Candeias, N.; Assoah, B.; Simeonov, S. Production and synthetic modifications of shikimic acid. *Chem. Rev.*, **2018**, *118*, 10458-10550.

- Γ 27) Cavaca, L.; Rodrigues, C.; Simeonov, S.; Gomes, R.; Coelho, J.; Romanelli, G.; Sathicq, A.; Martínez, J.; Afonso, C. Valorization of oleuropein via tunable acid-promoted methanolysis. *ChemSusChem*, **2018**, *11*, 2300-2305.
- B 28) Gomes, R.; Mitrev, Y.; Simeonov, S.; Afonso, C. Going beyond the limits of the biorenewable platform: Sodium dithionite-promoted stabilization of 5-hydroxymethylfurfural. *ChemSusChem*, **2018**, *11*, 1612-1616.
- Γ 29) Stanev, N.; Bordado, J.; Afonso, C.; Simeonov, S. Solvent-free catalytic self-etherification of 5-hydroxymethyl furfural. *ChemCatChem*, **2018**, *10*, 5406-5409.
- Γ 30) Pardo Cuervo, O.; Simeonov, S.; Peixoto, A.; Popova, M.; Lazarova, H.; Romanelli, G.; Martínez, J.; Freire, C.; Afonso, C. Efficient continuous production of the biofuel additive 5-(t-butoxymethyl) furfural from 5-hydroxymethylfurfural. *Energy Technology* **2019**, *7*, art. No 1900780.
- B 31) Ravasco, J.; Monteiro, C.; Siopa, F.; Trindade, A.; Oble, J.; Poli, G.; Simeonov, S.; Afonso, C. Creating diversity from biomass: A tandem bio/metal-catalysis towards chemoselective synthesis of densely substituted furans. *ChemSusChem*, **2019**, *12*, 4629-4635.
- B 32) Simeonov, S.; Ravutsov, M.; Mihovilovic, M. Biorefinery via achmatowicz rearrangement: Synthesis of pentane-1,2,5-triol from furfuryl alcohol. *ChemSusChem*, **2019**, *12*, 2748-2754.
- B 33) Simeonov, S.; Lazarova, H.; Marinova, M.; Popova, M. Achmatowicz rearrangement enables hydrogenolysis-free gas-phase synthesis of pentane-1,2,5-triol from furfuryl alcohol. *Green Chem.* **2019**, *21*, 5657-5664.
- Γ 34) Ravutsov, M.; Mitrev, Y.; Shestakova, P.; Lazarova, H.; Simeonov, S.; Popova, M. CO₂ adsorption on modified mesoporous silicas: The role of the adsorption sites. *Nanomaterials*, **2021**, *11*, art. No 2831.
- Γ 35) Fernández-Figueiras, A.; Ravutsov, M.; Simeonov, S. Site-selective C–H functionalization of arenes enabled by noncovalent interactions. *ACS Omega*, **2022**, *7*, 6439-6448.
- Γ 36) Kamenova, K.; Radeva, L.; Yoncheva, K.; Ublekov, F.; Ravutsov, M.; Marinova, M.; Simeonov, S.; Forys, A.; Trzebicka, B.; Petrov, P. Functional nanogel from natural substances for delivery of doxorubicin. *Polymers*, **2022**, *14*, art. No 3694.
- Γ 37) Slavchev, I.; Ward, J.; Rissanen, K.; Dobrikov, G.; Simeonov, S. Base-promoted direct amidation of esters: Beyond the current scope and practical applications. *RSC Adv.*, **2022**, *12*, 20555-20562.
- B 38) Dangalov, M.; Fernández-Figueiras, A.; Ravutsov, M.; Vakarelska, E.; Marinova, M.; Candeias, N.; Simeonov, S. Ru-catalyzed isomerization of Achmatowicz derivatives: a sustainable route to biorenewables and bioactive lactones, *ACS catal.*, Accepted, 10.1021/acscatal.2c04867