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Publication list in CDI activity

Articles/studies:

1. **O. Grad**, G. Blanita, M. D. Lazar, M. Mihet, "Methanation of CO₂ using MIL-53 based catalysts: Ni/MIL-53-Al₂O₃ versus Ni/MIL-53" *Catalysts* **2021**, 11(11), 1412.
2. **O. Grad**, M. Mihet, M. Coros, M. Dan, M. D. Lazar, G. Blanita, "Reduced graphene oxide modified with noble metal nanoparticles for formic acid dehydrogenation" *Catalysis Today* **2021**, 366, 41-47.
3. **O. Grad**, M. Mihet, G. Blanita, M. Dan, M. D. Lazar, "MIL-101-Al₂O₃ as catalytic support in the methanation of CO₂ – Comparative study between Ni/MIL-101 and Ni/MIL-101-Al₂O₃ catalysts" *Catalysis Today* **2021**, 366, 114-122.
4. A. Celeste, A. Paolone, J-P. Itie, F. Borondics, B. Joseph, **O. Grad**, G. Blanita, C. Zlotea, F. Capitani, "Mesoporous metal-organic framework MIL-101 at high pressure" *Journal of the American Chemical Society* **2020**, 142(35), 15012-15019.
5. M. Streza, **O. Grad**, D. Lazar, M. Depriester, S. Longuemart, A.H. Sahraoui, G. Blanita, D. Lupu, "Hybrid MOFs-graphene composites: Correlation between thermal transport and kinetics hydrogen adsorption" *International Journal of Heat and Mass Transfer* **2019**, 143, 118539.
6. M. Mihet, **O. Grad**, G. Blanita, T. Radu, M. D. Lazar, "Effective encapsulation of Ni nanoparticles in metal-organic frameworks and their application for CO₂ methanation" *International Journal of Hydrogen Energy* **2019**, 44(26), 13383-13396.
7. **O. Grad**, M. Mihet, M. Dan, G. Blanita, T. Radu, C. Berghian-Grosan, M. D. Lazar, "Au/reduced graphene oxide composites: eco-friendly preparation method and catalytic applications for formic acid dehydrogenation" *J. Mater. Sci.* **2019**, 54(9), 6991-7004.
8. **O. Moldovan**, K. Albert, I. Nagy, C. Morar, C. Sacalis, M. Darabantu, "Novel N-modified glycines on a (1S,2S)-2-amino-1-(4-nitrophenyl)propane-1,3-diol skeleton: 1,3-dioxanes and tripodands" *Tetrahedron Letters* **2016**, 57(51), 5808-5811.
9. I. Nagy, **O. Moldovan***, F. Popa, P. Lameiras, C. Morar, C. Sacalis, M. Darabantu, "Synthesis of Some Selectively N-Protected (1S,2S)-p-Nitrophenylserinol-Based Diamino-1,3-dioxanes and Tripodands" *Synthetic Communications*, **2015**, 45(20), 2319-2330.
10. **O. Moldovan**, I. Nagy, P. Lameiras, C. Antheaume, C. Sacalis, M. Darabantu, "Design, iterative synthesis and structure of novel optically active trispiro-dendritic melamines incorporating 'open-chain' versus 'closed-chain' serinolic peripheral units" *Tetrahedron Asymmetry*, **2015**, 26(14), 683-701.
11. C. Morar, C. Sacalis, P. Lameiras, A. Soran, H. Khartabil, C. Antheaume, I. Bratu, **O. Moldovan**, M. Darabantu, "Synthesis and stereochemistry of new 1,3-thiazolidine systems based on 2-amino-2-(mercaptomethyl)propane-1,3-diol: 4,4-bis(hydroxymethyl)-1,3-thiazolidines and c-5-hydroxymethyl-3-oxa-7-thia-r-1-azabicyclo[3.3.0]octanes" *Tetrahedron* **2013**, 69(47), 9966-9985.
12. C. Denneval, **O. Moldovan**, C. Baudequin, S. Achelle, P. Baldeck, N. Plé, M. Darabantu and Y. Ramondenc, "Synthesis and photophysical properties of push-pull structures incorporating diazines as attracting part and fluorene core" *Eur. J. Org. Chem.* **2013**, 25, 5591-5602.

13. **O. Moldovan**, P. Lameiras, I. Nagy, T. Opruta, F. Popa, C. Antheaume, Y. Ramondenc, M. Darabantu, "Stereochemistry of Six-membered Spiranes Arising from the First Use of a Diaza-trispiro-heneicosane Motif in the Synthesis of a G-1 Dendritic Melamine" *Tetrahedron* **2013**, 69(4), 2199–2213.
14. C. Morar, C. Sacalis, P. Lameiras, I. Bratu, **O. Moldovan**, Y. Ramondenc and M. Darabantu, "Novel 1,3-Thiazolidines. Synthesis of 2-Aryl-4,4-Bis(Hydroxymethyl)-1,3-Thiazolidines by Direct Thioaminalisation" *Stud. U. Babeş-Bolyai. Chem.* **2012**, LVII, 4, 145-156.
15. F. Popa, P. Lameiras, **O. Moldovan**, M. Tomoaia-Cotisel, E. Henon, A. Martinez, C. Sacalis, A. Mocanu, Y. Ramondenc, M. Darabantu, "Design, Synthesis and Structure of New Dendritic Melamines. First Use of a Tandem C-2-Substituted Serinol-O,O-Masked 4-Piperidone as a Peripheral Unit in Iterative Synthesis" *Tetrahedron* **2012**, 68(43), 8945-8967.
16. **O. Moldovan**, P. Lameiras, E. Henon, F. Popa, A. Martinez, D. Harakat, C. Sacalis, Y. Ramondenc, M. Darabantu, "New Serinolic Amino-s-triazines by Chemoselective Amination of Cyanuric Chloride and their (Pro)diastereomerism in Restricted Rotational Phenomena" *Centr. Eur. J. Chem.* **2012**, 10(4), 1119-1136.
17. F. Popa, P. Lameiras, E. Henon, **O. Moldovan**, A. Martinez, C. Bătiu, Y. Ramondenc, M. Darabantu, "Amino-s-triazine. Synthesis and Stereochemistry of Restricted Rotational Phenomena. First Use of a C-2-Substituted Serinol in Tandem with Masked 4-Piperidone for Selective Amination of Cyanuric Chloride" *Can. J. Chem.* **2011**, 89(10), 1207-1221.
18. **O. Moldovan**, P. Lameiras, E. Henon, F. Popa, A. Martinez, D. Harakat, C. Bătiu, Y. Ramondenc, M. Darabantu, "To What Extent the NMR "Mobile Protons" Are Relevant for Restricted Rotational Stereochemistry Phenomena? A Case in Amino-s-Triazine Series" *Stud. U. Babeş-Bolyai. Chem.* **2010**, LV, 4, 35-39.
19. F. Popa, **O. Moldovan**, M. Iusco, P. Lameiras, C. Bătiu, Y. Ramondenc, M. Darabantu, "Synthesis of a Dimeric G-2 Melamine Dendrimer. First Use of a Masked Piperidone Motif in Dendritic Chemistry" *Stud. U. Babeş-Bolyai. Chem.* **2009**, LIV, 4, 237-248.

Patents:

1. G. Blanita, D. Lupu, **O. Grad**, I. Misan, I. Coldea, M. D. Lazar, G. Borodi, M. Dan, "Procedeu de sinteză a structurii metal-organice MIL-101(Cr)" patent application approved A/01027/ **5.12.2017**.

Books or book chapters:

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