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L I S T A
LUCRĂRILOR ŞTIINŢIFICE

A. Teza de doctorat

Researches on the Synthesis and Reactivity of some 1,3-Dithiolium Salts, "Al.I. Cuza" University of Iasi, Romania, 2000.

B. Cărţi si capitole în cărţi publicate în ultimii 5 ani (2021-2025)

1. **Birsa**, **M. L.**, *Carbanions and Electrophilic Aliphatic Substitution* in *Organic Reaction Mechanisms 2018*, Moloney, M. G. Ed., John Wiley and Sons, Chichester, 2021, 277-288. DOI: 10.1002/9781119531975
2. **Birsa**, **M. L.**, *Elimination Reactions* in *Organic Reaction Mechanisms 2018*, Moloney, M. G. Ed., John Wiley & Sons, Chichester, 2021, 289-295. DOI: 10.1002/9781119531975
3. Sarbu, L. G., **Birsa, M. L.**, *Metode de investigare a mecanismelor de reacţie*, Ed. Stef, Iasi, 2021, 324 pag. ISBN 978-606-028-707-0
4. Sarbu, L. G., **Birsa, M. L.**, *Medicamente de sinteză*, Ed. Stef, Iasi, 2021, 245 pag. ISBN 978-606-028-708-7
5. **Birsa**, **M. L.**, *Carbanions and Electrophilic Aliphatic Substitution* in *Organic Reaction Mechanisms 2019*, Moloney, M. G. Ed., John Wiley and Sons, Chichester, 2022, 321-332.
6. **Birsa**, **M. L.**, *Elimination Reactions* in *Organic Reaction Mechanisms 2019*, Moloney, M. G. Ed., John Wiley & Sons, Chichester, 2022, 333-344.
7. **Birsa**, **M. L.**, *Carbanions and Electrophilic Aliphatic Substitution* in *Organic Reaction Mechanisms 2020*, Knipe, A. C. Ed., John Wiley and Sons, Chichester, 2024, 267-280.
8. **Birsa**, **M. L.**, *Elimination Reactions* in *Organic Reaction Mechanisms 2020*, Moloney, M. G. Ed., John Wiley & Sons, Chichester, 2024, 281-294.
9. **Birsa**, **M. L.**, *Carbanions and Electrophilic Aliphatic Substitution* in *Organic Reaction Mechanisms 2021*, Moloney, M. G. Ed., John Wiley and Sons, Chichester, 2025, 233-240.
10. **Birsa**, **M. L.**, *Elimination Reactions* in *Organic Reaction Mechanisms 2021*, Moloney, M. G. Ed., John Wiley & Sons, Chichester, 2025, 241-248.

C. Lucrări indexate ISI/BDI publicate în ultimii 5 ani (2021-2025)

1. Babii, C., Savu, M., Motrescu, I., **Birsa, M.L.**, Sarbu, L.G., Stefan, M., "Antibacterial synthetic flavonoid BrCl-flav exhibits important anti-*Candida* activity by damaging cell membrane integrity" *Pharmaceuticals*, **14**, 1130 (2021).

2. Asaftei, I.V., Lungu, N.C., **Birsa, M.L.**, Ignat, M., "Validation of Zn-Cu/ZSM-5 catalyst performance, at pilot scale, in the catalytic conversion of butane (nC(4) + i-C-4) technical fraction", *C. R. Chim.*, **25**, 311-320 (2022). doi: 10.5802/crchim.212
3. Savu, M., **Birsa, M.L.**, Stefan, M., "Synthetic flavonoid BrCl - a potential solution against fluconazole resistant Candida strains", *FEBS Open Bio*, **12**, 169-170 (2022).
4. Moldovan, C.V., Savu, M., Dussert, E., Aboubacar, H., Sarbu, L.G., Matiut, S., Cudennec, B., Krier, F., Ravallec, R., **Birsa, M.L.**, Stefan, M., "Synthetic Flavonoid BrCl-Flav-An Alternative Solution to Combat ESKAPE Pathogens", *Antibiotics (Basel)*, **11**, 1389 (2022). doi: 10.3390/antibiotics11101389
5. **Birsa, M. L.**, Sarbu, L.G., "An Improved Synthetic Method for Sensitive Iodine Containing Tricyclic Flavonoids", *Molecules*, **27**, 8430 (2022). https://doi.org/10.3390/molecules27238430
6. **Birsa, M.L.**, Sarbu, L.G. "Health Benefits of Key Constituents in *Cichorium intybus* L." *Nutrients*, **15**, 1322 (2023). https://doi.org/10.3390/nu15061322
7. **Birsa, M.L.**, Hopf, H., Jones, P.G., Sarbu, L.G., Bahrin, L.G., "[2.2]Paracyclophane Derivatives as Building Blocks for Coordination Polymers", *Materials*, **16**, 4051 (2023). https://doi.org/10.3390/ma16114051
8. **Birsa, M.L.**, Sarbu, L.G. "Hydroxy Chalcones and Analogs with Chemopreventive Properties" *Int. J. Mol. Sci.*, **24**, 10667 (2023). https://doi.org/10.3390/ijms241310667
9. **Birsa, M.L.**, Sarbu, L.G. "A structure-activity relationship study on the antioxidant properties of dithiocarbamic flavanones " *Antioxidants*, **13**, 963 (2024). https://doi.org/10.3390/antiox13080963
10. Mantea, L.E., Moldovan, C.V., Savu, M., Sarbu, L.G., Stefan, M., **Birsa, M.L.**, "An Eco-Friendly Method to Synthesize Potent Antimicrobial Tricyclic Flavonoids", *Antibiotics (Basel)*, **13**, 798 (2024). https://doi.org/10.3390/antibiotics13090798
11. Moldovan, C.V., Mantea, L.E., Savu, M., Jones, P.G., Sarbu, L.G., Stefan, M., **Birsa, M.L.**, " Novel Tricyclic Flavonoids as Promising Anti-MRSA Agents", *Pharmaceuticals*, **17**, 1276 (2024). https://doi.org/10.3390/ph17101276
12. **Birsa, M.L.**, Sarbu, L.G. "Novel dithiocarbamic flavanones with antioxidant properties – a structure activity relationship study" *Int. J. Mol. Sci.*, **25**, 13698 (2024). https://doi.org/10.3390/ijms252413698
13. Sarbu, L.G., Rosca, I., **Birsa, M.L.**, "Antibacterial and Antifungal Properties of New Synthetic Tricyclic Flavonoids" *Antibiotics*, **14**, 307 (2025). https://doi.org/10.3390/antibiotics14030307
14. Birsa, M.L., Sarbu, L.G. "Iodine-Substituted Dithiocarbamic Flavanones—A Structure–Activity Relationship Study of Their Antioxidant Properties." *Molecules*, **30**, 2280 (2025). https://doi.org/10.3390/ molecules30112280
15. Moldovan, C.V., Mantea, L.E., Savu, M., Sarbu, L.G., **Birsa, M.L.**, Stefan, M., "Novel tricyclic flavonoids as promising antimicrobial agents", *FEBS Open Bio*, **15**, 415-416 (2025). WOS:001552034504163

D. Lucrări publicate în ultimii 5 ani (2021-2025) în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

1. **Birsa, M. L.**, "Biologically active sulfur containing compounds" *Annals of the University of Craiova. The Chemistry Series*, **XLVII**, S11 (2021).

E. Brevete obţinute în întreaga activitate

1. Gulea A., Ţapcov V., **Birsa, M. L.**, Gînju D., Jalbă A., Graur V., Julea F., "Inhibitor al leucemiei mieloide umane în bază de {bis[2-(3,5-dibromo-2-hidroxifenil)-2-oxoetil-piperidin-1-carboditioato(1)O,O᾽]cupru}", Brevet de invenţie MD Nr 4190, 2012. Publ BOPI 12/2012. P. 21-22.

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