

Nume Prenume: **Humelnicu Doina**

Gradul didactic: profesor dr.

Instituția unde este titular: Universitatea Alexandru Ioan Cuza din Iași

Facultatea: Chimie

Departamentul: Chimie

L I S T A LUCRĂRILOR ȘTIINȚIFICE

A. Teza de doctorat

Studiul produsilor CRUD ce rezulta în tehnologia de obtinere a uraniului nuclear pur

B. Cărți si capitole în cărți publicate în ultimii 5 ani (2021-2025)

1. **D. Humelnicu**, I. Humelnicu, Significance of bioremediation approach: an overview for the wastewater treatment, in *Biotechnologies for Wastewater Treatment and Resource Recovery, Current Trends and Future Scope*, Elsevier, 2025: 297-309, <https://doi.org/10.1016/B978-0-443-27376-6.00009-8>

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

1. **D. Humelnicu**, E.S. Dragan, Evaluation of phosphate adsorption by porous strong base anion exchangers having hydroxyethyl substituents: kinetics, equilibrium, and thermodynamics, *Environ. Sci. Pollut. Res.*, **28(6)**, 2021: 7105-7115 <http://dx.doi.org/10.1007/s11356-020-10976-w>,
2. C. Mita, I. Bunea, T. Roman, **D. Humelnicu***, Cross-linked and functionalized acrylic polymers: Efficient and reusable sorbents for the sequestration of Zn(II) ions from synthetic wastewaters, *J. Polym. Environment*, 29(7) 2021: 2261-2281 <https://doi.org/10.1007/s10924-020-02005-1>,
3. M.V. Dinu, **D. Humelnicu**, M. M. Lazar, Analysis of copper(II), cobalt(II) and iron(III) sorption in binary and ternary systems by chitosan-based composite sponges obtained by ice-segregation approach, *Gels*, **7(3)**, 2021: 103 <https://doi.org/10.3390/gels7030103>
4. I. Zinicovscaia, N. Yushin, D. Abdusamadzoda, D. Grozdov, I. Humelnicu, M. Ignat, **D. Humelnicu**, Removal of vanadium ions from aqueous solutions using different type of hydroxyapatites: adsorption isotherm, kinetics and thermodynamic studies, *Environm. Eng. Manage. J.*, **20(6)**, 2021: 871-881 DOI:[10.30638/eemj.2021.081](https://doi.org/10.30638/eemj.2021.081)
5. E.S. Dragan, **D. Humelnicu**, M.V. Dinu, Designing smart triple-network cationic cryogels with outstanding efficiency and selectivity for deep cleaning of phosphate, *Chem. Eng. J.*, **426**, 2021: 131411 <https://doi.org/10.1016/j.cej.2021.131411>
6. **D. Humelnicu**, I. Zinicovscaia, I. Humelnicu, M. Ignat, Experimental studies on the removal of aluminium ions from synthetic aqueous solution by hydroxyapatites, *Acta Chim Slov.*, **68**, 2021: 821-832 <https://doi.org/10.17344/acsi.2021.6830>
7. I. Zinicovscaia, N. Yushin, **D. Humelnicu**, D. Grozdov, M. Ignat, S. Demcak, I. Humelnicu, Sorption of Ce(III) by silica SBA-15 and titanosilicate ETS-10 from aqueous solution, *Water*, **13(22)**, 2021: 3263 <https://doi.org/10.3390/w13223263>
8. **D. Humelnicu**, I. Zinicovscaia, I. Humelnicu, M. Ignat, N. Yushin, D. Grozdov, Study on the SBA-15 silica and ETS-10 titanosilicate as efficient adsorbents for Cu(II) removal from aqueous solution, *Water*, **14(6)**, 2022: 857, <https://doi.org/10.3390/w14060857>

9. M.V. Dinu, I. Humelnicu, C.A. Gheorghita, **D. Humelnicu**, Aminopolycarboxylic acids-functionalized chitosan microbeads as valuable heavy metal ions sorbents: fixed-bed column studies and theoretical analysis, *Gels*, **8(4)**, 2022: 221, <https://doi.org/10.3390/gels8040221>
10. **D. Humelnicu**, M. Ignat, M.V. Dinu, E. S. Dragan, Optimization of Arsenic Removal from Aqueous Solutions Using Amidoxime Resin Hosted by Mesoporous Silica, *ACS Omega*, **7(35)**, 2022: 31069-31080 <https://doi.org/10.1021/acsomega.2c03140>
11. C. A. Ghiorghita, **D. Humelnicu**, M. V. Dinu, M. Ignat, S. Bonardd, D. Díaz Díaz, E. S. Dragan, Polyelectrolyte Complex Composite Cryogels with Self-Antibacterial Properties and Wide Window for Simultaneous Removal of Multiple Contaminants, *Chem. Eng. J.*, **459**, 2023: 141562 <https://doi.org/10.1016/j.cej.2023.141562>
12. E.S., Dragan, **D. Humelnicu**, M.V. Dinu, Sustainable Multi-Network Cryogels with Enhanced Performances in Removal of Oxyanions from Aqueous Solutions, *Polymers*, **15(4)**, 2023: 885, <https://doi.org/10.3390/polym15040885>
13. C.A. Ghiorghita, M.M. Lazar, I. V. Platon, **D. Humelnicu**, M. V. Dinu, Feather-weight cryostructured thiourea-chitosan aerogels for highly efficient removal of heavy metals and bacterial pathogens, *Int. J. Biol. Macrom.*, **235**, 2023: 123910 <https://doi.org/10.1016/j.ijbiomac.2023.123910>
14. M.M. Lazar, C.A. Ghiorghita, E.S. Dragan, **D. Humelnicu**, M. V. Dinu, Ion-imprinted polymeric materials for selective adsorption of heavy metal ions from aqueous solution, *Molecules*, **28(6)**, 2023: 2798 <https://doi.org/10.3390/molecules28062798>
15. I. Zinicovscaia, N. Yushin, **D. Humelnicu***, D. Grozdov, M. Ignat, I. Humelnicu, Adsorption capacity of silica SBA-15 and titanosilicate ETS-10 toward indium ions, *Materials*, **16(8)**, 2023: 3201 <https://doi.org/10.3390/ma16083201>
16. I. Zinicovscaia, N. Yushin, **D. Humelnicu**, D. Grozdov, I. Humelnicu, M. Ignat, T. Vershinina, Removal of indium ions from aqueous solutions using hydroxyapatite and its two modifications, *Separations*, **10(7)**, 2023: 401, <https://doi.org/10.3390/separations10070401>
17. **D. Humelnicu**, C. A. Ghiorghita, I. Humelnicu, E. S. Dragan, Experimental and theoretical investigations on Hg(II) removal by recyclable composite sorbents comprised of polymers bearing thiourea and amidoxime functional groups and mesoporous silica, *Chem. Eng. J.*, **479**, 2024: 147690, <https://doi.org/10.1016/j.cej.2023.147690>,
18. I. Zinicovscaia, N. Yushin, D. Sifelani, **D. Humelnicu**, Efficiency of biological versus mesoporous adsorbent for gadolinium removal from wastewater, *Sci. Rep.*, **15**, 2025: 30500
19. M.V. Dinu, **D. Humelnicu**, M.M. Lazar, E.S. Dragan, Exclusive Cationic Composite Cryogels as Potential Filters for Advanced Removal of Metallic Pollutants, Anionic Dyes and Bacteria from Water, *ACS Applied Engineering Materials*, **3**, 2025: 3271-3284

D. Lucrări publicate în ultimii 5 ani (2021-2025) în reviste și volume de conferințe cu referenți (neindexate)

- Reviste

1.

- Selecție cu maximum 20 lucrări în volume de conferințe

1.

E. Brevete obținute în întreaga activitate

1. Rudic, A. Gulea, Al. Cecal, L. Cepoi, I. Palamaru, **Doina Humelnicu** - Procedeu de purificare a apelor reziduale de ionii de uranil - Republica Moldova, Brevet 774 G2 /1997
2. Al. Cecal, V. Rudic, A. Gulea, M. Palamaru, **Doina Humelnicu** -Procedeu de solubilizare microbiologica a ionilor de uranil din minereuri uranifere - Brevet nr. 114.960 B-1999
3. Al. Cecal, N. Calu, M. Palamaru, Alexandra Iordan, **Doina Humelnicu**, M. Calu, K. Popa - Procedeu de solubilizare in topitura alcalina a uraniului din minereuri uranifere sarace in minerale utile - Brevet nr. 114.984 – 1999

Data: 25.02.2026