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Facultatea: Chimie

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L I S T A LUCRĂRILOR ȘTIINȚIFICE

A. Teza de doctorat

"Investigații asupra structurii electronice și reactivității moleculare în soluție", Universitatea "Alexandru Ioan Cuza" din Iași

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

1. Doina Humelnicu, Ionel Humelnicu

Chapter 22 - Significance of bioremediation approach: an overview for the wastewater treatment, **2025**, Pages 297-309

<https://doi.org/10.1016/B978-0-443-27376-6.00009-8>

în book *Biotechnologies for Wastewater Treatment and Resource Recovery Current Trends and Future Scope*
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<https://doi.org/10.1016/C2023-0-51426-0>

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

1. Zinicovscaia Inga, Yushin Nikita, Abdusamadzoda Dater, Grozdov Dmitrii, Humelnicu Ionel, Ignat Maria, Humelnicu Doina,

Removal of Vanadium Ions From Aqueous Solutions Using Different Type of Hydroxyapatites: Adsorption Isotherm, Kinetics and Thermodynamic Studies

Environmental Engineering and Management Journal **2021**, Volume 20, (6), Page 871-881

2. Maria C. Buta, Bogdan Frecus, Mirela Enache, Ionel Humelnicu, Ana M. Toader and Fanică Cimpoeșu
Intra- and Inter-Molecular Spin Coupling in Phenalenyl Dimeric Systems,

J. Phys. Chem. A **2021**, 125 (32), 6893–6901 <https://doi.org/10.1021/acs.jpca.1c02705>,

3. Inga Zinicovscaia, Nikita Yushin, Doina Humelnicu, Dmitrii Grozdov, Maria Ignat, Stefan Demcak and Ionel Humelnicu

Sorption of Ce(III) by Silica SBA-15 and Titanosilicate ETS-10 from Aqueous Solution

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Acta Chimica Slovenica, **2021**, 68 (4), 821 – 832 <http://dx.doi.org/10.17344/acsi.2021.6830>
5. Doina Humelnicu, Inga Zinicovscaia, Ionel Humelnicu, Maria Ignat, Nikita Yushin and Dmitrii Grozdov
Study on the SBA-15 Silica and ETS-10 Titanosilicate as Efficient Adsorbents for Cu(II) Removal from Aqueous Solution
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6. Maria Valentina Dinu, Ionel Humelnicu, Claudiu Augustin Ghiorghita and Doina Humelnicu,
Aminopolycarboxylic Acids-Functionalized Chitosan-Based Composite Cryogels as Valuable Heavy Metal Ions Sorbents: Fixed-Bed Column Studies and Theoretical Analysis
Gels **2022**, 8 (4), Article Number 221 <https://doi.org/10.3390/gels8040221>
7. Maurusa-Elena Ignat, Viorica Dulman, Leonard Ignat, Maria Ignat, and Ionel Humelnicu
Evaluation of the Adsorptive Potential of Zeolite Volcanic Tuff in Single and Binary Aqueous Solutions of the Basic Blue 41 Cationic Dye
ChemistrySelect **2022**, 7 (14), Article Number e202104460 <https://doi.org/10.1002/slct.202104460>
8. Inga Zinicovscaia, Nikita Yushin, Doina Humelnicu, Dmitrii Grozdov, Maria Ignat and Ionel Humelnicu
Adsorption Capacity of Silica SBA-15 and Titanosilicate ETS-10 toward Indium Ions
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9. Inga Zinicovscaia, Nikita Yushin, Doina Humelnicu, Maria Ignat, Ionel Humelnicu, Dmitrii Grozdov and Tatyana Vershinina
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Separations **2023**, 10(7), Article Number 401; <https://doi.org/10.3390/separations10070401>
10. Doina Humelnicu, Claudiu Augustin Ghiorghita, Ionel Humelnicu, Ecaterina Stela Dragan
Experimental and theoretical investigations on Hg(II) removal by recyclable composite sorbents comprised of polymers bearing thiourea or amidoxime functional groups and mesoporous silica
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Ab Initio Modeling of the Photoluminescence of SrCl₂:Eu²⁺ - Direct Comparison between Density Functional and Wave Function Theory-Based Approaches
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E. Brevete obținute în întreaga activitate

1. L. Odochian, D. Dîrțu, A. Pui, M. Dumitraș, I. Humelnicu, C. Tănase, L. Hîncu, brevet de invenție nr. 122359/30.04.2009, Procedeu și instalație de obținere a hidrazinei, Patent Number(s): RO122359-B1

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