

## Rezultate

### Articole publicate

Ana Maria Toader, Bogdan Frecus, Corneliu I. Oprea, Maria Cristina Buta, Assessing Quantum Calculation Methods for the Account of Ligand Field in Lanthanide Compounds. *Physchem* 2023, 3, 270–289.

Alice Mischie, Ana Maria Toader, Maria Cristina Buta, Fanica Cimpoesu, Harmonic oscillator model of aromaticity (HOMA) in conjugated radicals and cations. *Computational and Theoretical Chemistry*, 2023, 1230, 114370

### Articole in evaluare

Ana Maria Toader, Maria Cristina Buta, Werner Urland, Alessandro Stroppa, Fanica Cimpoesu, Assessing the lanthanide pseudopotential datasets in terms of Slater-Condon spectral parameters. *Computational Materials Science*, nr. manuscris COMMAT-D-23-02710

Ana Maria Toader, Maria Cristina Buta, Fanica Cimpoesu, On the Calculation of Lanthanide Systems. The Spectral Parameters of Praseodymium Trivalent Ion. *Chemistry Journal of Moldova*. Ms. Ref no.: CJM-1146

Ana Maria Toader, Maria Cristina Buta, Fanica Cimpoesu, Adela Mihai, The Holohedrization Effect in Ligand Field Models. *Symmetry*. Manuscript ID: symmetry-2785719.

### Capitol carte

Fanica Cimpoesu, Maria-Cristina Buta, Ana Maria Toader and Gabriela Ionita. The Spin Chemistry of Nitroxide-Based Organic Biradicals: EPR Data and Computational Experiments. In *Fundamental and Biomedical Aspects of Redox Processes*, pp. 111-142. IGI Global, 2023.

### Participare la conferințe

Fănică Cimpoesu

Computational molecular magnetism and beyond. Exchange and spin-orbit coupling and other ingredients. *MolMod Lectures*, 13 martie 2023, Cluj-Napoca, Romania, prezentare orală, online

Fănică Cimpoesu, Mihai Secu, Marilena Ferbințeanu

Structure-Property Correlations in the Chemistry and Spectroscopy of Lanthanide Compounds *21<sup>th</sup> International Balkan Workshop on Applied Physics (IBWAP 2023)*, 11-14 iulie 2023, Constanța, România, prezentare orală - invitat

Ana Maria Toader, Bogdan Frecus, Corneliu I. Oprea, Maria Cristina Buta  
Assesing Quantum Calculation Methods for Ligand Field and Spectroscopy of Lanthanide  
Coordination Compounds  
*21<sup>th</sup> International Balkan Workshop on Applied Physics (IBWAP 2023)*, 11-14 iulie 2023,  
Constanța, România, poster

Maria Cristina Buta, Ana Maria Toader, Corneliu I. Oprea, Fănică Cimpoeșu  
Modeling the Activity of Cytochrome P450-NO Reductase  
*21<sup>th</sup> International Balkan Workshop on Applied Physics (IBWAP 2023)*, 11-14 iulie 2023,  
Constanța, România, poster

Fănică Cimpoeșu

A journey to the end of periodic table: the quantum chemistry of lanthanides.  
*Workshop on lanthanides systems*, 29 septembrie – 1 octombrie 2023, Muralto, Elvetia,  
prezentare orală – invitat

Fănică Cimpoeșu

Understanding the mechanism of 4f-5d transitions of lanthanide ions inside of the fullerene  
cages. *NanoMod 2023, Research International Workshop – Third Edition*, 21 Octombrie 2023,  
Timisoara, prezentare orală, online