

## LISTA DE PUBLICAȚII

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#### *Articole publicate (2016-2026)*

1. Tailoring the Synthesis and Stability of Germylenes via Electron-Rich P=C–P and P=C–P(=S) Derivatives, Iulia-Andreea Aghion, Raluca Septelean,\* Ionut-Tudor Moraru,\* Adrian Cristea, Albert Soran, Gabriela Nemes\*, *Inorganic Chemistry*, **2025**, *64*, 23457-23467, <https://doi.org/10.1021/acs.inorgchem.5c03621> (AIS Q1)
2. Synthesis and coordination ability of the first phosphavinyl(selenoxo)phosphorane: an electronic story, Iulia-Andreea Aghion, Raluca A. Septelean\*, David Lucaci, Ionut-Tudor Moraru, Albert P. Soran, Catalin C. Ciocan, Emilia Licarete, Manuela Banciu , Gabriela Nemes\*, *RSC Advances*, **2025**, *15*, 43426–43435, <https://doi.org/10.1039/d5ra05176b> (AIS Q2)
3. Design, Synthesis, Characterization, Molecular Modeling, and ADMET Analysis of Novel Quinazolin-4(3H)-One-Triazole Hybrids as Vasorelaxant Agent, Yassine Rhazi, Ismail Bouadid, Fatima Zahra Guerguer, Mohammed El mesky, Aziz Arzine, Asmae Nakkabi, Mohamed Bakhouch, Noemi Deak, Samir Chtita, El Houssine Mabrouk, Gabriela Nemes, Mohamed El Yazidi, Mohamed Eddouks, *Biochemistry and Biodiversity*, **2025**, *22*(9), 0:e01062, <https://doi.org/10.1002/cbdv.202501062> (AIS Q3)
4. In-Depth Theoretical Investigations of Borazine’s Aromaticity: Tailoring Electron Delocalization through Substituent Effects, Alex-Cristian Tomut, Ionut-Tudor Moraru\*, Gabriela Nemes\*, *Molecules* **2024**, *29*, 4902. <https://doi.org/10.3390/molecules29204902>. (AIS Q2)
5. New Quinazolin-4(3H)-One Derivatives Incorporating Isoxazole Moiety as Antioxidant Agents: Synthesis, Structural Characterization, and Theoretical DFT Mechanistic Study, Yassine Rhazi,\* Riham Sghyar, Noemi Deak, Bouchra Es-Sounni, Bouchra Rossafi, Albert Soran, Mustapha Laghmari, Azize Arzine, Asmae Nakkabi, Khalil Hammani, Samir Chtita, Mohammed M. Alanazi, Gabriela Nemes, Mohamed El. Yazidi\*, *Pharmaceuticals*, **2024**, *17*, 1390. <https://doi.org/10.3390/ph17101390>. (AIS Q2)
6. Investigation of the catalytic activity of hybrid decavanadate materials, Noemi Deak, Meryem Idboumlik, Albert Soran, Mohammed Lachkar, Brahim El Bali, Gabriela

Nemes\*, *Studia UBB Chemia*, **2024**, 69 (3) 7-23, DOI:10.24193/subbchem.2024.3.01. (AIS Q4)

7. Coordination ability of phosphavinyl(oxo and thioxo)phosphoranes ( $P=C-P=X$ ;  $X = O,S$ ) toward transition metals, Iulia-Andrea Aghion, Raluca Septelean \*, Alex-Cristian Tomut, Ionut-Tudor Moraru, Albert Soran, Gabriela Nemes \*, *Organometallics*, **2024**, doi.org/10.1021/acs.organomet.4c00270 (AIS Q1)

8. In silico modelling of chelate stabilized tetrylene derivatives, Alex-Cristian Tomut, Iulia-Andreea Aghion, Raluca Septelean, Ioan-Dan Porumb, Ionut-Tudor Moraru\* and Gabriela Nemes\*, *RSC Advances*, **2024**, 14, 10161 – 10171, DOI: 10.1039/d4ra01515k. (AIS Q2)

9. Offsets between hyperconjugations, p-d donations and Pauli repulsions impact the bonding of E–O–E systems. Case study on elements of Group 14, Ionut-Tudor Moraru, \* Florin Teleanu, Luminita Silaghi-Dumitrescu, Gabriela Nemes \*, *Phys.Chem.Chem.Phys*, **2022**, 24, 13217-13228, DOI: 10.1039/d2cp00869f (AIS Q2)

10. Novel coordination compounds featuring 9-chloro-9-phosphaalkenylchloro-9-germafluorene ligands, Noemi Deak, Raluca Septelean, Lavinia Buta, Ionut-Tudor Moraru , Iulia Andreea Cretoiu , Albert Soran\*, Gabriela Nemes \*, *Polyhedron*, **2022**, 15, 115866, DOI: 10.1016/j.poly.2022.115866. (AIS Q3)

11. The modulation of 9-Chloro-9-Phosphaalkenylchloro-9-Germafluorene reactivity through organolithium reagents, Lavinia Buta, Raluca Septelean, Albert Soran, Iulia-Andreea Aghion, Ionut-Tudor Moraru, Gabriela Nemes\*, *Polyhedron*, **2021**, doi.org/10.1016/j.poly.2021.115505. (AIS Q3)

12. A mononuclear Co(II) complex: Crystal structure, thermal behavior, optical properties and biological activities, Souad Dgachi, Fatima Rahmouni, Albert Soran, Mongi Saoudi, Gabriela Nemes, Houcine Naili, *Journal of Molecular Structure*, **2021**, 1244, 130996, doi.org/10.1016/j.molstruc.2021.130996. (AIS Q4)

13. Polymorphism in the metal-organic hybrid  $(PhCH_2NEt_3)_2[CoBr_4]$ : Synthesis, crystal structures and physico-chemical characterizations, Souad Dgachi, Mark M. Turnbull, Francesco Mezzadri, Alexander J. Norquist, Albert Soran, Jaurrsup Boonmak, Gabriela Nemes, Houcine Naïli\*, *Inorganica Chimica Acta*, **2021**, 514, 119997, DOI: 10.1016/j.ica.2020.119997. (AIS Q3)

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15. Synthesis and characterization of a novel bis-sulfoxide and its evaluation as a ligand in p-block chemistry, Noemi Deak, Olivier Thillaye du Boullay, Sonia Mallet-Ladeira,

Ionuț-Tudor Moraru, David Madec\*, Gabriela Nemes\*, *European Journal of Inorganic Chemistry*, **2020**, 3729-3737, DOI: 10.1002/ejic.202000728. (AIS Q2)

**16.** Oxidation of  $sp^2$  versus  $sp^3$  phosphorus atom in 1,3-diphosphapropenes. A DFT study, Ionuț-Tudor Moraru, Raluca Septelean, Gabriela Nemes\*, *Revue Roumaine de Chimie*, **2020**, 65(7-8), 747-753, DOI: 10.33224/rch.2020.65.7-8.13(AIS Q4)

**17.** The role of monoanionic aryl pincer ligands in the stabilization of group 14 metallylenes, Noemi Deak, David Madec\*, Gabriela Nemes\*, *European Journal of Inorganic Chemistry*, **2020**, 2769–2790, DOI: 10.1002/ejic.202000409. (AIS Q2)

**18.** New stable 2,3-dichloro,1,3-diphosphapropenes; synthesis and characterization, Raluca Septelean, Alexandra Muresan, Albert Soran, Ionuț-Tudor Moraru, Gabriela Nemes\*, *Revue Roumaine de Chimie*, **2020**, 65(6), 579-585, DOI: 10.33224/rch.2020.65.6.08. (AIS Q4)

**19.** A DFT investigation of a polycyclic stannylene model; structural characterization and stability assessment, Ionuț Moraru, Gabriela Nemes\*, *Studia Universitatis Babeș-Bolyai Chemia*, **2019**, 2(II), 435-446, DOI: 10.24193/subbchem.2019.2.37. (AIS Q4)

**20.** A non-symmetric sulfur-based O,C,O-chelating pincer ligand leading to chiral germylene and stannylene, Noemi Deak, Olivier Thillaye du Boullay, Ionuț-Tudor Moraru, Sonia Mallet-Ladeira, David Madec\*, Gabriela Nemes\*, *Dalton Transactions*, **2019**, 48, 2399-2406, DOI: 10.1039/C8DT05116J. (AIS Q1)

**21.** New stable 3,1-germaphosphapropenes. Synthesis and structural characterization, Lavinia Buta, Raluca Septelean, Ionuț-Tudor Moraru, Albert Soran, Luminita Silaghi-Dumitrescu, Gabriela Nemes\*, *Inorganica Chimica Acta*, **2019**, 486, 648-653, DOI: 10.1016/j.ica.2018.11.041. (AIS Q3)

**22.** Palladium and ruthenium derivatives stabilized by bis-sulfone ligand, Noemi Deak, Raluca Septelean, Ionuț-Tudor Moraru, Sonia Mallet-Ladeira, David Madec\*, Gabriela Nemes\*, *Studia Universitatis Babeș-Bolyai Chemia*, **2018**, 2, 105-115, DOI: 10.24193/subbchem.2018.2.10. (AIS Q4)

**23.** Computational and experimental investigation of phosphalkenyl germylenes from donor-acceptor perspective, Raluca Septelean, Ionuț Moraru, Tibor Kocsor, Noemi Deak, Nathalie Saffon, Annie Castel, Gabriela Nemes\*, *Inorganica Chimica Acta*, **2018**, 475, 112-119, DOI: 10.1016/j.ica.2017.08.057. (AIS Q3)

**24.** Bridging a knowledge gap from siloxanes to germoxanes and stannoxanes. A theoretical natural bond orbital study, Ionuț-Tudor Moraru, Petronela M. Petrar, Gabriela Nemes\*, *The Journal of Physical Chemistry A*, **2017**, 121(12), 2515–2522, DOI: 10.1021/acs.jpca.7b01208. (AIS Q2)

- 25.** Reactivity of bis-sulfonyl O,C,O-chelated-metallylenes in cycloaddition with ortho-quinone: An experimental and computational study, Noémi Deak, Ionut-Tudor Moraru, Nathalie Saffon-Merceron, David Madec\*, Gabriela Nemes\*, *European Journal of Inorganic Chemistry*, **2017**, 36, 4214-4220, DOI: 10.1002/ejic.201700756. (AIS Q2)
- 26.** New phosphorus containing bis-sulfone ligands, Noemi Deak, Sonia Mallet-Ladeira, Luminita Silaghi-Dumitrescu, David Madec\*, Gabriela Nemes\*, *Studia Universitatis Babeş-Bolyai Chemia*, **2017**, 62(4), 411-420, DOI:10.24193/subbchem.2017.4.35 (AIS Q4)
- 27.** New stannepine derivatives. Synthesis and characterization, Lavinia Buta, Raluca Septelean, Noemi Deak, Alexandra Pop, Gabriela Nemes\*, *Studia Universitatis Babeş-Bolyai Chemia*, **2016**, 61 (3), 81-90. (AIS Q4)
- 28.** Synthesis and structural characterization of new functionalized bis(fluorenyl)stannane derivatives, Raluca Septelean, Petronela M Petrar, Alexandra Pop, Gabriela Nemes\*, *Polyhedron*, **2016**, 109, 154-160, DOI:10.1016/j.poly.2016.01.044. (AIS Q3)
- 29.** Bis-sulfonyl O,C,O-chelated metallylenes (Ge, Sn) as adjustable ligands for iron and tungsten complexes, Noémi Deak, Petronela M. Petrar, Sonia Mallet-Ladeira, Luminita Silaghi-Dumitrescu, Gabriela Nemes\*, David Madec\*, *Chemistry - A European Journal*, **2016**, 22, 1349-1354, DOI:10.1002/chem.201504507. (AIS Q1)