

Fișa de verificare
a îndeplinirii criteriilor de Habilitare

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Funcția actuală: Conferențiar universitar
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Criterii CNATDCU – Criterii Habilitare domeniul CHIMIE

| | Criterii minimele CNATDCU | Punctaj realizat |
|-------------------|------------------------------|---------------------------|
| N_{max} | 50 | 50 |
| FIC | 100 | 207,8 |
| FIC _D | 70 | 195,9 |
| FIC _{AP} | 50 | 108,5 |
| FIC _{AC} | 25 | 92,0 |
| H index | 13 | 13 Clarivate 14 Scopus |

N_{max} – primele maxim N lucrari

FIC – fact de impact cumulat

FIC_D – factor de impact cumulat domeniu

FIC_{AP} – factor de impact cumulat autor principal (prim-autor și autor de corespondență)

FIC_{AC} – factor de impact cumulat autor de corespondență

În continuare este prezentată lista celor 50 de publicații N_{max} în ordinea descrescătoare a factorilor de impact, așa cum sunt ei raportați online la data curentă (12.06.2024) și care se referă la ediția 2022, iar pe baza lor au fost calculați diverșii factori de impact cumulați.

1. "Unusual dimetallaborane cluster polyhedra and their skeletal bonding" A. Lupan^{*}, A.A. Attia, R.B. King, *Coord. Chem. Rev.*, 2017, 345, 1-5; doi:10.1016/j.ccr.11001 (c. 2, F.I. 20,6)
2. "New class of hybrid materials for detection, capture and on-demand release of carbon monoxide" A. Pitto-Barry, A. Lupan, C. Ellingford, A.A. Attia, N.P. Barry, *ACS Appl. Mater. Interfaces*, 2018, 10, 13693-13701; doi: 10.1021/acsami.8b01776 (c. 7, F.I. 9,5)
3. "Inhibition of pyrimidine biosynthesis pathway suppresses viral growth through innate immunity" M. Lucas-Hourani, D. Dauzonne, P. Jorda, G. Cousin, A. Lupan et.al., *Plos Pathog.*, 2013, 9, e1003678. doi: 10.1371/journal.ppat.1003678 (c. 119, F.I. 6,7)
4. "First-in-class allosteric inhibitors of bacterial IMPDHs" T. Alexandre, A. Lupan, O. Helynck, S. Vichier-Guerre, L. Dugue, M. Gelin, A. Haouz, G. Labesse, H. Munier-Lehmann, *Eur. J. Med. Chem.*, 2019, 167, 124-132; doi: 10.1016/j.ejmech.2019.01.064 (c. 8, F.I. 6,7)
5. "Synergy of the antibiotic colistin with echinocandin antifungals in *Candida* species" U. Zeidler, M.E. Bougnoux, A. Lupan, O. Helynck, A. Doyen, Z. Garcia, N. Sertour, C. Clavaud, H. Munier-Lehmann, C. Saveanu, C. d'Enfert, *J. Antimicrob. Chemother.*, 2013, 68, 1285; doi: 10.1093/jac/dks538 (c. 47, F.I. 5,2)

6. "Nonspherical deltahedra in low-energy dicarbale structures testing the Wade–Mingos rules: the regular icosahedron is not favored for the 12-vertex dicarbale" A.A. Attia, A. Lupan^{*}, R.B. King, *Inorg. Chem.*, 2015, *54*, 11377-11384; doi:10.1021/acs.inorgchem.5b02014 (c. 9, F.I. 4,6)
7. "Triplet spin-state capped deltahedral structures rather than singlet spin-state oblatocloso structures as energetically favored dimanganaborane structures" A. Gaina-Gardiuta, A. Lupan^{*}, R.B. King, *Inorg. Chem.*, 2022, *61*, 20793-20803; doi: 10.1021/inorgchem.2c02936 (F.I. 4,6)
8. "Spherical closo deltahedra with surface metal-metal multiple bonding versus oblate deltahedra with internal metal-metal bonding in dichromadiborane structures: the nature of Stone's icosahedral dichromadiborane" S. Jákó, A. Lupan^{*}, A.Z. Kun, R.B. King, *Inorg. Chem.*, 2019, *58*, 3825-3837; doi: 10.1021/acs.inorgchem.8b03476 (c. 1, F.I. 4,6)
9. "Hypoelectronicity and chirality in dimetallaboranes of the group 9 metals cobalt, rhodium, and iridium" S. Jákó, A. Lupan^{*}, A.Z. Kun, R.B. King, *Inorg. Chem.*, 2017, *56*, 351-358; doi: 10.1021/acs.inorgchem.6b02281 (c. 1, F.I. 4,6)
10. "Paramagnetism in metallacarboranes: the polyhedral chromadiborane systems" S. Jákó, A. Lupan^{*}, A.Z. Kun, R.B. King, *Inorg. Chem.*, 2017, *56*, 11059-11065; doi: 10.1021/acs.inorgchem.7b01422 (c. 1, F.I. 4,6)
11. "Deviations from the most spherical deltahedra in rhenadiboranes having $2n + 2$ wadean skeletal electrons" A.A. Attia, A. Lupan^{*}, R.B. King, *Inorg. Chem.*, 2017, *56*, 15015-15025; doi: 10.1021/acs.inorgchem.7b02348 (c. 2, F.I. 4,6)
12. "Magnesium(II) D-gluconate complexes relevant to radioactive waste disposals: metal ion-induced ligand deprotonation or ligand-promoted metal ion hydrolysis?" B. Kutus, C. Dudás, Csilla, E. Orban, A. Lupan, A.A. Attia, I. Palinko, P. Sipos, G. Peintler, *Inorg. Chem.*, 2019, *58*, 6832-6844; doi: 10.1021/acs.inorgchem.9b00289 (c. 8, F.I. 4,6)
13. "Density functional theory study of 11-atom germanium clusters: Effect of electron count on cluster geometry" R.B. King, I. Silaghi-Dumitrescu, A. Lupan, *Inorg. Chem.*, 2005, *44*, 3579; doi: 10.1021/ic040110x (c. 31, F.I. 4,6)
14. "Hypoelectronic dirhenaboranes having eight to twelve vertices: internal versus surface rhenium-rhenium bonding" A. Lupan, R.B. King, *Inorg. Chem.*, 2012, *51*, 7609; doi: 10.1021/ic300458w (c. 25, F.I. 4,6)
15. "Limited occurrence of isocloso deltahedra with 9 to 12 vertices in low-energy hypoelectronic diferradiborane structures" A. Lupan, R.B. King, *Inorg. Chem.*, 2011, *50*, 9571; doi: 10.1021/ic201321f (c. 22, F.I. 4,6)
16. "Density functional study of 8- and 11-vertex polyhedral borane structures: Comparison with bare germanium clusters" R.B. King, I. Silaghi-Dumitrescu, A. Lupan, *Inorg. Chem.*, 2005, *44*, 7819; doi: 10.1021/ic050656z (c. 10, F.I. 4,6)
17. "Microwave assisted synthesis, photophysical and redox properties of (phenothiazinyl) vinyl-pyridinium dyes" L. Gaină, I. Torje, E. Gal, A. Lupan, C. Bischin, R. Silaghi-Dumitrescu, G. Damian, P. Lonneck, C. Cristea, L. Silaghi-Dumitrescu, *Dyes Pigm.*, 2014, *102*, 315-325; doi: 10.1016/j.dyepig.2013.10.044 (c. 23, F.I. 4,5)
18. "Reversible complexation of ammonia by breaking a manganese-manganese bond in a manganese carbonyl ethylenedithiolate complex: A theoretical study of an unusual type of Lewis acid" L.F. Radu, A.A. Attia, R. Silaghi-Dumitrescu, A. Lupan^{*}, R.B. King, *Dalton Trans.*, 2019, *48*, 324-332; doi: 10.1039/C8DT04217A (c. 2, F.I. 4,0)
19. "Deltahedral ferradiboranes: analogues of ferrocene" A. Lupan^{*}, R.B. King, *Dalton Trans.*, 2014, *43*, 4993-5000; doi: 10.1039/C3DT52381K (c. 9, F.I. 4,0)
20. "Tetracarbale structures: nido polyhedra and non-spherical deltahedra" A.A. Attia, A. Lupan^{*}, R.B. King, *Dalton Trans.*, 2016, *45*, 11528-11539; doi: 10.1039/c6dt01982j (c. 4, F.I. 4,0)

21. "Tetracarboranes: nido structures without bridging hydrogens" A.A. Attia, A. Lupan, R.B. King, *Dalton Trans.*, 2016, 45, 18541-18551; doi: 10.1039/C6DT03507H (c. 1, F.I. 4,0)
22. "Dimetallaborane analogues of pentaborane" A.M.V. Branzanic, A. Lupan^{*}, R.B. King, *Dalton Trans.*, 2015, 44, 7355-7363; doi: 10.1039/C5DT00143A (c. 2, F.I. 4,0)
23. "Density functional theory study of eight-atom germanium clusters: Effect of electron count on cluster geometry" R.B. King, I. Silaghi-Dumitrescu, A. Lupan, *Dalton Trans.*, 2005, 10, 1858; doi: 10.1039/b501855b (c. 23, F.I. 4,0)
24. "The prevalence of isocloso deltahedra in low-energy hypoelectronic metalladiboranes with a single metal vertex: manganese and rhenium derivatives" A. Lupan, R.B. King, *Dalton Trans.*, 2012, 41, 7073; doi: 10.1039/c2dt30442b (c. 13, F.I. 4,0)
25. "Pseudo electron-deficient organometallics: limited reactivity towards electron-donating ligands" A. Pitto-Barry, A. Lupan, M. Zegke, T. Swift, A.A. Attia, R.M. Lord, N.P. Barry, *Dalton Trans.*, 2017, 46, 15676-15683; doi: 10.1039/C7DT02827J (c. 13, F.I. 4,0)
26. "Formation of mono and binuclear neodymium(III)-gluconate complexes in aqueous solutions in the pH range of 2-8" B. Kutus, N. Varga, G. Peintler, A. Lupan, A.A. Attia, I. Palinko, P. Sipos, *Dalton Trans.*, 2017, 46, 6049-6058; doi: 10.1039/C7DT00909G (c. xxx, F.I. 4,0)
27. "Electromerism and linkage isomerism in biologically-relevant Fe-SO complexes" M. Surducun, D. Lup, A. Lupan, S. Makarov, R. Silaghi-Dumitrescu, *J. Inorg. Biochem.*, 2013, 118, 13; doi: 10.1016/j.jinorgbio.2012.09.013 (c. 13, F.I. 3,9)
28. "Multiconfigurational and DFT analyses of the electromeric formulation and UV-Vis absorption spectra of the superoxide adduct of ferrous superoxide reductase" A.A. Attia, D. Cioloboc, A. Lupan, R. Silaghi-Dumitrescu, *J. Inorg. Biochem.*, 2016, 165, 49-53; doi: 10.1016/j.jinorgbio.2016.09.017 (c. 8, F.I. 3,9)
29. "Spin state preference and bond formation/cleavage barriers in ferrous-dioxygen heme adducts: remarkable dependence on methodology" A.A. Attia, A. Lupan, R. Silaghi-Dumitrescu, *RSC Adv.*, 2013, 3, 26194-26204; doi: 10.1039/C3RA45789C (c. 18, F.I. 3,9)
30. "Interactions between proteins and platinum-containing anti-cancer drugs" C. Bischin, V. Taciuc, A. Lupan, R. Silaghi-Dumitrescu, *Minirev. Med. Chem.*, 2011, 11, 214; doi: 10.2174/138955711795049844 (c. 30, F.I. 3,8)
31. "On the roles of alanine and serine in the β -sheet structure of fibroin" J.F. Carrascoza Mayen, A. Lupan, C. Cosar, A.Z. Kun, R. Silaghi-Dumitrescu, *Biophys. Chem.*, 2015, 197, 10-17; doi:10.1016/j.bpc.2014.11.001 (c. 6, F.I. 3,8)
32. "The tetracapped truncated tetrahedron in 16-vertex tetrametallaborane structures: spherical aromaticity with an isocloso rather than a closo skeletal electron count" A.A. Attia, A. Lupan^{*}, R.B. King, S. Ghosh, *Phys. Chem. Chem. Phys.*, 2019, 21, 22022-22030; doi: 10.1039/c9cp04263f (c. 5, F.I. 3,3)
33. "Cationic gold clusters with eight valence electrons: possible spherical aromatic systems with sigma holes" A.A. Attia, A. Branzanic, A. Muñoz-Castro, A. Lupan^{*}, R.B. King, *Phys. Chem. Chem. Phys.*, 2019, 21, 17779-17785; doi: 10.1039/C9CP03440D (c. 4, F.I. 3,3)
34. "Biicosahedral metallaboranes: aromaticity in metal derivatives of three-dimensional analogues of naphthalene" A.A. Attia, A. Lupan^{*}, R.B. King, *Phys. Chem. Chem. Phys.*, 2016, 18, 11707-11710; doi: 10.1039/c5cp05708f (c. 3, F.I. 3,3)
35. "Hypoelectronic diruthenaboranes and diosmaboranes having eight to twelve vertices: capped isocloso and bicapped closo structures" A. Lupan, R.B. King, *New J. Chem.*, 2013, 37, 2528; doi: 10.1039/C3NJ00460K (c. 4, F.I. 3,3)
36. "Fe-O versus O-O bond cleavage in reactive iron peroxide intermediates of superoxide reductase" A. Attia, D. Cioloboc, A. Lupan, R. Silaghi-Dumitrescu, *J. Biol. Inorg. Chem.*, 2013, 18, 95; doi: 10.1007/s00775-012-0954-4 (c. 10, F.I. 3,0)

37. "The sound of Chemistry: translating infrared wavenumbers into musical notes" N. Garrido, A. Pitto-Barry, J.J. Solevila-Barreda, A. Lupan, L. Comerford Boyes, W.H.C. Martin, N.P.E. Barry, *J. Chem. Educ.*, 2020, 97, 703-709; doi: 10.1021/acs.jchemed.9b00775 (c. 8, F.I. 3,0)
38. "Six-vertex hydrogen-rich Cp₂M₂B₄H₈ dimetallaboranes of the second- and third-row transition metals: effects of skeletal electron count on preferred polyhedra" A.M.V. Branzanic, A. Lupan^{*}, R.B. King, *Organometallics*, 2014, 33, 6443-6451; doi: 10.1021/om500801e (c. 6, F.I. 2,8)
39. "Binuclear ethylenedithiolate iron carbonyls: a density functional theory study" L.F. Radu, A.A. Attia, R. Silaghi-Dumitrescu, A. Lupan^{*}, R.B. King, *Inorg. Chim. Acta*, 2021, 519, 120260; doi: 10.1016/j.ica.2021.120260 (c. 4, F.I. 2,8)
40. "Iron carbonyl complexes of a rigid chelating dicarbene: a density functional theory study" C. Balaiu, A.A. Attia, A. Lupan^{*}, R.B. King, *Inorg. Chim. Acta*, 2021, 514, 120002; doi: 10.1016/j.ica.2020.120002 (c. 4, F.I. 2,8)
41. "Dimetallaboranes with polyhedral surface metal–metal multiple bonds: Deltahedral dirhenaboranes with pentalenedirhenium vertices" A. Lupan, R.B. King, *Organometallics*, 2013, 32, 4002; doi: 10.1021/om400481c (c. 9, F.I. 2,8)
42. "Metal–metal interactions in deltahedral dirhoda- and diiridadicarbaboranes" A. Lupan, R.B. King, *Inorg. Chim. Acta*, 2013, 397, 83; doi: 10.1016/j.ica.2012.11.023 (c. 19, F.I. 2,8)
43. "Sulfur and carbon as heteroatoms in ferrathiocarboranes" A.A. Attia, A. Lupan, R.B. King, *Polyhedron*, 2016, 113, 109-114; doi:10.1016/j.poly.2016.04.027 (F.I. 2,6)
44. "Comparison of hypoelectronic deltahedral ditechneboranes having eight to twelve vertices with their rhenium analogues: Examples of polyhedral surface metal–metal multiple bonds" A. Lupan, R.B. King, *Polyhedron*, 2013, 60, 151; doi: 10.1016/j.poly.2013.04.053 (c. 6, F.I. 2,6)
45. "Metal-metal multiple bonds with "half-bond" components in paramagnetic organometallics of f-block metals" C. Cosar, A.A. Attia, A. Lupan^{*}, R.B. King, *J. Organometal. Chem.*, 2017, 827, 105-111; doi: 10.1016/j.jorganchem.2016.11.006 (c. 2, F.I. 2,3)
46. "A phenotypic assay to identify Chikungunya virus inhibitors targeting the nonstructural protein nsP2" M. Lucas-Hourani, A. Lupan, P. Despres, J. Dubois, C. Guillou, F. Tangy, P.O. Vidalain, H. Munier-Lehmann, *J. Biomol. Screen.*, 2013, 18, 172; doi: 10.1177/1087057112460091 (c. 28, F.I. 2,3)
47. "Performance comparison of computational methods for modeling alpha-helical structures" A. Lupan, A. Kun, F. Carrascoza, R. Silaghi-Dumitrescu, *J. Mol. Model.*, 2013, 19, 193; doi: 10.1007/s00894-012-1531-z (c. 11, F.I. 2,2)
48. "Secondary structure elements in polylactic acid models" I. Irsai, C. Majdik, A. Lupan, R. Silaghi-Dumitrescu, *J. Math. Chem.*, 2012, 50, 703; doi: 10.1007/s10910-011-9919-z (c. 7, F.I. 1,7)
49. "Weak sulfur-sulfur interactions between chemically-identical atoms" R. Silaghi-Dumitrescu, A. Lupan, *Cent. Eur. J. Chem.*, 2013, 11, 457; doi: 10.2478/s11532-012-0178-z (c. 11, F.I. 1,46)
50. "Kinetics of reduction of cobalamin by sulfoxylate in aqueous solutions" D.S. Salnikov. I.A. Derevenkov, S.V. Makarov, E.S. Ageeva, A. Lupan, M. Surducun, R. Silaghi-Dumitrescu, *Rev. Roum. Chim.*, 2012, 57, 353 (c. 14, F.I. 0,5)

12.6.2024

Semnatura _____