



Curriculum vitae Europass

Informații personale

Nume / Prenume	Lupan Alexandru
Adresă	Str. Arany Janos, Nr. 11, Cluj-Napoca, Cluj
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Naționalitate	Română
Data nașterii	23.05.1978

Experiență profesională

Perioada	2006-prezent
Funcția sau postul ocupat	Chimist
Numele angajatorului	Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai
Tipul activității	Lucrări de laborator de Chimie generală și anorganică, activitate de cercetare în chimie anorganică și bioanorganică
Perioada	2007-2010
Funcția sau postul ocupat	Cercetător postdoctoral
Numele angajatorului	Institut Pasteur, Paris, Franța
Tipul activității	Cercetare asupra activității biologice a unor compuși chimici drug-design.

Educație și formare

Perioada	2002 - 2006
Calificarea / diploma obținută	Diplomă de doctor în Chimie
Numele instituției de învățământ	Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai
Perioada	2001 – 2002
Calificarea/diploma obținută	Diplomă de master, specializarea Chimie Organometalică și Coordinativă Aplicată
Numele instituției de învățământ	Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai
Perioada	1997- 2001
Calificarea / diploma obținută	Diplomă de licență în Chimie
Numele instituției de învățământ	Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai
Perioada	1993- 1997
Calificarea / diploma obținută	Diplomă de bacalaureat
Numele instituției de învățământ	Liceul Teoretic 'Gheorghe Șincai' Cluj-Napoca, specializarea chimie-biologie

Aptitudini și competențe personale

Limbi străine

Limba Engleză

Limba Franceză

Înțelegere				Vorbire				Scriere	
Ascultare		Citire		Participare la conversație		Discurs oral		Exprimare scrisă	
C2	avansat	C2	avansat	C2	avansat	C2	avansat	C2	avansat
C2	avansat	C2	avansat	C1	avansat	C1	avansat	C1	avansat

Competențe și aptitudini de utilizare a calculatorului

Utilizarea de softuri specializate (HyperChem, GAMESS, Gaussian, Mopac, Spartan, Flexx, etc.)

ResearcherID

<http://www.researcherid.com/rid/A-3142-2012>

Publicații

1. "Dimetallaborane analogues of pentaborane" A.M.V. Branzanic, A. Lupan, R.B. King, *Dalton Trans.*, 2015, *in press*, doi: 10.1039/C5DT00143A
2. "The Wade-Mingos rules in seven-vertex dimetallaborane chemistry: hydrogen-rich $Cp_2M_2B_5H_9$ systems of the second and third row transition metals" A.M.V. Branzanic, A. Lupan, R.B. King, *J. Organometal. Chem.*, 2015, *in press*, doi: 10.1016/j.jorganchem.2015.02.030
3. "Phosphorus as a heteroatom in metallaborane structures: cyclopentadienylcobalt diphosphaboranes" A.A. Attia, A. Lupan, R.B. King, *Polyhedron*, 2015, 85, 933-940; doi:10.1016/j.poly.2014.10.005
4. "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
5. "Designing a non-icosahedral twelve-vertex deltahedral metallatricarbaborane with a degree 7 metal vertex" A. Lupan, R.B. King, *Inorg. Chem. Commun.*, 2015, 51, 40-41; doi: 10.1016/j.inoche.2014.11.003
6. "Six-vertex hydrogen-rich $Cp_2M_2B_4H_8$ 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
7. "Sulfur as a heteroatom in metallaborane structures: cyclopentadienylcobalt thiaboranes" A. Lupan, R.B. King, *Polyhedron*, 2014, 78, 130-134; doi: 10.1016/j.poly.2014.04.041
8. "The buildup of eight-vertex tetrametallaborane clusters: bisdisphenoidal versus tetracapped tetrahedral structures" A. Lupan, R.B. King, *Eur. J. Inorg. Chem.*, 2014, 22, 3614-3618; doi: 10.1002/ejic.201402363
9. "Deltahedral ferratricarbaboranes: analogues of ferrocene" A. Lupan, R.B. King, *Dalton Trans.*, 2014, 43, 4993-5000; doi: 10.1039/C3DT52381K
10. "Structural and electronic isomerism in Fe,S centers" A. Lupan, A. Attia, R. Silaghi-Dumitrescu, S.V. Makarov, A.F. Vanin, *J. Biol. Inorg. Chem.*, 2014, 19, S279; wos:000332835300220
11. "Flattened Deltahedral Structures and Bridging Hydrogen Atoms in Hypoelectronic Dimolybdaboranes and Ditungstaboranes" A. Lupan, R.B. King, *J. Organomet. Chem.*, 2014, 754, 94-103; doi: 10.1016/j.jorganchem.2013.12.045
12. "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

13. "Pentalene as a ligand in hypoelectronic diruthenaboranes and diosmaboranes with surface metal-metal double bonding" A. Lupan, R.B. King, *Polyhedron*, 2014, 71, 133-141; doi: 10.1016/j.poly.2014.01.010
14. "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
15. "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
16. "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
17. "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
18. "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
19. "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
20. "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
21. "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
22. "Electromerism and linkage isomerism in biologically-relevant Fe-SO complexes" M. Surducan, D. Lup, A. Lupan, S. Makarov, R. Silaghi-Dumitrescu, *J. Inorg. Biochem.*, 2013, 118, 13; doi: 10.1016/j.jinorgbio.2012.09.013
23. "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
24. "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
25. "Phosphinoarylthiolato molybdenum and iron complexes M{(SC₆H₄-2-PPh₂)-kappa S-2,P}(2)(CO)(2) (M = Mo, Fe): Analogous composition - Different structure" A.M. Valean, S. Gomez-Ruiz, A. Lupan, R. Silaghi-Dumitrescu, L. Silaghi-Dumitrescu, E. Hey-Hawkins, *Inorg. Chim. Acta*, 2013, 394, 289; doi: 10.1016/j.ica.2012.05.041
26. "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
27. "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
28. "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. Surducan, R. Silaghi-Dumitrescu, *Rev. Roum. Chim.*, 2012, 57, 353
29. "Kinetic versus thermodynamic isomers of the deltahedral dicobaltadicarbaboranes having nine to 12 vertices" A. Lupan, R.B. King, *Polyhedron*, 2012, 33, 319; doi: 10.1016/j.poly.2011.11.042
30. "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

31. "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
32. "Can geometrical distortions make a laccase change color from blue to yellow?" A. Lupan, C. Matyas, A. Mot, R. Silaghi-Dumitrescu, *Stud. Univ. Babeş-Bolyai Chem.*, 2011, 56, 231.
33. "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
34. "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
35. "Computational modelling metal-protein interactions: cisplatin" A. Lupan, A. Kun, R. Silaghi-Dumitrescu, *Metal Elem. Environ. Med. Biol.*, 2010, 10, 199.
36. "PM6 modeling of alpha-helical polypeptide structures" A. Kun, A. Lupan, R. Silaghi-Dumitrescu, *Stud. Univ. Babeş-Bolyai Chem.*, 2010, 55, 265.
37. "Identifying modulators of virulence of Alphavirus by comparing the activity of the first reporter gene to a control mammalian cell not expressing the non-structural protein 2 (nsP2) coding sequence and comprising the first reporter gene" Y. Jacob, M. Lucas-Hourani, F. Tangy, P.O. Viadain, A. Lupan, H. Munier-Lehmann, 2009, EU Patent EP2065476-A1
38. "Identifying agent that induces interferon stimulated response element, where agent is useful to treat e.g. cancer and viral infection, comprises contacting test agent with cell and detecting agent that results in activation of reporter gene" Y. Jacob, M. Lucas-Hourani, A. Lupan, H. Munier-Lehmann, F. Tangy, P.O. Viadain, 2009, US Patent US2011159480-A1
39. "A mammalian cell-based screening assay to identify inhibitors of alphaviruses" P.O. Viadain, F. Tangy, Y. Jacob, M. Lucas-Hourani, H. Munier-Lehmann, A. Lupan, 2008, Patent wipo: <http://patentscope.wipo.int/search/en/WO2009068998>
40. "A quantum chemical conformational analysis of p-tert-butyl/pentyl/octyl-calix[8]arenes" A. Lupan, A. Saponar, I. Silaghi-Dumitrescu, A. Kun, L. Silaghi-Dumitrescu, E.J. Popovici, *Stud. Univ. Babeş-Bolyai Chem.*, 2006, 51, 27.
41. "New low symmetry low energy structures of 11-atom bare germanium clusters: A density functional theory study" R.B. King, I. Silaghi-Dumitrescu, A. Lupan, *Chem. Phys.*, 2006, 327, 344; doi: 10.1016/j.chemphys.2006.05.006
42. "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
43. "Density functional theory study of eleven-atom germanium clusters: Effect of electron count on cluster geometry" R.B. King, I. Silaghi-Dumitrescu, A. Lupan, *Abstr. Papers ACS*, 2005, 229, 1103; wos:000228177707897
44. "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
45. "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
46. "Germanium cluster polyhedra: A density functional theory study" I. Silaghi-Dumitrescu, A. Kun, A. Lupan, R.B. King, *Adv. Comput. Met. Sci. Eng.*, 2005, 4, 804; wos:000238054400199
47. "The shapes of hypoelectronic six-vertex anionic bare boron clusters: Effects of the counterions" R.B. King, I. Silaghi-Dumitrescu, A. Lupan, A. Kun, *Main Group Chem.*, 2005, 4, 291; doi: 10.1080/10241220600798435