

**PERSONAL
INFORMATION**

University professor, PhD, at the "Alexandru Ioan Cuza" University of Iasi
Faculty of Chemistry

Tel. No.+40 232 201276

E-mail: aurel@uaic.ro

Date and place of birth: 1964, Maieru, Bistrita-Năsăud Department

OCCUPATIONAL FIELD

Professor, PhD, Faculty of Chemistry, "Alexandru Ioan Cuza" University of Iasi

Field: Inorganic chemistry

Doctoral coordinator in the field of Chemistry (OMECl 3656/10.04.2009)

**PROFESSIONAL
EXPERIENCE**

Professional/university
experience

University professor, from 2008 - present;

Associate professor, during the period 2008-2002;

University lecturer, between 2002-1996;

University assistant, between 1996-1990.

Professional experience /
evaluation and expertise

Member of the C1 standing committee, ARACIS, 2021-present;

Evaluator ARACIS (Romanian Agency for Quality Assurance in Higher Education), from 2009 - present;

CNATDCU member, 2016-2020; 2020-2024.

AQAS assessor (Agentur für Qualitätssicherung durch Akkreditierung von Studiengängen), 2015;

Short Term Expert, ACPART- DOCIS Project (2009-2011).

Chemistry teacher, School No. 2 Sighișoara, Mureș Department; 1988 – 1990.

Administrative experience

Dean, Faculty of Chemistry, from 2016 -2024;

Vice-Dean for Research, Faculty of Chemistry, 2012 - 2016;

Member of the Council of the Faculty of Chemistry: 2000-2003; 2012 – present;

Member of the University Senate: from 2016 - present;

Editor of the journal Acta Chemica Iași, 2012 - 2016.

AREAS OF COMPETENCE

Teaching staff - Teacher(chemistry) at the "Alexandru Ioan Cuza" University, Faculty of Chemistry, from 1990 to present.

Areas covered:

Coordination chemistry: synthesis, characterization and reactivity of coordination compounds;

Materials chemistry: synthesis and characterization of mixed oxides with spinel structure;

Bioinorganic chemistry: synthesis and characterization of synthetic oxygen transporters; study of molecular oxygen fixation and catalytic activity studies;

Inorganic chemistry: synthesis and characterization of inorganic compounds;

Structural analysisby IR spectroscopy on plants, fungi, soils, polymers, heritage objects, nanostructured compounds, etc.

Main activities and responsibilities

-teaching activities;

- research activities;

- guidance of doctoral theses, bachelor's theses, dissertations and methodological-scientific works for obtaining the first teaching degree in pre-university education.

SCIENTIFIC ACTIVITY

PUBLISHED BOOKS / ARTICLES:

- **Books**, university courses and practical work manuals: 10
- **scientific articles**published in specialized journals: 150, of which: 83 in ISI journals abroad, 40 in ISI journals in the country, participation in scientific events over 60.

citationsworks indexed/reviewed in international databases: over 1400; in Web of Science, Hirsch Index = 23 (Web of Science).

SCIENTIFIC COORDINATOR: Doctoral theses (10), bachelor's theses (>50), dissertation works (>15), methodological-scientific works for obtaining the first degree in pre-university education (>10).

Scientific REFERENTto numerous international journals (ISI rated): Journal of Coordination Chemistry, Inorganica Chimica Acta, Journal of Molecular Catalysis A: Chemical, Journal of Cellulose Chemistry, Journal of Environmental Chemistry, Textile Research Journal, Current Nanomaterials, Journal of the American Ceramic Society, International Journal of Food Properties, Journal of Thermal Analysis and Calorimetry, Chemistry Reports, Revista de Chimie, Journal of Nanomaterials, Applied Catalysis D, etc.

	DIRECTOR / RESEARCH / DEVELOPMENT GRANTS MANAGER: with internal funding: 3; with external funding: 4. COLLABORATOR IN RESEARCH GRANTS:with internal funding: 15; with external funding: 2. Promotion committee member (for professor/associate professor) at the “Alexandru Ioan Cuza” University of Iași, the University of Bucharest, the “Babeș Bolyai” University of Cluj Napoca, the “Dunărea de Jos” University of Galați; the “Gheorghe Asachi” Technical University of Iași. Doctoral committee member at the “Alexandru Ioan Cuza” University of Iași, the University of Bucharest, the “Gheorghe Asachi” Technical University of Iași.
SPECIALIZATIONS	2003- 2004 (10 months, Oct. - Aug.), postdoctoral research fellowship at the University of Paris XI (Sud) Laboratoire de Chimie Bioorganique et Bioinorganique; 1997- 1998 (10 months, Oct. - Aug.), doctoral research scholarship at the University of Paris XI (South) Laboratoire de Chimie Bioorganique et Bioinorganique; 1999 degree in Chemistry, Inorganic and Bioinorganic Chemistry Specialty.
EDUCATION	1988, June, bachelor's exam; 1984 – 1988: at the Faculty of Chemical Technology, "Gh. Asachi" Polytechnic Institute in Iasi; 1983 June, baccalaureate exam; 1981 - 1983: “Andrei Muresanu” High School, Bistrita; 1979 – 1981: “Liviu Rebreanu” High School, Bistrita; 1971 - 1979: Primary and secondary school; Maieru General School, Bistrița-Nasaud county.
TRAINING/ADVANCED TRAINING COURSES	2021, course of "Trainer"; 2019, course of "Inspector in the field of occupational safety and health".
TRAINING INTERNSHIPS AND MOBILITIES	2024, Université Sidi Mohamed Ben Abdellah, Fez, Morocco. 2023, University of Poitiers, France. 2015 (01-30. 04), Staff mobility, State University of Moldova, Ianus II Project; 2007-2017 (annual) Erasmus/Socrates mobilities at the University of Paris XI (South); - 2008 and 2009, research internships (3 weeks each), University of Paris-Sud (Paris XI) Laboratory of Bioorganic and Bioinorganic Chemistry, within an ECO-Net project.

MEMBER IN SCIENTIFIC
SOCIETIES

KNOWN FOREIGN
LANGUAGES

- 2007 July, one month as a guest researcher at the University of Konstanz, Germany;
- 2007 May, research internship, University of Paris-Sud (Paris XI) Laboratory of Bioorganic and Bioinorganic Chemistry;
- November 2006, one month as a visiting researcher at the University of Konstanz, Germany;
- June 2002, 2 weeks research internship, University of Paris-Sud (Paris XI) Bioorganic and Bioinorganic Chemistry laboratory.

Member of the Romanian Chemical Society,

French (reading, writing, speaking), good; English (reading, writing, speaking), intermediate level.

Iași

Prof. Dr. Aurel Pui

Listă lucrări (selectiv)

1. I Radu, AI Borhan, D Ghercă, AC Dirtu, D Dirtu, DG Popescu, MA Husanu, APui, Cobalt oxyhydroxide co-catalyst loaded onto Al: SrTiO₃ surface to boost photocatalytic performance, *Materials Chemistry and Physics* 332, 130274, 4, 2025.
2. M Nistor, A Nicolescu, RM Amarandi, A Pui, RI Stiufiuc, B Dragoi, Multi spectroscopic investigation of maisine-based microemulsions as convenient carriers for co-delivery of anticancer and anti-inflammatory drugs, *Scientific Reports* 15 (1), 5175, 2025.
3. Hidaoui, S; Hamdi, N; Saadi, M; El Omari, M; **Pui, A**; El Bali, B; El Ammari, L; Lachkar, M., Structural study, spectroscopic characterization, thermal decomposition, Hirshfeld surface analysis, and antibacterial activity of a novel hybrid centrosymmetric material(C₄H₁₂N₂)[Co(H₂O)₂(H₂P₂O₇)₂].2H₂O, *Inorganic Chemistry Communications*, 174, 2025, 10.1016/j.inoche.2025.114002.
4. Radu Ioana, Borhan Adrian Iulian, Gherca Daniel, Popescu, Dana Georgeta, Borca, Camelia Nicoleta, Huthwelker Thomas, Bulai, Georgiana, Stoian George, Husanu Marius, **Pui Aurel**, Enhancement of SrTiO₃ photocatalytic efficiency by Al doping: Answers from the structure, morphology and electronic properties contributions, *Ceramics International*, 2024, 50 (11), Page 20664-20675, Part B, DOI10.1016/j.ceramint.2024.03.188
5. Muresan, EI; Pui, A; Cernatescu, C.; Cimpoesu, R.; Horhoge, CE.; Istrate, B.; Rimbu, CM., Green Synthesis of Nanoparticles Containing Zinc Complexes and Their Incorporation in Topical Creams with Antimicrobial Properties, *Applied Sciences*, 2024, 14(11), 4612; <https://doi.org/10.3390/app14114612>.
6. Albu A, Simeanu, C., Pop, I.M., **Pui A**, Tarcău, D., Cucu-Man, S.-M., Selected Characteristics of Multifloral Honeys from North-Eastern Romania, *Agriculture (Switzerland)*, 2024, 14(1).
7. Ciomaga Hatnean V.C.; **Pui A**; Simonov A.; Ciomaga Hatnean M., Cristian, Crystal Growth of the R₂SiO₅ Compounds (R = Dy, Ho, and Er) by the Floating Zone Method Using a Laser-Diode-Heated Furnace, *Crystals*, **2023**, 13 (12), 1687, DOI: 10.3390/cryst13121687
8. Borhan, AI ; Herea, DD ; Husanu, MA; Popescu, DG ; Borca, CN; Huthwelker, T ; Bulai, G ; Radu, I; Dirtu, AC; Dirtu, D; Mita, C; Stoian, G; Ababei, G; Lupu, N ; **Pui, A**; Gherca, D., Straightforward FeOOH nanografting of Al-based SrTiO₃ perovskite material as core-shell nanoflower-like heteronanostructure with enhanced solar light-driven photodegradation capability, *APPLIED SURFACE SCIENCE*, **2023**, 614, art. nb.156247, DOI:10.1016/j.apsusc.2022.156247.
9. Dănilă, R.-Ú., Dumitru, I., Ignat, M., **Pui, A.**, CoFe₂O₄@HaP as Magnetic Heterostructures for Sustainable Wastewater Treatment, *Materials*, **2023**, 16(7), 2594.
10. Asandulesa, M., Hamciuc, C., **Pui, A.**, Virlan C., Lisa G., Barzic, A.I., Oprisan, B., Cobalt Ferrite/Polyetherimide Composites as Thermally Stable Materials for Electromagnetic Interference Shielding Uses, *International Journal of Molecular Sciences*, **2023**, 24(2), 999.
11. Lakhdar, R., Ouled Amor, C., Ben Mosbah, M., **Pui A.**, Moussaoui Y., Ben Salem, R., Elghniji, K., An investigation of the role of samarium on the sol stability, particle growth, optical, and photocatalytic performance of TiO₂, *Journal of Materials Science: Materials in Electronics*, **2023**, 34(12), 1043.
12. Dănilă, R., Amărandi, R.-M., Ignat, M., **Pui, A.**, Mesoporous MgFe₂O₄@HaP@APTES nanocomposite as scaffold for α-glucosidase coupling, *Materials Today Communications*, **2023**, 36, 106427.
13. Pop, I.M., Simeanu, D., Cucu-Man, S.-M., Pui, A., Albu, A., Quality Profile of Several Monofloral Romanian Honeys, *Agriculture (Switzerland)*, 2023, 13(1), 75.
14. Radu, I., Turcan, I., Lukacs, A.V., Roman, T., Bulai, G.-A., Olariu, M.A., Dumitru, I., **Pui, A**, Structural, dielectric and gas sensing properties of gadolinium (Gd³⁺) substituted zinc-manganese nanoferrites, **2022**, *Polyhedron*, 221, 115893.

15. Roman T., Gherca D., Borhan A.-I., Grigoras M., Stoian G., Lupu N., Turcan I., Cimpoesu N., Istrate B., Radu I., Danila R., **Pui A.**, Nanostructured quaternary $Ni_{1-x}Cu_xFe_{2-y}Ce_yO_4$ complex system: Cerium content and copper substitution dependence of cation distribution and magnetic-electric properties in spinel ferrites, *Ceramics International*, **2021**, 47 (13), 17177-17187.
16. Corneliu Hamciuc, Mihai Asandulesa, Elena Hamciuc, Tiberiu Roman, Marius Andrei Olariu, **Aurel Pui**, Novel Polyimide/Copper-Nickel Ferrite Composites with Tunable Magnetic and Dielectric Properties, *Polymers*, **2021**, 13, 1646., <https://doi.org/10.3390/polym13101646>.
17. Buema G., Borhan A.I., Herea D.D., Stoian G., Chiriac H., Lupu N., Roman T., **Pui A.**, Harja M., Gherca D., Magnetic solid-phase extraction of cadmium ions by hybrid self-assembled multicore type nanobeads, *Polymers (Open Access)* 13 (2), **2021**, (no. 229), 1 – 16.
18. Darie-Ion, L; Jayathirtha, M; Hitruc, GE; Zaharia, MM; Gradinaru, RV; Darie, CC; **Pui, A**; Petre, BA, A Proteomic Approach to Identify Zein Proteins upon Eco-Friendly Ultrasound-Based Extraction, *BIOMOLECULES*, 11 (12), **2021**.
19. Muresan E.I., Diaconu M., Zaharia C., Rosu G., Danila A., **Pui A.**, Bioactive Textiles Obtained by Using Aqueous Extracts of Vine Leaves, 2020, *Fibers and Polymers*, 21 (11), pag. 2505-2512.
20. Sescu A.M., Harja M., Favier L., Berthou L.O., de Castro C.G., **Pui A.**, Lutic D., Zn/la mixed oxides prepared by coprecipitation: Synthesis, characterization and photocatalytic studies, **2020**, *Materials*, 13 (21), pag. 1-19.
21. Elghniji K., Ouled Amor C., Virlan C., **Pui A.**, Elaloui E. Separation and Identification of Minerals Composing the Silica Sands (Southwestern Tunisia), **2020**, *Mining, Metallurgy and Exploration*, 37 (5), pag. 1753-1763.
22. Humelnicu D., **Pui A.**, Malutan C., Malutan T., Humelnicu I., Synthesis, characterization and theoretical investigations of new uranium (VI) and thorium (IV) complexes with 1-furfurylaldehyde-derived Schiff bases as ligands, **2020**, *Journal of Saudi Chemical Society*, 24 (6), pag. 451-460.
23. Zaharia M., Mihai M., Roman T., Zbancioc G., **Pui A.**, Gradinaru R.V., Logigan C., Drochioiu G., Unusual ferrite induced photohydrolysis of dinitrophenols to nonaromatic and nontoxic derivatives, *Journal of Photochemistry and Photobiology A: Chemistry*, **2020**, 394, 112497.
24. Ramona Danac, **Aurel Pui**, Ion Corja, Roxana-Maria Amarandi, Catalina Ionica Ciobanu, Mircea-Odin Apostu, Oleg Palamarciu, New M(II) (M=Mn, Co, Ni, Cu, Zn, Pd) coordinative compounds with 2-formylpyridine S-methyl-isothiosemicarbazide, *Journal of Molecular Structure*, 1207, **2020**, 127747.
25. Radu-G. Ciocarlan, Iztok Arcon, **Aurel Pui**, Myrjam Mertens, Natasa Novak Tusar, Elena M. Seftel, Pegie Cool, In-depth structural characterization and magnetic properties of quaternary ferrite systems $Co_{0.5}Zn_{0.25}M_{0.25}Fe_2O_4$ (M = Ni, Cu, Mn, Mg), *Journal of Alloys and Compounds*, 816, **2020**, 152674.
26. C. Virlan, F Tudorache, **A Pui**, Tertiary NiCuZn ferrites for improved humidity sensors: a systematic study, *Arabian Journal of Chemistry*, 13(1), **2020**, pp. 2066-2075
27. Roman, T., **Pui, A.**, Lukacs, A.V., Cimpoesu, N., Lupescu, S., Borhan, A.I., Kordatos, K., Ntziouni, A., Postolache, P., Zaharia, M., Stanciu, S., Mitoşeriu, L., Structural changes of cerium doped copper ferrites during sintering process and magneto-electrical properties assessment, *Ceramics International*, 45 (14), **2019**, Pages 17243-17251
28. Palamarciuc, O., Milunović, M.N.M., Sîrbu, A., Stratulat, E., **Pui, A.**, Gligorijevic, N., Radulovic, S., Kožlíšek, J., Darvasiová, D., Rapta, P., Enyedy, E.A., Novitchi, G., Shova, S., Arion, V.B., Investigation of the cytotoxic potential of methyl imidazole-derived thiosemicarbazones and their copper(ii) complexes with dichloroacetate as a co-ligand, *New Journal of Chemistry*, 43, Issue 3, **2019**, Pages 1340-1357.
29. Trandafir, E.V., Caltun, O.F., Ciocarlan, R., **Pui, A.**, Hempelmann, R., Diamandescu, L.d, Cervera, S.e, Trassinelli, M.e, Vernhet, D., Effect of slow charged 90 keV Ne⁸⁺ ions on zinc ferrite nanoparticles, *Materials Research Express*, 6 (9), **2019**, Article number 095077.
30. Roman, T., Asavei, R.-L., Karkalos, N.E., Roman, C., Virlan, C., Cimpoesu, N., Istrate, B., Zaharia, M., Markopoulos, A.P., Kordatos, K., Stanciu, S., **Pui, A.**, Synthesis and adsorption

- properties of nanocrystalline ferrites for kinetic modeling development, *International Journal of Applied Ceramic Technology*, 16, Issue 2, March/April **2019**, Pages 693-705.
31. Amor, C.O., Kais elghnija, Virvan, C., **Pui, A.**, Elaloui, E., Effect of dysprosium ion (Dy 3+) doping on morphological, crystal growth and optical properties of TiO₂ particles and thin films, *Physica B: Condensed Matter*, 560, 1 May **2019**, Pages 67-74.
 32. Muresan, E.I., **Pui, A.**, Măluțan, T., Coroabă, A., Cimpoesu, N., Istrate, B., Pinteală, M., Hard meso/macroporous iron oxide/iron silicate macrospheres obtained by the multi-templating technique, *Journal of Chemical Technology and Biotechnology*, 94 (9), **2019**, Pages 2888-2898
 33. Elghniji, K., Virvan, C., Elaloui, E., **Pui, A.**, Synthesis, characterization of SiO₂ supported-industrial phosphoric acid catalyst for hydrolysis of NaBH₄ solution, *Phosphorus, Sulfur and Silicon and the Related Elements*, 193, Issue 12, 2 December, **2018**, Pages 806-821.
 34. Murariu, M., Habasescu, L., Ciobanu, C.-I., Gradinaru, R.V., **Pui, A.**, Drochioiu, G., Mangalagiu, I., Interaction of Amyloid Aβ(9–16) Peptide Fragment with Metal Ions: CD, FT-IR, and Fluorescence Spectroscopic Studies, *International Journal of Peptide Research and Therapeutics*, 25 (3), **2019**, Pages 897-909.
 35. Amărandi, R.-M., Lückmann, M., Melyn, M., Jakobsen, M.H., Fallah, Z., Spiess, K., Hjortø, G.M., **Pui, A.**, Frimurer, T.M., Rosenkilde, M.M., Ligand-selective small molecule modulators of the constitutively active vGPCR US28, *European Journal of Medicinal Chemistry*, 155, 15 July **2018**, Pages 244-254.
 36. Ciocarlan, R.-G., Seftel, E.M., Mertens, M., **Pui, A.**, Mazaj, M., Novak Tusar, N., Cool, P., Novel magnetic nanocomposites containing quaternary ferrites systems Co_{0.5}Zn_{0.25}Mn_{0.25}Fe₂O₄ (M = Ni, Cu, Mn, Mg) and TiO₂-anatase phase as photocatalysts for wastewater remediation under solar light irradiation, *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, Volume 230, April **2018**, Pages 1-7.
 37. C. Virvan, O.F. Caltun, D. Lutić, **A. Pui**, New bio-surfactant used in the synthesis of functionalized nanoferrites as potential catalysts, *Current Nanoscience*, Volume 13, Issue 3, **2017**, Pages 247-253.
 38. C. Virvan, F. Tudorache, **A. Pui**, Increased sensibility of mixed ferrite humidity sensors by subsequent heat treatment, *International Journal of Applied Ceramics Technology*, *International Journal of Applied Ceramic Technology*, 14(6), pp. 1174-1182
 39. Muresan, E.I., Lutić, D., Lisa, G., **Pui, A.**, Mesoporous aluminosilicate macrospheres obtained by spray gelling technique, *Journal of Sol-Gel Science and Technology*, **2017**, 81 (3) p. 934-944.
 40. Lückmann, M., Amarandi, R.-M., Papargyri, N., Jakobsen, M.H., Christiansen, E., Jensen, L.J., **Pui, A.**, Schwartz, T.W., Rosenkilde, M.M., Frimurer, T.M., Structure-based discovery of novel US28 small molecule ligands with different modes of action, *Chemical Biology and Drug Design*, **2017**, 89 (3), 289-293.
 41. Virvan, C., Bulai, G., Caltun, O.F., Hempelmann, R., **Pui, A.**, Rare earth metals' influence on the heat generating capability of cobalt ferrite nanoparticles, *Ceramics International*, 42 (10), **2016**, Pages 11958-11965.
 42. Karlshøj, S., Amarandi, R.M., Larsen, O., Daugvilaite, V., Steen, A., Brvar, M., Pui, A., Frimurer, T.M., Ulven, T., Rosenkilde, M.M., Molecular mechanism of action for allosteric modulators and agonists in CC-chemokine receptor 5 (CCR5), *Journal of Biological Chemistry*, 29 (52), 2016, p.26860-26874.
 43. M. Airimioaei, R. Stanculescu, V. Preutu, C. Ciomaga, N. Horchidan, S. Tascu, D. Lutić, **A. Pui**, L. Mitoseriu, Effect of particle size and volume fraction of BaTiO₃ powders on the functional properties of BaTiO₃/poly(ε-caprolactone) composites, *Materials Chemistry and Physics*, 182 (**2016**) 246e255.
 44. Ciocarlan, R.G., **Pui, A.**, Gherca, D., Virvan, C., Dobromir, M., Nica, V., Craus, M.L., Gostin, I.N., Caltun, O., Hempelman, R., Cool, P., Quaternary M_{0.25}Cu_{0.25}Mg_{0.5}Fe₂O₄ (M = Ni, Zn, Co, Mn) ferrite oxides: Synthesis, characterization and magnetic properties, *Materials Research Bulletin*, 81, **2016**, p. 63-70.

45. Muresan, E.I., Puitel, A., **Pui, A.**, Radu, C.D., Tampu, D., Cimpoiesu, N., Sandu, I., Hierarchically bimodal porous metallosilicate catalysts for acetolysis of epichlorohydrin, *Revista de Chimie*, 67 (4) **2016**, pag. 659-664.
46. Postolachi, R., Danac, R., **Pui, A.**, New coordinative compounds with 4-(4'-pyridyl)pyridinium disubstituted monoylides, *Croatica Chemica Acta*, 88 (3), **2015**, pp. 207-211
47. Cozma, Danut Gabriel; Gherca, Daniel; Mihalcea, Ionut; Nicoleta Cornei, **Aurel Pui**, Correlation Between Size of CoFe₂O₄ Nanoparticles Determined from Experimental and Calculated Data by Different Mathematical Models, *CURRENT NANOSCIENCE*, 10 (6) **2014**, 869-876
48. D. Gherca, **A. Pui**, V. Nica, O. Caltun, N. Cornei, Eco-environmental synthesis and characterization of nanophase powders of Co, Mg, Mn and Ni ferrites, *Ceramics International* 40 (**2014**) 9599–9607.
49. Diana Mardare, Nicoleta Cornei, Dumitru Luca, Marius Dobromir, Ștefan A. Irimiciuc, Luciana Pungă, **Aurel Pui** and Cătălin Adomniței, Synthesis and hydrophilic properties of Mo doped TiO₂ thin films, *JOURNAL OF APPLIED PHYSICS*, **2014**, 115, 21, 213501_1-5
50. Cristina Rîmbu, Ramona Danac, **Aurel Pui**, Antibacterial Activity of Pd(II) Complexes with Salicylaldehyde-Amino Acids Schiff Bases Ligands, *Chem. Pharm. Bull.* (**2014**) 62(1) 12–15.
51. Zaharia, M; Borhan, A; Gherca, D; **Pui, A**; Gradinaru, R; Zbancioc, G; Drochioiu, G, Study on the mechanism of ferrite-induced dinitrophenol photodegradation, *EUROPEAN JOURNAL OF MASS SPECTROMETRY*, **2014**, 20, 2, 193-197.
52. C. Tanase, L. Odochian, T. Balaes, G. Lisa, D. Gherca, **A. Pui**, Study of thermal behaviour of some edible mushrooms, *J Therm Anal Calorim*, (**2014**) 115:947–953.
53. G. Motan, **A. Pui**, Studies of different type of aspirin by spectrophotometric methods, *Acta Chemica Iasi*, **2014**, 22, 2, 155-164.
54. Gherca, D., Cornei, N., Mentré, O., Kabbour, H., Daviero-Minaud, S., **Pui, A.** In situ surface treatment of nanocrystalline MFe₂O₄ (M = Co, Mg, Mn, Ni) spinel ferrites using linseed oil, *Applied Surface Science*, **2013**, 287, 490-498.
55. Postolachi, R., Danac, R., Buurma, N.J., **Pui, A.**, Balan, M., Shova, S., Deleanu, C., New cycloimmonium ylide ligands and their palladium(ii) affinities, *RSC Advances*, **2013**, 3 (38) , pp. 17260-17270.
56. **A. Pui**, D. Gherca, N. Cornei, Synthesis and characterization of MFe₂O₄ (M=Mg, Mn, Ni) nanoparticles, *Materials Research Bulletin*, **2013**, 48(4), Pages 1357-1362, ISI = 2.105
57. Valentin Nica, Gherca Daniel, Cristian Ursu, Florin Tudorache, Florin Brinza, **Aurel Pui**, Synthesis and Characterization of Co-Substituted Ferrite Nanocomposites, *IEEE TRANSACTIONS ON MAGNETICS*, **2013**, 49 (1), Pages 26-29. ISI = 1.363.
58. **Pui, Aurel**; Tanase, Catalin; Cozma, Danut-Gabriel; et al., ASSESSMENT OF MACROMYCETES USING FOURIER TRANSFORM INFRARED SPECTROSCOPY AND CHEMOMETRICS, *ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL*, **2013**, 12 (3), Pages: 527-534.
59. R. POSTOLACHI, R. DANAC, A. MOISE, T. MALUȚAN, M. PRZYBYLSKI, **A. PUI**, Pyridinium ylides as potential inhibitors for Glutamate Racemase, *Revista de Chimie*, **2013**, 64 (11), pp. 1301 – 1306.
60. Daniel, G., Ciocarlan, R.-G., Cozma, D.-G., Cornei, N., Nica, V., Sandu, I., **Pui, A.**, Influence of surfactant concentration (carboxymethylcellulose) on morphology and particle sizes of cobalt nanoferrites, *Revista de Chimie*, **2013**, 64 (8), pp. 848-851.
61. M. ZAHARIA, S. JURCOANE, D. MAFTEI, **A. PUI**, C. A. DUMITRAS-HUTANU, AND R.T GRADINARU, Yeast biodegradation of some pesticide dinitrophenols, *Biotechnological Letters*, **2013**, 18 (2) , pp. 8144-8151

62. Daniel Gherca, **Aurel Pui**, Nicoleta Cornei, Alina Cojocariu, Valentin Nica, Ovidiu Caltun, Synthesis, characterization and magnetic properties of MFe_2O_4 ($M = Co, Mg, Mn, Ni$) nanoparticles using ricin oil as capping agent, *J. Magn. Magn. Materials*, 324 (2012), 2012, 3906–3911, ISI = 1.78
63. Ramona Danac, Raluca Rusu, Alexandru Rotaru, **Aurel Pui**, Sergiu Shova, New conjugates of calix[4]arenes bearing dipyridine and indolizine heterocycles, *Supramolecular Chemistry*, Volume 24, Issue 6, 2012, 424-435. ISI = 2.145
64. Irina Andreea Cozaciuc, Rodica Postolachi, Robert Gradinaru, **Aurel Pui**, Synthesis and characterization of uranyl(VI) chiral Schiff-base complexes derived from salicylaldehyde and L-aminoacids, *J. Coord. Chem.*, 65/12, 2012, pages 2170-2181, DOI: 10.1080/00958972.2012.690146, ISI = 1.547
65. **Aurel Pui**, Theodor Malutan, Lucia Tataru, Corina Malutan, Doina Humelnicu, Gabriela Carja, New complexes of lanthanide Ln(III), ($Ln = La, Sm, Gd, Er$) with Schiff bases derived from 2-furaldehyde and phenylenediamines, *Polyhedron*, 30 (2011) 2127–2131. ISI = 2.057
66. Robert Gradinaru, Alin Ionas, **Aurel Pui**, Gheorghita Zbancioc, Gabi Drochioiu, Interaction of inorganic mercury with CoA-SH and acyl-CoAs, *Biometals*, DOI 10.1007/s10534-011-9472-z., *Biometals* (2011) 24:1115–1121 ISI = 2.283
67. C. Tanase, Lucia Odochian, Nicu Apostolescu, **A. Pui**, TG-FTIR analysis applied to the study of thermal behaviour of some edible mushrooms, *J. Therm. Anal. Calorim.*, (2011) 103: 1079-1085. ISI = 1.445.
68. **A. PUI**, D. GHERCA, G. CARJA, Characterization and magnetic properties of $CoFe_2O_4$ nanoparticles prepared in carboxymethylcellulose solution, *Digest Journal of Nanomaterials and Biostructures*, Vol. 6, No 4, October-December 2011, p. 1783-1791.
69. D-G. Cozma, **A. Pui**, R. Ricoux, J-P. Mahy, Estimation of Kinetic Parameters for the Catalytic Oxidation of Substituted Phenols in Liquid-phase, *Rev. Chim (Bucharest)*, 62, 1, 2011.
70. Popa K, **Pui A**, Tanase C. et al., Monitoring of $Ra-226$ and $Cs-137$ Radioisotopes on Bistrita Valley and their Translocation in Spontaneous Macromycetes, *REVISTA DE CHIMIE*, 61:9, (2010), 894-896.
71. **Pui A**, Cornei N, Ricoux R, Mahy J. P., Synthesis Characterization and Catalytic Activity of Some New Manganese (II) Compounds with Tetra-chloro R-bis(salicylaldehyde) Ethylenediamine and R- bis(salicylaldehyde) Phenylenediamine Ligands ($R = H, CH_3, CH_2-CH_3$), *REVISTA DE CHIMIE*, 61:6, (2010), 575-579.
72. Tanase C, **Pui A**, Oprea A, Popa K, Translocation of radioactivity from substrate to macromycetes in the Crucea (Romania) uranium mining area, *J. Radioanalytical and Nuclear Chemistry*, 281:3 (2009), 563-567.
73. **Pui A**, Perree-Fauvet M, Korri-Youssouf H, Iuliana Breaban, Bis(3-X, $\alpha,5$ -Dimethyl salicylaldehyde)ethylene Diamine Nickel(II) Complexes Synthesis and Characterization, *Rev. de Chimie, Buc*, 60:8 (2009), 763-766.
74. Th. Malutan, **A. Pui**, C. Malutan, L. Tataru, D. Humelnicu, A Fluorescence Emission, FT-IR and UV-VIS Absorption Study of the Some Uranium (VI) Schiff Bases Complexes, *Journal of Fluorescence*, (2008) 18:707-713.
75. C. Tanase, **A. Pui**, R. Olariu, D. G. Cozma, Analysis of heavy metals content in the soil and in the macromycetes species growing on mine waste dumps, *Revista de Chimie București*, 59, 5, 2008.
76. **A. Pui**, H. Fischer, H. Kopf, Spectral and electrochemical studies of manganese(III) and iron(III) complexes with substituted 3,4-bis{[(2-hydroxyphenyl)methylene]amino} benzene, *Rev. de Chimie, Buc.*, 12 (2008), .

77. **Aurel Pui**, D. Humelnicu, I. Humelnicu, Synthesis of some complexes of dioxouranium(VI) with di-halogeno-tetra-methyl salen ligands, *Rev. Roum. Chim.*, 53 (3), 2008, 117-182.
78. Catalin Tanase, **Aurel Pui**, Application of the FT IR spectroscopy in the study of fungi, *Revista de Chimie Bucuresti*, 59, 2, 2008, 212-215.
79. **Aurel Pui**, Jean-Pierre Mahy, Synthesis, characterization and catalytic activity of halo-methyl- bis(salicylaldehyde) ethylenediamine cobalt(II) complexes, *Polyhedron*, 26, 2007, 3143-3152.
80. **Aurel Pui**, Manganese (II) complexes with bis(3-halo-2-hydroxy-5-methylacetophenone) ethylenediamine; structure, characterization and redox behavior, *J. Coord. Chem.*, 60/7, 2007, 709-718.
81. **Aurel Pui**, Clotilde Policar, Jean-Pierre Mahy, Electronic and steric effects in cobalt Schiff bases complexes. Synthesis, characterization and catalytic activity of some cobalt(II) tetra-halogens-dimethyl salen complexes, *Inorg. Chim. Acta*, 360, 2007, 2139-2144.
82. **Aurel Pui**, Cristian DOBROTA, Jean-Pierre MAHY, Electrochemical, Spectroscopic Characterization and Catalytic Activity of Cobalt (II) Complexes of tetra-chloro-R-Salen ([tClSalen = bis(3,5-di-chloro- α -R salicylidene) ethylenediamine]) and tetra-chloro-R-Salophen ([tClSalophen = bis(3,5-di-chloro- α -R salicylidene)-1,2-phenylenediamine]), R = H, CH₃, CH₂-CH₃, *J. Coord. Chem.*, 60/5, 2007, 581-595.
83. Lucia Odochian, Viorica Dulman, Mihai Dumitrascu, **Aurel Pui**, Study by thermal methods on the materials obtained by dye removal from waste waters with beech flour, *Journal of Thermal Analysis and Calorimetry*, 89 (2), 2007, 625-631.
84. O. Pintilie, L. Profire, V. Sunel, M. Popa, **A. Pui**, Synthesis and Antimicrobial activity of Some New 1,3,4-Thiadiazole and 1,2,4-triazole Compounds Having a D,L-Methionine Moiety, *Molecules*, 12, 2007, 103-113.
85. **Aurel Pui**, Mihaela-Aurelia Vizitiu, Bis. (3-halogeno α ,5-diMethyl salicylaldehyde) ethylenediamine copper (II) complexes; synthesis, characterization and electronical influence, *Rev. de Chimie Bucuresti*, 58 (1), 2007, 25-27.
86. **Aurel Pui**, Mechanism of oxidation of 2,6-di-tert-butyl-phenol with Molecular Oxygen, in Presence of some New Bis(di-halogeno α -Methyl Salen) Copper(II) complexes, *Synth. React. Inorg. Metal-Organic and Nano-Metal Chemistry*, 36, 2006, 1-5.
87. **Aurel Pui**, Synthesis, characterisation and catalytic activity of the tetra-cloroSalen and tetra-cloro Salophen copper (II) complexes, *Rev. Roum. Chim.*, 51 (12), 2006, 1177-1182.
88. **A. Pui**, Al. Cecal, G. Drochioiu, Coordinative compounds of M(II) M=Mn, Fe, Co, Ni and Cu) with tetridentate diimine pyrrole Schiff bases, *Rev. Roum. Chim.*, 48(6), 2003, 439-443.
89. **Aurel Pui**, Binding of Molecular Dioxigen to the Co(II) Complexes in Nonaqueous Solution, *Croatica Chimica Acta.*, 75 (1), 2002, 165-173.
90. **Aurel Pui**, Ioan Berdan, Studii privind formarea compuşilor coordinativi ai Cu(II) cu baze Schiff, *Revista de Chimie*, 53, (1), 2002, 9-14.
91. **Aurel Pui**, Ioan Berdan, Aurore Gref and Irène Morgenstern-Badarau, New Manganese(II) Complexes with Catalytic Activity in oxidation reaction by molecular oxygen, *Rev. Roum. Chimie*, 47 (7), 2002, 607-612.
92. **Aurel Pui**, Ioan Berdan and Dănuţ-Gabriel Cozma, Coordinative compounds of Co(II) with Schiff bases, *Rev. Roum. Chimie*, 47 (10-11), 2002, 1147-1153
93. **Aurel Pui**, Ioan Berdan, Martine Perrée-Fauvete, Irène Morgenstern-Badarau, Electrochemical and Spectroscopic Characterization of New Co(II) Complexes. Their Catalytic Activity in Oxidation Reactions by Molecular Oxygen. *Inorg. Chimica Acta*, 320: (1-2), 2001, 168-172.

94. **Aurel Pui**, Ioan Berdan, Aurore Gref, Irène Morgenstern-Badarau, Synthesis and Characterization of new Cu(II) Complexes with Catalytic Activity in Oxidation Reactions by Molecular Oxygen, *Rev. Roum. Chimie*, 46 (8), 2001, 67-72.
95. **Aurel Pui**, Synthesis and characterisation of new Cu(II) complexes with catalytic activity in oxidation reactions by molecular oxygen, *Rev. Roum. Chimie*, 46 (8), 2001, 873-878.
96. **Aurel Pui**, Ioan Berdan, Mirela Goanță, Dumitru Ganju, Binding of molecular oxygen to the Mn^{II}(RSalen) complexes (R = -NO₂, -CH₃, -C₂H₅, -I; Salen = bis(Salicylaldehyde) ethylenediamine) in nonaqueous solution, *Rev. Roum. Chimie*, 46 (5), 2001, 497-501.
97. **A. Pui**, I. Berdan și Al. Cașcaval, Catalytic properties of some adducts of the coordination compounds of transitional metals with molecular oxygen, *Rev. Roum de Chimie*, 45(4), 2000, 331-335.
98. **Aurel Pui**, Ioan Berdan și Martine Peree-Fauvet, Implicațiile compușilor coordinativi în procese de oxidări catalitice; influența catalizatorului asupra produșilor de reacție, *Revista de Chimie*, 51 (12), 2000, 971-974.
99. **A Pui**, I. Berdan și Gh. Stoica, Coordinative compounds of Co(II) with bis(α -pyrrole-aldehyde) ethylenediamine, *Rev. Roum. Chimie*, 44 (3), 1999, 195-199.
100. Al. Cecal, M. Palamaru, **A. Pui**, S. Chișcă, A. Iordan, Radiometric method for the study of the nucleation of crystals containing ¹³⁴Cs⁺ ions in gelatin, *J. Radioanalytical and Nuclear Chemistry*, 222, 1-2, (1997), 39-43.
101. Berdan, **A. Pui**, Complexes du Tl (III) avec les acides pyridine-carboxyliques, *Bull. Soc. Fr.*, 128, 1991, 842-845.