

BOOK CHAPTERS

1. B. Cojocaru, V.I. Parvulescu, Photocatalytic Assisted Processes, in *Perovskites and Related Mixed Oxides: Concepts and Applications*, First Edition, P. Granger, V.I. Parvulescu, S. Kaliaguine, W. Prellier, (Eds), Wiley-VCH Verlag GmbH & Co. KGaA, 2015, chapter 30, 675-697, ISBN 978-3-527-33763-7
2. B. Cojocaru, C.K. Waters, F. Lin, L. Woodard, R.M. Richards, V.I. Parvulescu, *Nanoparticles and Nanocomposites Design in Photocatalysis, Nanoparticle Design and Characterization for Catalytic Applications in Sustainable Chemistry*, R. Luque, P. Prinsen, (Eds.), The Royal Society of Chemistry, 2019, chapter 9, 236-280., ISBN 978-1-78801-490-8 / 978-1-78801-805-0
3. C.K. Waters, B. Cojocaru, F. Lin, L. Woodard, R. M. Richards, V.I. Parvulescu, *Plasmonic Photocatalysts for Environmental Applications, Nanoparticles and Nanocomposites Design in Photocatalysis, Nanoparticle Design and Characterization for Catalytic Applications in Sustainable Chemistry*, R. Luque, P. Prinsen, (Eds.), The Royal Society of Chemistry, 2019, chapter 11, 310-329, ISBN 978-1-78801-490-8 / 978-1-78801-805-0

ISI PAPERS

1. *Hydrotalcites composition as catalysts: preparation and their behavior on epoxidation of two bicycloalkenes*, D. Carriazo, C. Martín, V. Rives, A. Popescu, B. Cojocaru, I. Mandache, V. I. Parvulescu, *Micropor. Mesopor. Mat.*, **2006**, 95, 39-47;
2. *Rotational Fluctuations of Water Confined to Layered Oxide Materials: Nonmonotonous Temperature Dependence of Relaxation Times*, L. Frunza, A. Schonhals, S. Frunza, V.I.; Parvulescu, B. Cojocaru, D. Carriazo, C. Martin, V. Rives, *J. Phys. Chem. A.*, **2007**, 111, 5166-5175;
3. *Direct Time-Resolved Detection of Singlet Oxygen in Zeolite-Based Photocatalysts*, B. Cojocaru, M. Laferrière, E. Carbonell, V. Parvulescu, H. García, J. C. Scaiano, *Langmuir*, **2008**, 24, 4478-4481;
4. *Sensitizers on Inorganic Carriers for Decomposition of the Chemical Warfare Agent Yperite*, B. Cojocaru, V.I. Parvulescu, E. Preda, G. Iepure, V. Somoghi, E. Carbonell, M. Alvaro, H. García, *Environ. Sci. Technol.*, **2008**, 42, 4908-4913;
5. *Sunflower and rapeseed oil transesterification to biodiesel over different nanocrystalline MgO catalysts*, M. Verziu, B. Cojocaru, J. Hu, R. Richards, C. Ciuculescu, P. Filip, V.I. Parvulescu, *Green Chem.*, **2008**, 10, 373-381;
6. *Band gap effect on the photocatalytic activity of supramolecular structures obtained by entrapping photosensitizers in different inorganic supports*, B. Cojocaru, Ş. Neaţu, V.I. Pârvulescu, K. Dumbuya, H.-P. Steinrück, J. M. Gottfried, C. Aprile, H. Garcia, J. C. Scaiano, *Phys. Chem. Chem. Phys.*, **2009**, 11, 5569-5577;
7. *Synergism of activated carbon and undoped and nitrogen-doped TiO₂ in the photocatalytic degradation of the chemical warfare agents soman, VX, and yperite*, B. Cojocaru, S. Neatu, V.I. Parvulescu, V. Somoghi, N. Petrea, G. Epure, M. Alvaro, H. Garcia, *ChemSusChem.*, **2009**; 2, 427-436 ;
8. *Polymer–microporous host interactions probed by photoluminescence spectroscopy*, C. Tiseanu, V.I. Parvulescu, B. Cojocaru, V.A. Lorenz-Fonfria, M. Kumke, A. Gessner, I. Enculescu, *Phys. Chem. Chem. Phys.*, **2010**, 12, 3031-3037;
9. *Visible-light C–heteroatom bond cleavage and detoxification of chemical warfare agents using titania-supported gold nanoparticles as photocatalyst*, Ş. Neaţu, B. Cojocaru, V.I. Pârvulescu, V. Şomoghi, M. Alvaro, H. Garcia, *J. Mater. Chem.*, **2010**, 20, 4050-4054;

10. *Sol-gel-entrapped nano silver catalysts-correlation between active silver species and catalytic behavior*, V.I. Parvulescu, B. Cojocaru, V. Parvulescu, R. Richards, Z. Li, C. Cadigan, P. Granger, P. Miquel, C. Hardacre, *J. Catal.*, **2010**, 272, 92-100;
11. *Visible-light photocatalytic activity of gold nanoparticles supported on template-synthesized mesoporous titania for the decontamination of the chemical warfare agent SOMAN*, M. Alvaro, B. Cojocaru, A.A. Ismail, N. Petrea, B. Ferrer, F.A. Harraz, V.I. Parvulescu, H. Garcia, *Appl. Catal. B Environ.*, **2010**, 99, 191-197;
12. *Photoluminescence properties of terbium complexes bound to amorphous silica*, B. Cojocaru, C.Tiseanu, V.I. Parvulescu, *J. Non-Cryst. Solids*, **2010**, 356, 1854-1858;
13. *Synthesis and Characterization of Titanium Dioxide Phases in Mesostructured Silica Matrices with Photocatalytic Activity*, S. Gopala, R.R. Bhattacharjee, R. Haerr, B. Yeginoglu, O.D. Pavel, B. Cojocaru, V.I. Parvulescu, R.M. Richards, *ChemCatChem*, **2011**, 3, 408–416;
14. *In-situ study of ozone and hybrid plasma Ag-Al catalysts for the oxidation of toluene: evidence of the nature of the active sites*, M. Magureanu, D. Piroi, N.B. Mandache, V.I. Parvulescu, V. Parvulescu, B. Cojocaru, C. Cadigan, R. Richards, H. Daly, C. Hardacre, *Appl. Catal. B Environ.*, **2011**, 104, 84-90;
15. *Improving TiO₂ activity in photo-production of hydrogen from sugar industry waste-waters*, M. Ilie, B. Cojocaru, V.I. Parvulescu, H. Garcia, *Int. J. Hydrogen Energ.*, **2011**, 36, 15509-15518;
16. *Influence of gold particle size on the photocatalytic activity for acetone oxidation of Au/TiO₂ catalysts prepared by dc-magnetron sputtering*, B. Cojocaru, Ş. Neaţu, E. Sacaliuc-Pârvulescu, F. Lévy, V.I. Pârvulescu, H. Garcia, *Appl. Catal. B Environ.*, **2011**, 107, 140-149;
17. *The activity of yttrium-modified Mg,Al hydrotalcites in the epoxidation of styrene with hydrogen peroxide*, O.D. Pavel, B. Cojocaru, E. Angelescu, V.I. Parvulescu, *Appl. Catal. A General*, **2011**, 403, 83-90;
18. *Surface versus volume effects in luminescent ceria nanocrystals synthesized by oil in water microemulsion method*, C. Tiseanu, V.I. Parvulescu, M. Boutonnet, B. Cojocaru, P.A. Primus, C.M. Teodorescu, C. Solans, M. Sanchez Dominguez, *Phys. Chem. Chem. Phys.*, **2011**, 13, 17135-17145.
19. *Synthesis, solid-state photophysical properties and electropolymerization of novel diazulenyl ethenes*, E. A. Dragu, S. Nica, M. Raicopol, A. Baran, D.-F. Anghel, B. Cojocaru, L. Tarko, A.C. Razuş, *Tetrahedron Lett.*, **2012**, 53, 2611–2614.
20. *In situ Raman and Time-Resolved Luminescence Investigation of the Local Structure of ZrO₂ in the Amorphous to Crystalline Phase Transition*, C. Tiseanu, V. I. Parvulescu, B. Cojocaru, K. Pemartin, M. Sanchez-Dominguez, M. Boutonnet, *J. Phys. Chem. C*, **2012**, 116, 16776–16783.
21. *Order and disorder effects in nano-ZrO₂ investigated by micro-Raman and spectrally and temporarily resolved photoluminescence*, C. Tiseanu, B. Cojocaru, V.I. Parvulescu, M. Sanchez-Dominguez, P. A. Primus, M. Boutonnet, *Phys. Chem. Chem. Phys.*, **2012**, 14, 12970-12981.

22. *Heterogeneous amination of bromobenzene over titania supported gold catalysts*, M. Ciobanu, B. Cojocaru, C. Teodorescu; F. Vasiliu, S.M. Coman, W. Leitner; V.I Parvulescu, *J. Catal.*, **2012**, 296, 43-54.
23. *Isolated centres versus defect associates in Sm³⁺-doped CeO₂: a spectroscopic investigation*, C. Tiseanu, B. Cojocaru, D. Avram, V. I. Parvulescu, A. V. Vela-Gonzalez, M. Sanchez-Dominguez, *J. Phys. D: Appl. Phys.*, **2013**, 46, 5302.
24. *Toluene oxidation by non-thermal plasma combined with palladium catalysts*, M. Magureanu, D. Dobrin, N. B. Mandache, B. Cojocaru, V. I. Parvulescu, *Front. Chem.*, **2013**, 1, Article 7..
25. *Photocatalytic Activity and Selectivity of ZnO Materials in the Decomposition of Organic Compounds*, F. Lin, B. Cojocaru, C.-L. Chou, C. A. Cadigan, Y. Ji, D. Nordlund, T.-C. Weng, Z. Zheng, V.I. Pârulescu, R.M. Richards, *ChemCatChem*, **2013**, 5, 3841–3846.
26. *Heavily impregnated ceria nanoparticles with europium oxide: spectroscopic evidences for homogenous solid solutions and intrinsic structure of Eu³⁺ - oxygen environments*. D. Avram, C. Rotaru, B. Cojocaru, M. Sanchez-Dominguez, M. Florea, C. Tiseanu, *J. Mater. Sci.*, **2014**, 49, 2117-2126.
27. *Local structure and nanoscale homogeneity of CeO₂-ZrO₂: Differences and similarities to parent oxides revealed by luminescence with temporal and spectral resolution*, C. Tiseanu, V.I. Parvulescu, D. Avram, B. Cojocaru, M. Boutonnet, M. Sanchez-Dominiguez, *Phys. Chem. Chem. Phys.*, **2014**, 16, 703-710.
28. *Structural down- and phase selective up- conversion emission properties of mixed valent Pr doped into oxides with tetravalent cations*, C. Tiseanu, V. Parvulescu, D. Avram, B. Cojocaru, N. Apostol, A. V. Vela-Gonzalez, M. Sanchez-Dominguez, *Phys. Chem. Chem. Phys.*, **2014**, 16, 5793-580.
29. *Exceptional capability of nanosized CeO₂ materials to “dissolve“ lanthanide oxide established by time-gated excitation and emission spectroscopy*, C. Tiseanu, V.I. Parvulescu, D. Avram, B. Cojocaru, M. Sanchez-Dominguez, *Dalton Trans.*, **2014**, 43, 7622-7630.
30. *Lanthanide - lanthanide and lanthanide - defect interactions in co - doped ceria revealed by luminescence spectroscopy*, D. Avram, C. Gheorghe, C. Rotaru, B. Cojocaru, M. Florea, V. Parvulescu, C. Tiseanu, *J. Alloys Compd.*, **2014**, 616, 535-541.
31. *New Zn(II) coordination polymers constructed from aminoalcohols and aromatic dicarboxylic acids: synthesis, structure, photocatalytic properties and solid-state conversion to ZnO*, C. Paraschiv, A. Cucos, S. Shova, C. Maxim, A. M. Madalan, D. B. Visinescu, B. Cojocaru, V. Parvulescu, M. Andruh, *Cryst. Growth Des.*, **2015**, 15 (2), 799–811.
32. *NIR to Vis - NIR up - conversion and X-ray excited emission of Er doped high Z BiOCl*, D. Avram, B. Cojocaru, M. Florea, V. Teodorescu, I. Tiseanu, C. Tiseanu, *Opt. Mater. Express*, **2015**, 5, 951-962.
33. *Towards a Unified Description of Luminescence – Local Structure Correlation in Ln Doped CeO₂ Nanoparticles: Roles of Ln Ionic Radius, Ln Concentration and Oxygen Vacancies*, Avram, Daniel;

- Sanchez-Dominguez, Margarita; Cojocaru, Bogdan; Florea, Mihaela; Parvulescu, Vasile; Tiseanu, Carmen, *J. Phys. Chem. C*, **2015**, 119 (28), pp 16303–16313;
34. *Pure and almost pure NIR emission of Tm and Tm, Yb - CeO₂ under UV, X - ray and NIR up - conversion excitation: Key roles of level selective antenna sensitization and charge – compensation*, D. Avram, A. Urda, B. Cojocaru, I. Tiseanu, M. Florea, C. Tiseanu, *Phys. Chem. Chem. Phys.*, **2015**, 17, 30988-30992.
35. *A two-dimensional coordination polymer constructed from binuclear copper(II) metalloligands and manganese(II) ions: synthesis, crystal structure and magnetic properties*, Alina S. Dinca, Catalin Maxim, Bogdan Cojocaru, Francesc Lloret, Miguel Julve, Marius Andruh, *Inorganica Chimica Acta*, **2016**, 440, 148–153.
36. *Graphene oxide as metal-free catalyst for hypochlorite oxidation of primary amines to nitriles*, Ana Primo, Marta Puche, Octavian D. Pavel, Bogdan Cojocaru, Vasile Parvulescu and Hermenegildo García, *Chem. Commun.*, **2016**, 52, 1839-1842.
37. *Liquid-phase oxidation with hydrogen peroxide of benzyl alcohol and xylenes on Ca₁₀(PO₄)₆(OH)₂ - CaWO₄*, M.I. Domínguez, B. Cojocaru, M. Tudorache, J.A. Odriozola, M.A. Centeno, V.I. Parvulescu, *Comptes Rendus Chimie*, **2016**, 19(10), 1156–1165.
38. *Advances in luminescence of lanthanide doped Y₂O₃: Case of S₆ sites*, Optical Materials Express, D. Avram, B. Cojocaru, M. Florea, C. Tiseanu, *Opt. Mater. Express* **2016**, 6(5), 1635-1643.
39. *Lignin fragmentation over magnetically recyclable composite Co@Nb₂O₅@Fe₃O₄ catalysts*, Cristina Opris; Bogdan Cojocaru; Nicoleta Gheorghe; Madalina Tudorache; Simona M Coman; Vasile I Parvulescu; Bahir Duraki; Frank Krumeich; Jeroen Anton van Bokhoven, *J. Catal.*, **2016**, 339, 209–227.
40. *Defect induced tunable near infrared emission of Er - CeO₂ by heterovalent co – dopants*, M. Florea, D. Avram, B. Cojocaru, I. Tiseanu, V. Parvulescu, C. Tiseanu, *Phys. Chem. Chem. Phys.*, **2016**, 18, 18268-18277.
41. *Time-gated down-/up-conversion emission of Ho-CeO₂ and Ho, Yb-CeO₂ nanoparticles*, D. Avram, I. Porosnicu, B. Cojocaru, M. Florea, C. Tiseanu, *J. Lumin.*, **2016**, 179, 265-271.
42. *C–N cross-coupling on supported copper catalysts: The effect of the support, oxidation state, base and solvent*, Alina Tirsoaga, Bogdan Cojocaru, Cristian Teodorescu, Florin Vasiliu, Maria Nicoleta Grecu, Daniela Ghica, Vasile I. Parvulescu, Hermenegildo Garcia, *J. Catal.*, **2016**, 341, 205–220.
43. *Enhanced photo-degradation of bisphenol pollutants onto gold-modified photocatalysts*, Bogdan Cojocaru, Veronica Andrei, Madalina Tudorache, Feng Lin, Chris Cadigan, Ryan Richards and Vasile I. Parvulescu, *Catal. Today*, **2017**, 284, 153-159.
44. *Direct conversion of cellulose to α-hydroxy acids (AHAs) over Nb₂O₅-SiO₂ coated magnetic nanoparticles*, N. Candu, F. Anita, I. Podolean, B. Cojocaru, V. I. Parvulescu, S. M. Coman, *Green. Process. Synth.*, **2017**, 6, 255-264.

45. *Mesoporous Tantalum Oxide Photocatalyst: Structure and Activity Evaluation*, Gulaim A. Seisenbaeva, Bogdan Cojocaru, Bogdan Jurca, Carmen Tiseanu, Jean-Marie Nedelec, Vadim G. Kessler, Vasile I. Parvulescu, *Chemistry Select*, **2017**, 2(1), 421–427.
46. *Protonated titanate nanotubes as solid acid catalyst for aldol I condensation*, Melita Sluban, Bogdan Cojocaru, Vasile Parvulescu, Jernej Iskra, Romana Cerc Korošec, Polona Umek, *J. Catal.* **346** (2017) 161–169.
47. *Selective catalytic reduction of NO by H₂/C₃H₆ over Pt/Ce_{1-x}Zr_xO_{2-δ}: The synergy effect studied by transient techniques*, Christos M. Kalamaras, George G. Olympiou, Vasile I. Pârvulescu, Bogdan Cojocaru, Angelos M. Efstathiou, *Appl. Catal. B.: Environ.*, **306** (2017), 308–318.
48. *Lignin fragmentation onto multifunctional Fe₃O₄@Nb₂O₅@Co@Re catalysts: the role of the composition and deposition route of rhenium*, Cristina Opris, Bogdan Cojocaru, Nicoleta Gheorghe, Madalina Tudorache, Simona M. Coman, Vasile I. Parvulescu, Bahir Duraki, Frank Krumeich, Jeroen A. van Bokhoven, *ACS Catal.*, **2017**, 7, pp 3257–3267.
49. *Up-conversion luminescence of Er(Yb)-CeO₂: Status and new results*, Ioana Porosnicu, Daniel Avram, Bogdan Cojocaru, Mihaela Florea, Carmen Tiseanu, *J. Alloys. Compd.*, **711** (2017) 627–636.
50. *Down-/Up-Conversion Emission Enhancement by Li Addition: Improved Crystallization or Local Structure Distortion*, Avram, Daniel; Cojocaru, Bogdan; Tiseanu, Ion; Florea, Mihaela; Tiseanu, Carmen, *J. Phys. Chem. C*, **2017**, 121 (26), pp 14274–14284.
51. *Intermediate Selectivity in the Oxidation of Phenols using Plasmonic Au/ZnO Photocatalysts*, Lin, Feng; Cojocaru, Bogdan; Williams, Luke; Cadigan, Christopher; Tian, Chixia, Grecu, Maria; Xin, Huolin L; Vyas, Shubham; Parvulescu, Vasile; Richards, Ryan, *Nanoscale.*, **2017**; 9(27), 9359-9364.
52. *Nanoscale insights into doping behavior, particle size and surface effects in trivalent metal doped SnO₂*, Bogdan Cojocaru, Daniel Avram, Vadim Kessler, Vasile Parvulescu, Gulaim Seisenbaeva, Carmen Tiseanu, *Scientific Reports* **2017**, 7, Article number: 95980.
53. *RuCl₃ supported on N-doped graphene as reusable catalyst for one-step glucose oxidation to succinic acid*, C. Rizescu, I. Podolean, B. Cojocaru, V.I. Parvulescu, S.M. Coman, J. Albero, H. Garcia, *ChemCatChem* **2017**, 9(17), 3314–3321.
54. *Graphene oxide as catalyst for the diastereoselective transfer hydrogenation in the synthesis of prostaglandin derivatives*, S.M. Coman, I. Podolean, M. Tudorache, B. Cojocaru, V.I. Parvulescu, M. Puche, H. Garcia, , *Chem. Comm.* **2017**, 53, 10271-10274.
55. *Hydrogenolysis of lignin over Ru-based catalysts: the role of the ruthenium in a lignin fragmentation process*, Marian Verziu, Alina Jurca, Bogdan Cojocaru, Cristina Bucur, Bogdan Tudora, Aurore Richel, Mario Aguedo, Ajaikumar Samikannu, Jyri Pekka Mikkola, *Molec. Catal.*, **2018**, 450, 65–76.

56. *One-pot enzymatic production of lignin-silica composites*, Sabina Ion, Cristina Opris, Bogdan Cojocaru, Madalina Tudorache, Irina Zgura, Aurelian Galca, Adina Bodescu, Madalin Enache, Gabriel Maria, Vasile I Parvulescu, *Front. Chem., Green and Sustainable Chemistry* **2018**, 6, 124.
57. *Engineering active sites on reduced graphene oxide by hydrogen plasma irradiation: Mimicking bifunctional metal/supported catalysts in hydrogenation reactions*, Ana Primo, Antonio Franconetti, Monica Magureanu, Nicolae Bogdan Mandache, Cristina Bucur, Cristina Rizescu, Bogdan Cojocaru, Vasile I. Parvulescu, Hermenegildo Garcia, *Green Chem.*, **2018**, 20, 2611-2623.
58. *From Glucose Direct to Succinic Acid: an Optimized Recyclable Bifunctional Ru@MNP-MWCNT Catalyst*, Iunia Podolean, Bogdan Cojocaru, Hermenegildo Garcia, Cristian Teodorescu, Vasile I. Parvulescu, Simona M. Coman, *Top. Catal.*, **2018**. 61(18-19), 1866–1876.
59. *Highly efficient, easily recoverable and recyclable Re-SiO₂-Fe₃O₄ catalyst for the fragmentation of lignin*, Madalina Tudorache, Cristina Opris, Bogdan Cojocaru, Nicoleta Gheorghe, Alina Tirsoaga, Simona M. Coman, Vasile I. Parvulescu, Bahir Duraki, Frank Krumeich, Jeroen A. van Bokhoven, *ACS Sustainable Chem. Eng.*, **2018**, 6 (8), pp 9606–9618.
60. *Heavy doping ceria by wet impregnation: A viable alternative to bulk doping approaches*, Mihaela Florea, Daniel Avram, Valentin Adrian Maraloiu, Bogdan Cojocaru, Carmen Tiseanu, *Nanoscale*, **2018**, 10, 18043-18054.
61. *Full tetragonal phase stabilization in ZrO₂ nanoparticles by wet impregnation: Interplay of host structure, dopant concentration and sensitivity of characterization technique*, Claudiu Colbea, Daniel Avram, Bogdan Cojocaru, Raluca Negrea, Corneliu Ghica, Vadim Kessler, Gulaim Seisenbaeva, Vasile Parvulescu, Carmen Tiseanu, *Nanomaterials*, **2018**, 8(12), 988.
62. *Efficient glucose dehydration to HMF on Nb-BEA catalysts*, Natalia Candu, Magdi A. Belkassim, Marian Verziu, Bogdan Cojocaru, Bogdan Jurca, Nicoleta Apostol, Cristian Teodorescu, Vasile I. Parvulescu, Simona M. Coman, *Catal. Today*, **2019**, 325, 109.
63. *CO₂ methanation catalyzed by oriented MoS₂ nanoplatelets supported on few layers graphene*, Ana Primo, Jinbao He, Bogdan Jurca, Bogdan Cojocaru, Cristina Bucur, Vasile I. Parvulescu, Hermenegildo Garcia, *Appl. Catal. B: Environmental*, **2019**, 245, 351–359.
64. *Diastereoselective hydrogenation of Formoterol intermediate over M(Ir, Pd, Pt, Rh, Ru)/BEA zeolite catalysts*, Candu, N., Cojocaru, B., Coman, S.M., Parvulescu, V.I., *Catal. Today*, **2020**, 354, 100-108.
65. *Phase control in Hafnia: New synthesis approach and convergence of average and local structure properties*, Cojocaru, B., Avram, D., Negrea, R., Ghica, C., Kessler, V.G., Seisenbaeva, G.A., Parvulescu, V.I., Tiseanu, C., *ACS Omega*, **2019**, 4 (5), 8881.
66. *Nitrogen-doped graphene as metal free basic catalyst for coupling reactions*, Candu, N., Man, I., Simion, A., Cojocaru, B., Coman, S.M., Bucur, C., Primo, A., Garcia, H., *J. Catal.*, **2019**, 376, 238.

67. *Batch versus flow stereoselective hydrogenation of A-acetamido-cinnamic acid catalyzed by an Au(I) complex*, Negoi, A., Cojocaru, B., Parvulescu, V.I., Imlyhen, N., Gouygou, M., *Molec. Catal.*, **2019**, 474, art. no. 110420.
68. *Synergistic B–Al interaction in SBA-15 affording an enhanced activity for the hydro-isomerization of heptane over Pt–B–Al-SBA-15 catalysts*, Rizescu, C., Cojocaru, B., Thanh Hien, N.T., Huyen, P.T., Parvulescu, V.I., *Micropor. Mesopor. Mat.*, **2019**, 142.
69. $^3[\text{Cu}_2(\text{mand})_2(\text{hmt})]$ – MOF: A synergetic effect between Cu(II) and hexamethylenetetramine in the Henry reaction, Horatiu Szalad, Natalia Candu, Bogdan Cojocaru, Traian Pasatoiu, Marius Andruh, Vasile Parvulescu, *Chemistry*, **2020**, 2(1), 50-62.
70. *Nanometer-thick films of antimony oxide nanoparticles grafted on defective graphenes as heterogeneous base catalysts for coupling reactions*, Andrada Simion; Natalia Candu; Bogdan Cojocaru; Simona Coman; Cristina Bucur; Amparo Forneli; Ana Primo; Isabela Costinela Man; Vasile I Parvulescu; Hermenegildo Garcia, *J. Catal.*, **2020**, 390, 135-149.
71. *Improvement of catalytic activity of graphene oxide by plasma treatment*, M. Magureanu; N.B. Mandache; F. Gherendi; C. Rizescu; B. Cojocaru; A. Primo; H. Garcia; V.I. Parvulescu, *Catal. Today*, **2021**, 366, 2-9.
72. *Catalytic behavior of Li-Al-LDH prepared via mechanochemical and co-precipitation routes for cyanoethylation reaction*, Octavian Dumitru Pavel, Alexandra-Elisabeta Stamate, Elena Bacalum, Bogdan Cojocaru, Rodica Zăvoianu, Vasile I. Pârvulescu, *Catalysis Today*, **2021**, 366, 227-234.
73. *Lanthanide doped TiO₂: Coexistence of discrete and continuous dopant distribution in anatase phase*, Daniel Avram, Andrei A. Patrascu, Marian C. Istrate, Bogdan Cojocaru, Carmen Tiseanu, *Journal of Alloys and Compounds*, **2021**, 851, 156849.
74. *First evidence from luminescence of lanthanide substitution in rutile TiO₂*, D. Avram, B. Cojocaru, C. Tiseanu, *Materials Research Bulletin*, **2021**, 134, 111091.
75. *Role of Ln type in the physical mechanisms of defect mediated luminescence of Li, Ln - SnO₂ nanoparticles*, Cojocaru, Bogdan; Colbea, Claudiu; Avram, Daniel; Istrate, Cosmin; Abramiuc, Laura; Tiseanu, Carmen, *Journal of Materials Chemistry C*, **2021**, 9(1), 148-157.
76. *Engineering hydrogenation active sites on graphene oxide and N-doped graphene by plasma treatment*, Monica Magureanu, N.B. Mandache, C. Rizescu, Cristina Bucur, Bogdan Cojocaru, Isabela C. Man, Ana Primo, Vasile I. Parvulescu, Hermenegildo Garcia, *Applied Catalysis B: Environmental*, **2021**, 287, 119962
77. *Rare-Earth-Modified Titania Nanoparticles: Molecular Insight into Synthesis and Photochemical Properties*, Fredric G. Svensson, Bogdan Cojocaru, Zhen Qiu, Vasile Parvulescu, Tomas Edvinsson, Gulaim A. Seisenbaeva, Carmen Tiseanu, Vadim G. Kessler, *Inorganic Chemistry*, **2021**, 60 (19), 14820–14830.
78. *Preliminary Study on Light-Activated Antimicrobial Agents as Photocatalytic Method for Protection of Surfaces with Increased Risk of Infections*, Răzvan Bucureşteanu, Lia-Mara Ditu,

Monica Ionita, Ioan Calinescu, Valentin Rădițoiu, Bogdan E. Cojocaru, Ludmila Otilia Cinteza, Carmen Curutiu, Alina-Maria Holban, Marius Enachescu, Laura Bianca Enache, Gabriel Mustatea, Viorel Chihai, Adela Nicolaev, Elena Larisa Borcan, Grigore Mihăescu, *Materials*, **2021**, 14(18), 5307.

79. *Facile In Situ Synthesis of ZnO Flower-like Hierarchical Nanostructures by the Microwave Irradiation Method for Multifunctional Textile Coatings*, Maria Antonia Tănase, Andreia Cristina Soare, Petruța Oancea, Adina Răducan, Cătălin Ionuț Mihăescu, Elvira Alexandrescu, Cristian, Petcu, Lia Mara Dițu, Marilena Fierbințeanu, Bogdan Cojocaru, Ludmila Otilia Cinteza, *Nanomaterials*, **2021**, 11(10), 2574.
80. *Chiral Schiff-base ligands, their copper(II) complexes and graphene oxide supported structures as organo, homogeneous and heterogeneous catalysts for Henry, cyanosilylation and aldol coupling reactions*, Zinnia Arora, D.-I. Eftemie, Adela Spinciu, Cătălin Maxim, Ana-Maria Hanganu, Bogdan Cojocaru, Octavian D. Pavel, Marius Andruh, Vasile I. Pârvulescu, *ChemCatChem*, **2021**, 13 (21), 4634-4644.
81. *Doped microporous graphitic carbons as metal-free catalysts for the selective hydrogenation of alkynes to alkenes*, Primo A., Rendón-Patiño A., Bucur C., Jurca A., Cojocaru B., Parvulescu V.I., Garcia H., *J. Catal.*, **2022**, 405, 355 – 362.
82. *Nanometric-thick metal-free h-boron nitride/graphene films as base catalyst for the synthesis of benzoxazoles*, Alejandra Rendón-Patiño, Ana Primo, Bogdan Cojocaru, Sabina Gabriela Ion, Dana G. Popescu, Vasile Parvulescu and Hermenegildo García, *ChemCatChem*, **2022**, 14 (12), e202200356 DOI: 10.1002/cctc.202200356
83. *Sonogashira Synthesis of New Porous Aromatic Framework-Entrapped Palladium Nanoparticles as Heterogeneous Catalysts for Suzuki-Miyaura Cross-Coupling*, Căta, Lidia, Terenti, Natalia; Cociug, Cristina; Hădade, Niculina Daniela, Grosu, Ion, Bucur, Cristina; Cojocaru, Bogdan; Parvulescu, Vasile I., Mazur, Michal; Čejka, Jiří, *ACS Appl. Mater. Interfaces*, **2022**, 14(8), 10428–10437. DOI: 10.1021/acsami.1c24429
84. *An advanced approach for MgZnAl-LDH catalysts synthesis used in Claisen-Schmidt condensation*, Rodica Zăvoianu, Silvana-Denisa Mihăilă, Bogdan Cojocaru, Mădălina Tudorache, Vasile I. Parvulescu, Octavian Dumitru Pavel, Solon Oikonomopoulos, Elisabeth Egholm Jacobsen, *Catalysts*, **2022**, 12, 759. DOI: 10.3390/catal12070759
85. *Tailored texture synthesized LDH catalysts in the presence of quaternary ammonium salts*, Bogdan Cojocaru, Bogdan Ciprian Jurca, Rodica Zăvoianu, Ruxandra Bîrjega, Vasile I. Pârvulescu, Octavian Dumitru Pavel, *Catalysis Communications*, **2022**, 170, 106485. DOI: 10.1016/j.catcom.2022.106485
86. *ZnO/CQDs Nanocomposites for Visible Light Photodegradation of Organic Pollutants*, Elena E. Toma, Giuseppe Stoian, Bogdan Cojocaru, Vasile I. Parvulescu, Simona M. Coman, *Catalysts* **2022**, 12(9), 952 DOI: 10.3390/catal12090952

87. *Use of Photocatalytically Active Supramolecular Organic–Inorganic Magnetic Composites as Efficient Route to Remove β -Lactam Antibiotics from Water*, Sabina Gabriela Ion, Octavian D. Pavel, Nicolae Guzo, Madalina Tudorache, Simona M. Coman, Vasile I. Parvulescu, Bogdan Cojocaru, Elisabeth E. Jacobsen, *Catalysts*, **2022**, 12, 1044. DOI: 10.3390/catal12091044
88. *Catalytic hydrotreatment of humins wastes over bifunctional Pd-based zeolite catalysts*, Magdi El Fergani, Natalia Candu, Iunia Podolean, Bogdan Cojocaru, Madalina Tudorache, Vasile I. Parvulescu, Simona M. Coman, *Catalysts* **2022**, 12(10), 1202. DOI: 10.3390/catal12101202.
89. *New MgFeAl-LDH Catalysts for Claisen-Schmidt Condensation*, Zavoianu Rodica, Sandulescu Madalina, Parvulescu Vasile, Cojocaru Bogdan, Octavian Dumitru Pavel, *Molecules*, **2022**, 27(23), 8391; <https://doi.org/10.3390/molecules27238391>
90. *Catalytic oxidation of biomass-derived 5-hydroxymethylfurfural to 5-hydroxymethyl-2-furancarboxylic acid by Co-based MOFs*, Mihai Bordeiasu, Aleksander Ejsmont, Joanna Goscianska, Bogdan Cojocaru, Vasile Parvulescu, Simona Coman, *Applied Catalysis A, General*, **2023**, 657, 119147.
91. *Liquid phase oxidation of alkenes and glycerol with molecular oxygen over mixed-ligand copper(II) complexes grafted on GO as catalysts*, Rizescu Cristina, El Fergani Magdi, Eftemie Diana Ioana, Cojocaru Bogdan, Popescu Dana Georgeta, Andruh, Marius, Parvulescu Vasile I. I., *Applied Catalysis A: General* **2023**, 663, 119302 , <https://doi.org/10.1016/j.apcata.2023.119302>, <http://dx.doi.org/10.2139/ssrn.4370227>
92. *Synthesis of lactide from L-Lactic acid over iso-reticular zeolites derived from Al-UTL*, Podolean, Iunia; Cojocaru, Bogdan; Pârvulescu, Vasile I.; Mazur, Michal; Abdi, Sarra; Čejka, Jiří, *Applied Catalysis A: General* **2023**, 665, 119379, DOI 10.1016/j.apcata.2023.119379.
93. *Highly Efficient Ru-Based Catalysts for Lactic Acid Conversion to Alanine*, Iunia Podolean, Mara Dogaru, Nicolae Cristian Guzo, Oana Adriana Petcuta, Elisabeth E.Jacobsen, Adela Nicolaev, Bogdan Cojocaru, Madalina Tudorache, Vasile I. Parvulescu, Simona M. Coman, *Nanomaterials* **2024**, 14, 277. <https://doi.org/10.3390/nano14030277>
94. *Impact of organic / inorganic alkalis in tailoring of Mg/Al-hydrotalcite used in Claisen–Schmidt condensation*, Rodica Zăvoianu , Salman Eman Taha, Bogdan E. Cojocaru, Vasile I. Pârvulescu, Octavian D. Pavel, *Catalysis Today*, **2024**, 114693, <https://doi.org/10.1016/j.cattod.2024.114693>
95. *CQDs-based nanocomposites for the 5-(hydroxymethyl)furfural photooxidation*, Giuseppe Stoian, Elena E. Toma, Petruta Oancea, Natalia Candu, Bogdan Cojocaru, Madalina Tudorache And Simona M. Coman, *Rev. Roum. Chim.*, **2024**, 69(5–6), 285–290, DOI: 10.33224/rch.2024.69.5-6.06
96. *The influence of the precursor type in the synthesis of Mg/Al-hydrotalcite through a non-traditional method used for Claisen-Shmidt condensation*, Rodica Zăvoianu, Bogdan E. Cojocaru, Sabina G. Ion, Ana Paula Soares Dias, Anca Cruceanu And Octavian D. Pavel, *Rev. Roum. Chim.*, **2024**, 69(5–6), 291–300, DOI: 10.33224/rch.2024.69.5-6.07.

97. **Physicochemical characterization of Ca- and Cu-coated TiO₂ microparticles and investigation of their antimicrobial properties**, Andreea Neacsu, Viorel Chihai, Razvan Bucuresteanu, Anton Fikai, Roxana Doina Trusca, Vasile-Adrian Surdu, Adela Nicolaev, Bogdan Cojocaru, Monica Ionita, Ioan Calinescu, Viorica Parvulescu, Lia-Mara Ditu, *Materials* **2024**, 17(18), 4483; <https://doi.org/10.3390/ma17184483>
98. *Layered Double Hydroxide-Based Composites for Concerted Decontamination of Water*, Qays Al Hasnawi, Sabina Gabriela Ion, Mădălina Tudorache, Octavian Dumitru Pavel and Bogdan Cojocaru, *Catalysts* **2024**, 14(10), 668; <https://doi.org/10.3390/catal14100668>
99. *MXenes as Heterogeneous Thermal Catalysts: Regioselective Anti-Markovnikov Hydroamination of Terminal Alkynes with 102 h⁻¹ Turnover Frequencies*, Grau, Ruben Ramirez; Garcia-Aznar, Pablo; Sastre, German; Goberna-Ferron, Sara; Pavel, Octavian; Tirsoaga, Alina; Cojocaru, Bogdan; Popescu, Dana Georgeta; Parvulescu, Vasile I.; Primo, Ana; Garcia, Hermenegildo; *Journal Of The American Chemical Society*, **2025**, 147(4), 3315-3332, <https://doi.org/10.1021/jacs.4c13481>
100. *Nb₂C MXene as Bifunctional Acid-Base and Oxidation/Hydrogenation Catalyst*, Alina Tirsoaga, Bogdan Cojocaru, Dana Georgeta Popescu, Rubén Ramírez-Grau, Pablo González-Durán, Pablo García-Aznar, Liang Tian, German Sastre, Ana Primo, Vasile I. Parvulescu, Hermenegildo Garcia and Octavian Dumitru Pavel, *EES Catal.* **2025**, 3, 856-869
101. *The impact of organic alkalis in the tailoring of MgCuAl-LDH-type materials as a catalyst for Claisen-Schmidt condensation*, Rodica Zavoianu, Salman Eman Taha, Daniela Cristina Culiță, Monica Raciulete, Vasile I Parvulescu, Bogdan E Cojocaru, Octavian D. Pavel, *Mol. Catal.* **2025** **ACCEPTED.**

Other articles

1. *Comment on “High multi-photon visible upconversion emissions of Er³⁺ singly doped BiOCl microcrystals: A photon avalanche of Er³⁺ induced by 980 nm excitation”*[*Appl. Phys. Lett.* 103, 231104 (2013)]., C. Tiseanu, M. Florea, B. Cojocaru,. *Appl. Phys. Lett.*, **2014**, 104, 236101 (FI=3.495).

PAPERS PUBLISHED IN JOURNALS AND CONFERENCE PROCEEDING VOLUMES WITH REFERENCES (NOT INDEXED):

1. *12-Tungstophosphoric acid supported on SBA-15 as catalysts in liquid-phase oxidation of 2,3,6-trimethylphenol*, U. Filek, B. Cojocaru, V.I. Parvulescu, A. Mohamed, H. Hamdan, B. Sulikowski, Sampling Catalysis Research in the Pannonian Region, Proc. of the Pannonian International Catalysis Symposium, 8th, Szeged, Hungary, July 4-7, 2006, p. 57-63.
2. *Sunflower and rapeseed oil transesterification to biodiesel over different nanocrystalline MgO catalysts*, M. Verziu, B. Cojocaru, J. Hu, R. Richards, C. Ciuculescu, P. Filip, V.I. Parvulescu, 3rd International Conference on Green and Sustainable Chemistry, Delft, The Netherlands, July 1-5, 2007, R. Sheldon (Ed), p. 34.
3. *Sunflower and rapeseed oil transesterification to biodiesel over different nanocrystalline MgO(111) nanosheet catalysts*, B. Cojocaru, S. Neatu, M. Verziu, M. Musteata, J. Hu, R. Richards, V. I. Parvulescu, Europacat VIII, Abo/Turku, 26-31 August 2007, Finlanda, H. Topsøe et al. (Eds.) p. P9-19.
4. *In-situ study of ozone interaction with Ag-Al catalysts: first evidence of active sites nature*, B. Cojocaru, V.I. Parvulescu, V. Parvulescu, J. Hu, R. Richards, H. Daly, C. Hardacre, 6th World Congress on Oxidation Catalysis, 5-10 Julie 2009 Lille, Franța, E. Bordes- Richard and P. Ruiz (Eds.), p. 126.
5. *In-situ study of ozone interaction with Ag-Al catalysts: first evidence of active sites nature*, V.I. Parvulescu, V. Parvulescu, B. Cojocaru, J. Hu, R. Richards, H. Daly, C. Hardacre, EuropaCat IX, Catalysis for a Sustainable World, August 30- September 4, 2009, Salamanca, Spain, A. Corma (Ed), p. 226.
6. *Polymer-coated lanthanide's-exchanged zeolites*, C Tiseanu, V. I. Parvulescu, B. Cojocaru, A. Voiculescu and S. Georgescu, 10th International Balkan Workshop on Applied Physics (IBWAP), July 6-8, 2009, Constanta, Romania, paper S1-P60; Book of Abstracts, ISBN 978-973-614-507-0, page 85
7. *Sinergia entre el carbón activado y el TiO₂ sin dopar y dopado con nitrógeno en la degradación fotocatalítica de enlaces P-C*, B. Cojocaru, Ș. Neațu, V. I. Pârvescu, M. Alvaro, H. Garcia, XXII CICAT – Congreso Iberoamericano de Catálisis, Vina del Mar, Chile, September 5-10, 2010, F. Gil et al (Eds.). p. 81-88
8. *Multivalent sol-gel entrapped-nano silver catalysts- reduction of NO by hydrocarbons under real exhaust gas conditions and plasma assisted oxidation of toluene*, V.I. Parvulescu, B. Cojocaru, M. Magureanu, R. Richards, P. Granger, 43rd World Chemistry Congress IUPAC 2011 - San Juan, Puerto Rico, July 30-August 5, J. Colon et al (Eds) p. 390.

9. *In-situ study of ozone and hybrid plasma Ag-Al catalysts for the oxidation of toluene: evidence of the nature of the active sites*, M. Magureanu, D. Piroi, N.B. Mandache, V.I. Pârvulescu, V. Pârvulescu, B. Cojocaru, C. Cadigan, R. Richards, H. Daly, C. Hardacre, X European Workshop on Selective Oxidation(ISO2011), ISOP04, EuropaCat X, August 28- September 2, 2011, Glasgow, United Kingdom, David Jackson et al. (Eds).
10. *Is the preparation route of active silver species controlling their catalytic behavior in NO reduction by hydrocarbons?*, B. Cojocaru, R. Richards, Z. Li, C. Cadigan, P. Granger, P. Miquel, V.I. Parvulescu, 4th International Conference on Catalysis for Polluting Emissions Aftertreatment and Production of Renewable Energies, Zakopane, September 7-9, 2011, Zakopane, Poland, P. Da Costa, C. Dujardin, A. Krzton (Eds)., p. 141-144.
11. *Titanium dioxide phases in mesostructured silica matrices for cyclohexene oxidation*,B. Cojocaru, O.D. Pavel, V.I. Parvulescu, D. S. Gopala, R. R. Bhattacharjee, R.Haerr, R. Richards, ISOP85, X European Workshop on Selective Oxidation (ISO2011), EuropaCat X, August 28- September 2, 2011, Glasgow, United Kingdom, David Jackson et al. (Eds).
12. *Titanium dioxide phases in mesostructured silica matrices: Synthesis, characterization and oxidation activity*, D.S. Gopala, R.R. Bhattacharjee, R. Haerr, B. Yeginoglu, O.D. Pavel, B. Cojocaru, R.M. Richards, V.I. Parvulescu; A.F. Volpe Jr., A.M. Gaffney, R. Fushimi (Eds), 7th World Congress on Oxidation Catalysis (7WCOC), Saint Louis, Missouri, USA, June 8th - 12th 2013, 1130
13. *Luminescence properties of CeO₂ doped with Ln ions under optical and X-ray excitation modes*, D. Avram, B. Cojocaru, M. Florea, V. Parvulescu, and C. Tiseanu, "," The 4th International Conference on the Physics of Optical Materials and Devices, ICOM 2015, 31 August - 04 September 2015, Budva, Montenegro; Book of Abstracts, ISBN: 978-86-7306-134-4, p. 53, presentation S9-O30-165

PATENTS

1. *Procedeu de preparare a spumelor ceramice pe baza de noroi rosu* Dosar OSIM : A/ 00137/ 25 feb. 2015, Andrei Sarbu, Sandu Teodor, Anamaria Zaharia, Steluta Apostol, Rodica Zavoianu, Luminita Mara, Liliana Sarbu, Fanica Bacalum, Ruxandra Birjega, Sorin Vizireanu, Andreea Gabriela Olaru, Dan Cosasu, Teodor Velea, Ioana Andreea Gradinaru, Radu Anita Laura, Florea Mihaela, Bogdan Eugen Cojocaru, Valentin Dragut, Iordache Tanta Verona, Florea Ana Mihaela, RO131328-A2

RESEARCH PROJECTS

Director

1. Catalizatori pe baza de fotosensibilizatori incastrati in zeoliti pentru reactii de foto-oxidare, CNCSIS TD, 2007-2009, 50000 lei
2. Combustibili verzi – obtinerea hidrogenului din deseurile productiei de biodiesel folosind noi catalizatori si procese catalitice neconventionale, PN II PD, 2010-2012, 340000 lei
3. In depth study of the structure – photocatalytic activity relationship of lanthanide metal doped titania photocatalysts (PHOTOLANTI), UEFISCDI TE, 2018-2020, 450000 lei
4. Decontaminarea fotocatalitică a apelor reziduale din industria farmaceutică utilizând catalizatori magneticisupramoleculari hibridi organic-anorganic, PN-III-P4-ID-PCE2020-2207 235/2021, 2021-2023, 1.198.032 Lei.

Team Member

1. Photocatalytic decontamination of nerve and vesicant agents, 2005-2008, NATO SfP 981476, https://www.nato.int/nato_static_fl2014/assets/pdf/2013_10_pdf/20131125_9_Parvulescu_SPS_CB_RN_WS_2013.pdf
2. Innovative synthesis in continuous-flow processes for sustainable chemical production, 2010-2014, Grant ID 246461, FP7. <https://cordis.europa.eu/project/id/246461>
3. Dezvoltarea unui sistem avansat de tratare a apelor industriale cu conținut de azot, bazat pe cuplarea descărcărilor electrice cu cataliza heterogenă și fotocataliză / Development of a new advanced system for industrial waste-waters treatment containing nitrogen, based on coupling of electrical discharge with heterogeneous catalysis and photocatalysis, 2004-2006, PNCDI, CERES 4-137;
4. Sinteze de matrice pentru catalizatori redox suportați: un nou concept de structuri ierarhizate cu aplicații în reacții de oxidare selectivă / Synthesis of matrix for redox supported catalysts: a new concept of hierarchical structures with applications in selective oxidation reactions, 2004-2006, PNCDI, CERES CERES 4-140;
5. Materiale hibride mezostructurate luminescente cu ioni de lantanide / Hybrid luminescent meso-structured materials with lanthanide ions, 2004-2006, PNCDI, CERES 4-152;
6. Participarea unor materiale oxidice ce conțin ioni cu valență variabilă, cu dispersie ridicată, la reacții catalitice de oxidare selectivă, în condiții speciale, CERES 4-81;

7. Noi catalizatori oxidici nano-structurați pentru procese industriale care asigură o dezvoltare durabilă / New nano-structured oxide catalysts for industrial processes that ensure sustainable development, 2005-2008, State budget, PNCDI, Research for Excellence programme, Proiect CEEEX - C25(Sg5) nr.5619/10.11.2005; <https://chimie.unibuc.ro/cercetare/cataliza/conspid/>
8. Materiale și procese fizice pentru surse fotonice avansate / Materials and physical processes for advanced photon sources, 2005-2007, PNCDI, CEEEX 05/D11/53;
9. Nanocomposites with lanthanide ions: structure-property relationships, 2006-2008, State budget, PNCDI, Research for Excellence programme;
10. Transesterification of triglycerides in heterogeneous catalysis assisted by non-conventional power sources: ultrasonics and microwaves, 2006-2008, PNCDI, Research for Excellence programme;
11. Amino-acids, structural units in selective synthesis, 2008-2009, State budget, PNCDI, Bilateral Cooperation programme;
12. Fotocatalizatori pentru producția de hidrogen și combustibili din biomasă și ape reziduale / Photocatalysts for hydrogen and fuels production from biomass and waste waters, 2007-2010, State budget, PNCDI, Parteneriate 21-048/18.09.2007;
13. Development of new materials for industrial applications of the technology for catalytic control of NO_x at low temperatures using gaseous mixtures H₂/CO and H₂/HC as reducing agents, State budget, PNCDI, Bilateral Cooperation programme.
14. Luminescenta rezolvata temporal si spectral a nano-oxizilor tetravalenti: o abordare UNITARA / Temporally and spectrally resolved luminescence of lanthanide's doped tetravalent nano-oxides: A unitary approach, IDEI PCE 309/2011 PN-II-ID-PCE-2011-3-0534, 2011 – 2016.
15. Extensive valorization of lignin and salicylic acid to bulk and fine chemicals, 2012-2016, 275, PNII
16. Sinteze catalitice heterogene de derivati aminici prin reactii de hidroaminare si de cuplare N-C, 2011-2016, 151, LISALCHEM
17. Design of organic spacers for constructing metal-organic frameworks (MOFs)- towards a better control on the porous architecture and active catalytic sites, 2012-2015, 9 IDEI
18. Novel design of learn burn postcombustion catalyst with hierarchical porous structure, 2012-2014, 716, Bilateral Franta
19. Integrated system for producing synthetic aviation fuel from algal biomass, PN-II-PT-PCCA-2011-3.2-0083, 2012-2015, 44, ALGAL-SAF
20. New catalytic route from biomass waste to fuel, 2013-2015, 16, bilateral Elvetia
21. Doped oxide nanoparticles: From local structure to long - range perspective via luminescence; 67/2017: PN-III-P4-ID-PCE-2016-0305, 2017 – 2019

22. Graphenes as eco-heterogeneous catalysts for the eco-production of C4-dicarboxylic acids, 121/2017: PN-III-P4-ID-PCE-2016-0146
23. Wastewaters treatment through flocculation- oxidation processes mediated by red mud derived flocculants and catalysts, PN-II-PT-PCCA-2013-4-0177, 2014 – 2017.
24. Functionalized hierachical structures on graphene exhibiting magnetic, adsorption and catalytic properties , nr. 1/2018 - PN-III-P4-ID-PCCF-2016-0088, 2018-2022..
25. Mip-slm technology for alkyl pyrazines production as natural flavours requested by agro-food industry, 2017-2018.
26. Design of organic spacers for constructing metal-organic frameworks (mofs) – towards a better control of the porous architecture and active catalytic sites, PN-II-ID-PCCE-2011-2-0050 (9/2012) 2012-2016.
27. MXenes-type catalysts for energy production and fine-chemical syntheses (MXeneCAT), PN-III-P4-ID-PCE-2020-1532; No. PCE17/2020, 2020-2023.
<https://chimie.unibuc.ro/cercetare/cataliza/PN-III-P4-ID-PCE-2020-1532/>
28. MOFs-COFs composites for the selective and stereoselective catalytic reactions (PN-IV-P1-PCE-2023-1254; 2025-2027.
29. Integrated solutions for water pollution abatement – towards zero pollution (NO-Poll), PNRR-III-C9-2022-I5-18 (contract 760010/2022), Proiect Specific PS5, 2023-3025

ORAL PRESENTATIONS AT INTERNATIONAL CONFERENCES

1. Is the preparation route of active silver species controlling their catalytic behavior in NO reduction by hydrocarbons?, V.I. Pârvulescu, B. Cojocaru, V. Pârvulescu, R. Richards, Z. Li, C. Cadigan, P. Granger, P. Miquel, C. Hardacre, 4th annual DGRI Meeting, Catalysis for Polluting Emissions Aftertreatment and Production of Renewable Energies 7-10 september 2011, Zakopane, Poland
2. Phase control in CeO₂, ZrO₂ and CeO₂-ZrO₂ supports by changing the preparation route and activation conditions, C. Tiseanu, B. Cojocaru, P. Granger, V. I. Pârvulescu, GDRI Meeting, 9-13 SEPTEMBER 2012, Poland
3. Eu as structural probe for controlling the photocatalytic behaviour of mesoporous tantalum oxide in selective oxidation of amines, G.A. Seisenbaeva, B. Cojocaru, B. Jurca, C. Tiseanu, J.-M. Nedelec, V.G. Kessler, V.I. Parvulescu, 13th European Congress on Catalysis (EUROPACAT2017), 27 August - 01 September 2017, Florence, Italy.
4. LDH-Organic Sensitizer Composites for Decontamination of Water, B. Cojocaru, Q. Al Hasnawi, S.G. Ion, M. Tudorache, R. Zăvoianu, O.D. Pavel, V.I. Parvulescu, 14th Symposium of the Romanian Catalysis Society, 9-11 July 2025, Cluj-Napoca, Romania

Co-author

1. 12-Tungstophosphoric acid supported on SBA-15 as catalysts in liquid phase oxidation of 2,3,6-trimethylphenol, U. Filek, B. Cojocaru, V.I. Pârvulescu, A. Mohamed, H. Hamdan, B Sulikowski. Proc. 8th Pannonian Intern. Catal. Symp.. "Sampling Catalysis Research in the Pannonian Region", July 4-7, 2006, Szeged, Hungary; (Ed. I. Pálkó), Hungarian Zeolite Association, Szeged, 2006, ISBN 963 06 0138 9, pp. 57-63.
2. Sunflower and rapeseed oil transesterification to biodiesel over different nanocrystalline MgO(111) nanosheet catalysts, B. Cojocaru, S. Neatu, M. Verziu, J. Hu, R. Richards, V. I. Parvulescu, 3d International Conference on Green and Sustainable Chemistry, Delft, 1-5 Iulie 2007, Olanda, ISBN: 978-90-809691-5-5, Editor R.A. Sheldon, pp. 34;
3. In-situ study of ozone interaction with Ag-Al catalysts: first evidence of active sites nature, B. Cojocaru, V.I. Parvulescu, V. Parvulescu, J. Hu, R. Richards, H. Daly, C. Hardacre, 6th World Congress on Oxidation Catalysis, 5-10 Iulie 2009 Lille, Franța
4. Polymer-coated lanthanide's-exchanged zeolites, C Tiseanu, V. I. Parvulescu, B. Cojocaru, A. Voiculescu and S. Georgescu, 10th International Balkan Workshop on Applied Physics (IBWAP), July 6-8, 2009, Constanta, Romania, paper S1-P60; Book of Abstracts, ISBN 978-973-614-507-0, page 85
5. Sinergia entre el carbón activado y el TiO₂ sin dopar y dopado con nitrógeno en la degradación fotocatalítica de enlaces P-C, B. Cojocaru, Ș. Neațu, V. I. Pârvulescu, M. Alvaro, H. Garcia, XXII

CICAT – Congreso Iberoamericano de Catálisis, Vina del Mar, Chile, September 5-10, 2010, F. Gil et al (Eds.). p. 81-88

6. Multivalent sol-gel entrapped-nano silver catalysts- reduction of NO by hydrocarbons under real exhaust gas conditions and plasma assisted oxidation of toluene, V.I. Parvulescu, B. Cojocaru, M. Magureanu, R. Richards, P. Granger, 43rd World Chemistry Congress IUPAC 2011 - San Juan, Puerto Rico, July 30-August 5, J. Colon et al (Eds) p. 390
7. Synthesis and characterization of titanium dioxide phases in mesostructured silica matrices with photocatalytic activity D.S. Gopala, R.R. Bhattacharjee, R. Haerr, B. Yeginoglu, O.D. Pavel, B. Cojocaru, V.I.Parvulescu, R.M. Richards, 7 th World Congress on Oxidation Catalysis, Saint Louis, Missouri, June 8 - 12th, 2013, Abstract Number 1144 Oral Presentation Session: Oxidation Technology for CleanTech, pag. 113
8. Down- and up- conversion emission processes in lanthanide doped CeO₂, D. Avram, B. Cojocaru, M. Florea, V.I. Parvulescu, C. Tiseanu, Second workshop on Reducible oxide chemistry, structure and functions, November 6-8, 2013, Uppsala, Sweden
9. Tuning The Size, Shape (Particles And Films) And Interactions Of Nano-Structured Materials To Control The Photocatalysts Band Gap And Photocatalytic Efficiency, B. Cojocaru, V.I. Parvulescu, The 14th International Balkan Workshop on Applied Physics, Institute for Ion Physics and Applied Physics, 2014, Constanta/Romania
10. Luminescence properties of CeO₂ doped with Ln ions under optical and X-ray excitation modes, D. Avram, B. Cojocaru, M. Florea, V. Parvulescu, and C. Tiseanu, The 4th International Conference on the Physics of Optical Materials and Devices, ICOM 2015, 31 August - 04 September 2015, Budva, Montenegro; Book of Abstracts, ISBN: 978-86-7306-134-4, p. 53, presentation S9-O30-165
11. Superparamagnetic Core Shell Catalysts for the Environmental Production of Fuels from Renewable Lignin, C. Opris, B. Cojocaru, M. Tudorache, S.M. Coman, C. Bala, B. Duraki, J.A. van Bokhoven, V.I. Parvulescu, International Conference on Renewable Energy and Environment, 13-14 October 2016, Bali, Indonesia
12. Heterogeneous Au-based catalysts for C-N coupling reactions, M. Ciobanu, B. Jurca, B. Cojocaru, V.I. Parvulescu, 2nd Workshop on C-H Activation in Organic Synthesis, March 13-14, 2017, Sofia, Bulgaria
13. Recyclable bi-functional Ru@MNP-MWCNT catalysts for succinic acid from glucose, 4th International Congress on Catalysis for Biorefineries, I. Podolean, B. Cojocaru, H. Garcia, S. M. Coman and V. I. Parvulescu Catbior 2017, Lyon, France, 11 - 15 December 2017.
14. Enzyme one-pot system for the construction of artificial lignin-based composites, M. Tudorache, S. Ion, C. Opris, B. Cojocaru, I. Zgura, A. C. Galca, A. Bodescu, L. Copolovici, M. Enache, G.-M. Maria, V.I. Parvulescu TOCAT8, Yokohama 5-10 august 2018
15. New pathway to artificial lignocellulosic material in one-pot enzymatic approach, I. Sabina, C. Opris, B. Cojocaru, M. Tudorache, I. Zgura, A. Galca, M. Enache, G. Maria, V. Parvulescu, 14th

Pannonian International Symposium on Catalysis, 03.09.2018 – 09.09.2018, Stary Smokovec, Slovakia.

16. One-pot system based on enzyme oxi-copolymerization of monolignols for designing the lignin-based composites, M. Tudorache, S. Ion, C. Opris, B. Cojocaru, I. Zgura, A.C. Galca, A. Bodescu, L. Copolovici, M. Enache, G.-M. Maria, V.I. Parvulescu, 19-22 March 2018, MSCEP, Trondheim, Norway.
17. Oxi-(co)polymerization of monolignols assisted by peroxidase enzyme in one-pot approach, S. Ion, C. Opris, B. Cojocaru, M. Tudorache, I. Zgura, A.C. Galca, A. Bodescu, M. Enache, G.-M. Maria, V.I. Parvulescu, PRIOCHEM, 25-27 October 2018, Bucuresti, Romania.
18. Lignin fragmentation onto multifunctional $\text{Fe}_3\text{O}_4@\text{Nb}_2\text{O}_5@\text{Co}@Re$ catalysts: the role of composition and deposition route of rhenium, C. Opris, B. Cojocaru, N. Gheorghe, M. Tudorache, S.M. Coman, B. Duraki, J.A. van Bokhoven, V.I. Parvulescu, 4th Workshop: Valorisation of lignocellulosic biomass side streams for sustainable production of chemicals, materials & fuels using low environmental impact technologies, March 12-14th 2018, Thessaloniki, Greece
19. Engineering active sites by hydrogen plasma irradiation: Mimicking bifunctional metal/supported catalysts in hydrogenation reactions, A. Primo, A. Franconetti, H. García, M. Magureanu, N.B. Mandache, C. Bucur, C. Rizescu, B. Cojocaru, V. Parvulescu, 4th European Congress on Catalysis, EUROPACAT, 18-23 August 2019, Aachen, Germania
20. Marine ulvan polysaccharide as a valuable pool of rare sugars, I. Podolean, B. Cojocaru, S. Coman, E. Ioannou, S. Kikionis, V. Roussis, A. Primo, H. Garcia, V. I. Parvulescu, 5th International Congress on Catalysis in Biorefineries – CATBIOR 2019, 23-27 September 2019, Turku, Finland
21. Tuning the Selectivity of Ldhs By Changing the Chemical Composition and Preparation Route, O. D. Pavel, E. Stamate, B. Cojocaru, R. Zavoianu, R. Birjega, V. Parvulescu, The 17th International Congress on Catalysis, San Diego, CA, USA, 14-19 June 2020- 2020 Vision, Section Catalysis with Ordered Porous Materials 6, 2:40 PM Wednesday, <https://nam.confex.com/nam/2020icc/meetingapp.cgi/Home/0>, <http://nacatsoc.org/wp-content/uploads/2022/02/ICC-2020-Program-Book.pdf>
22. Efficient hydrogenation of CO_2 to methane over oriented MoS_2 nanoplatelets supported on few layers graphene, A. Primo, J. He, B. Jurca, B. Cojocaru, C. Bucur, H. Garcia, V.I. Parvulescu, 11th International Conference on Environmental Catalysis, 6th - 9th September 2020, Manchester, UK
23. New approaches in synthesis of 2D LDH-type materials used in the Claisen-Schmidt condensation, S.-D. Mihăilă, B. Cojocaru, B. Jurca, O.-D. Pavel, G. Mitran, R. Zăvoianu, V.I. Pârvulescu, Contemporary Solutions for Advanced Catalytic, Materials with a High Impact on Society (CoSolMat), , 11th – 15th OCTOBER 2021, Bucharest, Romania, p. 57-58 <https://chimie.unibuc.ro/edu/greencam/index.php/workshop-2021>
24. Green strategy for the synthesis of carbon quantum dots (CQDs) from humins wastes, G. Stoian, P. Oancea, B. Cojocaru, M. Tudorache, V.I. Parvulescu, S.M. Coman, Contemporary Solutions for

Advanced Catalytic Materials with a High Impact on Society (CoSolMat), 11th – 15th OCTOBER 2021, Bucharest, Romania.

25. Zn(II) coordination polymers with mixed anionic linkers employed as heterogenous photocatalysts, C. Paraschiv, A. Cucos, S. Shova, B. Cojocaru, V.I. Parvulescu, Contemporary Solutions for Advanced Catalytic Materials with a High Impact on Society (CoSolMat), 11th – 15th OCTOBER 2021, Bucharest, Romania.
26. From humins wastes to carbon quantum dots (CQDs) based photocatalytic nanocomposites, N.C. Guzo, M. El Fergani, B. Cojocaru, J. Gościańska, V.I. Parvulescu, S. M. Coman, Contemporary Solutions for Advanced Catalytic Materials with a High Impact on Society (CoSolMat), 11th – 15th OCTOBER 2021, Bucharest, Romania.
27. Lignin derivatization using enzymatic pathway, S. Ion, B. Cojocaru, M. Tudorache, V.I. Parvulescu, Contemporary Solutions for Advanced Catalytic Materials with a High Impact on Society (CoSolMat), 11th – 15th OCTOBER 2021, Bucharest, Romania.
28. Hybrid Organic-Inorganic Magnetic Supramolecular Composites with Adsorption and Photocatalytic Degradation Capabilities of Antibiotics Under Solar Light, B. Cojocaru*, R. Mihailescu, N. Guzo, O.D. Pavel, S. Ion, M. Tudorache, S. Coman, V.I. Parvulescu, The 27th North American Catalysis Society Meeting (NAM27), May 22-27, 2022 in New York City, USA, <https://nam.confex.com/nam/2022/meetingapp.cgi/Paper/27339>
29. Valmet chiral-base ligands and their copper(II) complexes as organo, homogeneous and heterogeneous catalysts for Henry, cyanosilylation and aldol coupling reactions, Z. Arora, D.-I. Eftemie, A. Spinciu, C. Maxim, A.-M. Hanganu, M. Tudorache, B. Cojocaru, O.D. Pavel, P. Granger, M. Andruh, V.I. Pârvulescu, 4th HC3A Meeting, 20th - 21st January 2022, Barcelona, Spain.
30. Nanometric-Thick Metal-Free h-Boron Nitride/Graphene Films As Base Catalyst for the Synthesis of Benzoxazoles, S. Ion, A. Primo, B. Cojocaru, C. Bala, D. Popescu, V. Parvulescu and H. Garcia, The 28th North American Catalysis Society Meeting (NAM28), June 18-23, 2023, Providence, Rhode Island, USA.
31. Organic alkalis as an alternative for eco-friendly mechano-chemical synthesis of Layered Double Hydroxides-type catalysts, O.D. Pavel, B.C. Jurca, R. Zăvoianu, R. Bîrjega, B. Cojocaru, V.I. Pârvulescu 15th European Congress on Catalysis, August 27 – September 1, 2023, Prague, Czech Republic.
32. Organic alkalis as an alternative to traditionally inorganic ones for ecofriendly mechano-chemical synthesis of LDH-type catalysts, O. D. Pavel, B. Cojocaru, R. Zăvoianu, V.I. Pârvulescu, 18th ICC, July 14-19, 2024, Lyon, France.
33. MXenes as Thermal Catalysts for the Aldol Condensation and Oxidative Coupling of Aniline Reactions, O. Pavel, C. Bala, B. Cojocaru, P. González-Durán, P. García-Aznar, L. Tian, G. Sastre, A. Primo, V. I. Parvulescu, H. Garcia, 29th Organic Reactions Catalysis Society Meeting, February 9-13, 2025, Myrtle Beach, SC, USA.

34. LDH-Type Catalysts Tailored by Organic Alkaline: A New Approach in Synthesis, O.D. Pavel, B. Cojocaru, R. Zăvoianu, V.I. Pârvulescu, 4th Symposium of the Romanian Catalysis Society, 9-11 July 2025, Cluj-Napoca, Romania

INVITED LECTURES

1. Hybrid organic-inorganic composites for photocatalytic environment remediation, Invited Lecture la "Materials for Biomass Summer School", Norwegian University of Science and Technology, Trondheim, Norvegia. 12-16 September **2022**.
2. Nature inspired nanohybrids for environment remediation, International summer school on Nanosciences & Nanotechnologies – NANOSUM2024, Blaubeuren, Germany, June 16-21 **2024**.

PAPERS PRESENTED IN SUMMARY AT INTERNATIONAL CONFERENCES

First/correspondent author

1. Titanium dioxide phases in mesostructured silica matrices for cyclohexene oxidation, B. Cojocaru, O.D. Pavel, V.I. Parvulescu, D.S. Gopala, R.R. Bhattacharjee, R. Haerr, R. Richards EuropaCat X, Glasgow, Scotland, 28 August - 2 Sept 2011, poster ISOP85, <http://europacat.chem.gla.ac.uk/workshop/ISOP85.pdf>; <http://europacat.chem.gla.ac.uk/index.html>
2. Sunflower and rapeseed oil transesterification to biodiesel over different nanocrystalline MgO(111) nanosheet catalysts, B. Cojocaru, S. Neatu, M. Verziu, M. Musteata, J. Hu, R. Richards, V. I. Parvulescu, Europacat VIII, Abo/Turku, 26-31 August 2007, Finlanda.
3. Sensitizers on inorganic carriers for the decomposition of chemical warfare agent Yperite, B. Cojocaru, V. I. Pârvulescu, E. Preda, G. Epure, N. Petrea, V. Somoghi, E. Carbonell, M. Alvaro, H. García, 5th International Conference on Environmental Catalysis, Belfast, 31 August - 3 Septembrie 2008, Marea Britanie
4. Synergism of Activated Carbon and Undoped and N-doped TiO₂ in the Photocatalytic Degradation of Chemical Warfare Agents using UV and Visible Light, B. Cojocaru, V.I. Pârvulescu, M. Alvaro, H. Garcia, HYMA 2011, Strasbourg, France, 6-10 Martie 2011.
5. Visible-light detoxification of chemical warfare agents (CWA) using titania-supported gold nanoparticles as photocatalyst, B. Cojocaru, S. Neațu, V.I. Pârvulescu, V. Șomoghi, M. Alvaro, H. Garcia, European Symposium on Photocatalysis, 29-30 September 2011, Bordeaux, France
6. Photocatalytic removal of toxic and dangerous compounds, B. Cojocaru, V.I. Pârvulescu, H. Garcia, 15th International Congress on Catalysis, Munchen, Germany, July 2012.
7. Raman and luminescence spectroscopic investigation of local structure of ZrO₂ catalysts, B. Cojocaru, C. Tiseanu, V.I. Parvulescu, EuropaCat-XI, Lyon, France, September 1st-6th, 2013
8. Hydrogen photo-generation from sugar solutions, B. Cojocaru, V. Parvulescu, RomCat2013, May 2013, Cluj-Napoca.

9. Intermediate selectivity in the oxidation of phenols using plasmonic Au/ZnO photocatalysts, B. Cojocaru, F. Lin, C.A. Cadigan, M.N. Grecu, H.L. Xin, V.I. Parvulescu, R.M. Richards, 11th International Symposium of the Romanian Catalysis Society, RomCat 2016, 06-08 June 2016, Timisoara, Romania
10. In depth study of the structure – photocatalytic activity relationship of lanthanide metal doped titania photocatalysts, B. Cojocaru, S.G. Ion, O.D. Pavel, D. Avram, V.I. Pârvulescu, 12th International Symposium of the Romanian Catalysis Society, RomCat 2019, Bucuresti, Romania, 5-7 Iunie 2019, poster 6, p. 85 – 86 <https://www.chimie.unibuc.ro/romcat/>
11. Photocatalytic decontamination of wastewaters using hybrid organic inorganic magnetic supramolecular catalysts, R. Mihailescu, O.D. Pavel, S. Ion, M. Tudorache, S. M. Coman, V.I. Parvulescu, B. Cojocaru*, Contemporary Solutions for Advanced Catalytic Materials with a High Impact on Society (CoSolMat), 11th – 15th OCTOBER 2021, Bucharest, Romania, p. 93-94, Poster 5 <https://chimie.unibuc.ro/edu/greencam/index.php/workshop-2021>.
12. Supramolecular organic-inorganic magnetic materials with efficient effect on photocatalytic removal of antibiotics from water, S. Ion, N.C. Guzo, O.D. Pavel, M. Tudorache, S.M. Coman, V.I. Parvulescu, B. Cojocaru*, The 13th International Symposium of the Romanian Catalysis Society (RomCat2022), June 22-24, 2022, Baile Govora, Romania p. 94 – 95, P11.
13. Efficient Removal of Antibiotics from Waste Water by Photocatalytically Active Supramolecular Organic–Inorganic Magnetic Composite, S.G. Ion, O.D. Pavel, N.Guzo, M. Tudorache, S. M. Coman, V.I. Parvulescu, B. Cojocaru*, 15th European Congress on Catalysis (EuropaCat 2023), 27 august – 1 septembrie 2023, Praga, Republica Ceha.
14. NiAl-Ti3C2 MXene as an Efficient Catalyst for Fine Chemicals Synthesis, B. Cojocaru, O. D. Pavel, L. Tian, D.G. Popescu, V.I. Parvulescu, Hermenegildo Garcia, 14th Symposium of the Romanian Catalysis Society, 9-11 july 2025, Cluj-Napoca, Romania
15. Lanthanide-Doped TiO2 Photocatalysts Used for the Photodegradation of Antibiotics in Water, B. Cojocaru, R. Zăvoianu, V.I. Parvulescu, O.D. Pavel, 14th Symposium of the Romanian Catalysis Society, 9-11 july 2025, Cluj-Napoca, Romania

Co-autor

16. Zeolites/polymer nanohybrids with lanthanide's ions: Photoluminescence properties and interaction mechanisms, C. Tiseanu, V.I. Parvulescu, M. Kumke, B. Cojocaru and A. Gessner , Frontiers in Polymer Science (Poly 2009), 7-9 June, Mainz, Germany, 2009

17. Polymer-coated lanthanide's-exchanged zeolites, C Tiseanu, V. I. Parvulescu, B. Cojocaru, A. Voiculescu and S. Georgescu, 10th International Balkan Workshop on Applied Physics (IBWAP), July 6-8, 2009, Constanta, Romania, paper S1-P60; Book of Abstracts, ISBN 978-973-614-507-0, page 85
18. In situ study of ozone interaction with Ag-Al catalysts: first evidence of active sites structure, V.I. Parvulescu, V. Parvulescu, B. Cojocaru, J. Hu, R. Richards, H. Daly, C. Hardacre, EuropaCar IX, Catalysis for a Sustainable World, 30 August – 4 Septembrie 2009, Salamanca, Spania
19. Cubic and low symmetry centers in Eu^{3+} , and Sm^{3+} doped CeO_2 nanoparticles. Effects of dopant concentration and thermal treatment, D. Avram, B. Cojocaru, N. Gheorghe, and C. Tiseanu, International Krutyn Summer School 2012, 23-29 September 2012, Krutyn, Poland.
20. Titanium dioxide phases in mesostructured silica matrices: Synthesis, characterization and oxidation activity, V.I. Parvulescu, D.S. Gopala, R.R. Bhattacharjee, R. Haerr, B. Yeginoglu, O.D. Pavel, B. Cojocaru, R.M. Richards; 7th World Congress on Oxidation Catalysis, Saint Louis, Missouri, June 8 – 12th, 2013, Poster Presentation, Location: 10, Session: C4. Oxidation Technology for CleanTech, pag. 65
21. Lignin fragmentation over $\text{Re@Co@Nb}_2\text{O}_5@\text{Fe}_3\text{O}_4$ catalysts, C.M. Opris, M. Tudorache, B. Cojocaru, V.I. Parvulescu, 11th International Symposium of the Romanian Catalysis Society, RomCat 2016, 06-08 June 2016, Timisoara, Romania
22. Aliphatic amine oxidation: the impact of inert gases on the solubility of oxygen in ionic liquids, O.D. Pavel, B. Cojocaru, S.M. Coman, P. Goodrich, C. Hardacre, V.I. Parvulescu, 11th International Symposium of the Romanian Catalysis Society, RomCat 2016, 06-08 June 2016, Timisoara, Romania, poster P-31, p. 131 – 132.
23. Oxidation of amines to nitriles in presence of new metal-free catalyst, O.D. Pavel, B. Cojocaru, A. Tirsoaga, A. Primo, M. Puche, H. García, V.I. Parvulescu, 11th International Symposium of the Romanian Catalysis Society, RomCat 2016, 06-08 June 2016, Timisoara, Romania, poster P-32, p. 133 – 134.
24. 2D-Nanostructured carbon material growth on ceramic foams by Radiofrequency Plasma-Beam-Enhanced Chemical Vapor Deposition, S. Vizireanu, G. Dinescu, C.-R. Luculescu, R. Birjega, A. Vlad, R. Zavoianu, B. Cojocaru, A. Sarbu, T. Sandu, L. Mara, C. Bradu, 11th International Conference On Physics Of Advanced Materials (ICPAM-11), Cluj-Napoca, 8-14 Septembrie 2016;

25. Down and up-conversion processes in Ho³⁺ and Ho³⁺, Yb³⁺ co-doped CeO₂ nanoparticles, I. Porosnicu, D. Avram, B. Cojocaru, M. Florea and C. Tiseanu, 16th International Balkan Workshop on Applied Physics and Materials Science (IBWAP 2016) Constanta, Romania, 7-8 July 2016.
26. NIR optical and X-ray excitation of luminescence in Er doped oxide nanoparticles for spectral converters and theranostics, D. Avram, B. Cojocaru, M. Florea, I. Tiseanu, C. Tiseanu, EUROMAT 2017, Thessaloniki, Greece, 17 - 22 september 2017.
27. X-ray and Near-Infrared Excitation of Luminescence in Ln doped Nanoparticles for Bio-imaging Applications, D. Avram, B. Cojocaru, I. Tiseanu, M. Florea, C. Tiseanu, SHIFT 2017 (Spectral sHapIng For biomedical and energy applicaTions), Costa de Adeje, Spain, 12 - 17 november 2017.
28. Remarkable enhancement of emission intensity of Eu-SnO₂ nanoparticles by Li addition, D. Avram, C. Colbea, A. Broasca, B. Cojocaru, C. Tiseanu, IBWAP (18th International Balkan Workshop on Applied Physics and Materials Science), Constanta, Romania, 10-13 Iulie 2018.
29. Mechanochemical vs. co-precipitation method in the synthesis of Li-Al-type LDH, O.D. Pavel, A.E. Stamate, E. Bacalum, B.E. Cojocaru, R. Zăvoianu, V.I. Pârvulescu, 12th International Symposium of the Romanian Catalysis Society, RomCat 2019, Bucuresti, Romanian, 5-7 Iunie 2019, poster 22, p. 115 – 116.
30. Synergistic B-Al interaction in SBA-15 affording an enhanced activity for the hydroisomerization of heptane over Pt-B-Al-SBA-15 catalysts, C. Rizescu, B. Cojocaru, N.T. Thanh Hien, P.T. Huyen, V.I. Pârvulescu, 12th International Symposium of the Romanian Catalysis Society, RomCat 2019, Bucuresti, Romanian, 5-7 Iunie 2019.
31. Multifunctional Fe₃O₄@Nb₂O₅@Co@Re catalysts for lignin fragmentation, M. Tudorache, C. Opris, B. Cojocaru, S. M. Coman, N. Gheorghe, B. Duraki, J. van Bokhoven, V. Parvulescu, 14th European Congress on Catalysis, EUROPACAT, Aachen, Germany, 18-23 August 2019.
32. Oriented MoS₂ Nanoplatelets Supported on few Layers Graphene as very active Catalysts for CO₂, A. Primo, J. He, B. Jurca, B. Cojocaru, C. Bucur, V.I. Parvulescu, H. Garcia, 14th European Congress on Catalysis, EUROPACAT, Aachen, Germany, 18-23 August 2019.
33. Mechanochemical method: a key way in the insertion of large cations in the LDH-type structure, O.D. Pavel, B. Cojocaru, R. Bîrjega, R. Zăvoianu, V.I. Pârvulescu, 14th European Congress on Catalysis, EUROPACAT, Aachen, Germany, 18-23 August 2019, poster B.1.104

34. [Cu₂(mand)₂(hmt)] – MOF: A Synergetic Effect between Cu(II) and Hexamethylenetetramine in the Henry Reaction, H. Szalad, N. Candu, C. Bala, B. Cojocaru, T. Pasatoiu, M. Andruh and V. Parvulescu, The 17th International Congress on Catalysis, San Diego, CA, USA, 14-19 June 2020.
35. Mimicking Bifunctional Metal/Supported Catalysts Properties in Graphenes Via Engineering Active Sites By Hydrogen Plasma Irradiation, A. Primo, A. Franconetti, M. Magureanu, N. B. Mandache, C. Bucur, C. Rizescu, B. Cojocaru, V. Parvulescu and H. Garcia, The 17th International Congress on Catalysis, San Diego, CA, USA, 14-19 June 2020.
36. Organic alkalis as a viable alternative to conventional inorganic one in the hydrotalcite-type materials synthesis pathways, S.-D. Mihăilă, O.-D. Pavel, R. Zăvoianu, B. Cojocaru, B. Jurca, V. I. Pârvulescu, Horizons of Science: Forum of Diploma Thesis Conference, 7-8 June 2021, Poland https://horyzontynauki.uj.edu.pl/en_GB/biezaca-edycja/program
37. Chiral-copper(ii) complexes anchored on carboxylated graphene oxide for catalytic applications, D.-I. Eftemie, A.-M. Spinciu, C. Maxim, Z. Arora, A.-M. Hanganu, M. Tudorache, B. Cojocaru, O. D. Pavel, P. Granger, M. Andruh, V.I. Pârvulescu, Contemporary Solutions for Advanced Catalytic Materials with a High Impact on Society (CoSolMat), 11th – 15th OCTOBER 2021, Bucharest, Romania pag. 89 – 90; Poster 3 <https://chimie.unibuc.ro/edu/greencam/index.php/workshop-2021>
38. A New Approach in the Synthesis of LDH-Type Materials Used in the Condensation Reaction, S. D. Mihăilă, B. Cojocaru, G. Mitran, M. C. Corobea, O.D. Pavel and R.a Zăvoianu, The 2nd International Electronic Conference on Catalysis Sciences—A Celebration of Catalysts 10th Anniversary (ECCS2021), 15–30 Oct 2021, Best Poster Award; <https://doi.org/10.3390/ECCS2021-11146> / <https://sciforum.net/paper/view/11146>
39. Quaternary ammonium salts for hydrotalcite-type catalysts synthesis, O.D. Pavel, B. Cojocaru, B.C. Jurca, R. Zăvoianu, R. Bîrjega, V.I. Pârvulescu, The 2nd International Electronic Conference on Catalysis Sciences-A Celebration of Catalysts 10th Anniversary, 15–30 October 2021, <https://doi.org/10.3390/ECCS2021-11145> / <https://sciforum.net/paper/view/11145>
40. TiO₂-Carbon Quantum Dots (CQDs) nanocomposites for photocatalytic purification of waste waters, N.C. Guzo, B. Cojocaru, J. Gościańska, V.I. Parvulescu, S.M. Coman, The 13th International Symposium of the Romanian Catalysis Society (RomCat2022), June 22-24, 2022, Baile Govora, Romania
41. A new path in the synthesis of Zn modified LDH used in Claisen-Schmidt condensation, O.D. Pavel, S.D. Mihăilă, B. Cojocaru, B.C. Jurca, G. Mitran, R. Zăvoianu, M.C. Corobea, R. Bîrjega, R. Tincu, V.I. Pârvulescu, The 13th International Symposium of the Romanian Catalysis Society (RomCat2022), June 22-24, 2022, Baile Govora, Romania p. 141 – 142, P35

42. Efficient humins wastes valorization: a green approach toward carbon quantum dots (CQDs) in biphasic butanol/water systems, G. Stoian, P. Oancea, B. Cojocaru, M. Tudorache, V.I. Parvulescu, S.M. Coman, The 13th International Symposium of the Romanian Catalysis Society (RomCat2022), June 22-24, 2022, Baile Govora, Romania
43. CQD@ZnO heterostructures with enhanced photocatalytic properties, E.E. Toma, G. Stoian, B. Cojocaru, M. Tudorache, J. Gościańska, V.I. Parvulescu, S.M. Coman, The 13th International Symposium of the Romanian Catalysis Society (RomCat2022), June 22-24 2022, Baile Govora, Romania
44. Valmet chiral-base ligands and their copper(II) complexes as organo, homogeneous and heterogeneous catalysts for Henry, cyanosilylation and aldol coupling reactions, Z. Arora, D.-I. Eftemie, A. Spinciu, C. Maxim, A.-M. Hanganu, M. Tudorache, B. Cojocaru, O.D. Pavel, P. Granger, M. Andruh, V.I. Pârvulescu, 13th International Symposium of The Romanian Catalysis Society, RomCat 2022, June 22-24, 2022, Băile Govora, Romania, p. 75 – 76, P1
45. Catalytic production of amino acids from biomass-derived intermediates, M.-A. Badea, B. Cojocaru, E.E. Jacobsen, V.I. Parvulescu, S.M. Coman, 13th International Symposium of The Romanian Catalysis Society, RomCat 2022, June 22-24, 2022, Băile Govora, Romania
46. A non-traditional perspective in the synthesis of Fe-LDH type materials, O. Dumitru Pavel, R. Zăvoianu, A. Tîrșoagă, A. Cruceanu, B. Cojocaru, R. Bîrjega, V.I. Pârvulescu, Conferința Națională de Chimie, Editia XXXVI (CNCHIM 2022), 4-7 octombrie 2022, Călimănești-Căciulata, Vâlcea, România, 5th - 7th October 2022, P.S.IV. - 6, p. 174 <https://chimcomplex.com/cnchim-2022/>
47. Biomass valorization by enzymatic grafting of lignin, S.G. Ion, B. Cojocaru, V.I. Pârvulescu, M. Tudorache, "Materials for Biomass Summer School", Norwegian University of Science and Technology, Trondheim, Norvegia. 12-16 septembrie 2022.
48. A circular economy concept: from biomass wastes to CQD/TiO₂ catalysts with enhanced photodegradation efficiency of organic dyes, N.-C. Guzo, B. Cojocaru, J. Goscińska, V. I. Parvulescu, S. M. Coman, "Materials for Biomass Summer School", Norwegian University of Science and Technology, Trondheim, Norvegia. 12-16 septembrie 2022
49. The Impact of the Layered Materials Synthesis Method Type on the Photodegradation of the Recalcitrant Dye Orange G, D.-S. Baltag, A. Răducan, P. Oancea, B. Cojocaru, R. Zăvoianu, V.I. Pârvulescu, O.D. Pavel, 14th Symposium of the Romanian Catalysis Society, 9-11 July 2025, Cluj-Napoca, Romania