

Publications list

Articles:

Articles in JCR indexed journals:

1. Burdon F., Ramberg E., Popescu C., Nita D., **Bradu, C.**, Forio, M. A. E., Witing, F., Kupilas, B., Lau, D. C. P., Volk, M., Rîșnoveanu G., Goethals P., Friberg N., Johnson R. K., Fatty acid biomarkers reveal landscape influences on linkages between aquatic and terrestrial food webs, *Ecological Monographs*, 95, 3 (2025) e70025 (IF: 7,5; AIS: -Q1)
2. Baltag D., Raducan, A., Bilea, Florin; Neacșu, V. A., Bradu, C., Oancea P., Oxidative removal of Orange G by homogeneous advanced oxidation processes, *Journal of Water Process Engineering* 73 (2025) 107670 (IF: 6,7; AIS: Q1)
3. Frone A.N., Panaitescu D.M., Gabor A.R., Nicolae C. A., Ghiurea M., **Bradu C.**, Poly(3-hydroxybutyrate) Modified with Thermoplastic Polyurethane and Microfibrillated Cellulose: Hydrolytic Degradation and Thermal and Mechanical Properties, *Polymers* 16 (2024) 3606 (IF: 4,7; AIS: 0,657; RIS: 1,689 Q1)
4. Crini G., Lacalamita D., Lichtfouse E., Morin-Crini N., Liu C., Wilson L. D., Picos-Corrales L.A., Akhere M.A., Sotiropoulou M., **Bradu C.**, Mongioví C., *Characterization and treatment of industrial laundry wastewaters: a review*, *Environmental Chemistry Letters*, 22(5) (2024) 2257–2292 (IF: 15,0; AIS: 2,246; RIS: 5.491 Q1)
5. Bilea F., **Bradu C.**, Medvedovici A., Dunpin H., Magureanu M., *Pulsed corona discharge: an advanced treatment method for antibiotic-contaminated water*, *Journal of Physics D: Applied Physics* 57 (2024) 435205 (IF: 3,1; AIS: 0,633; RIS: 1.335 Q2)
6. Bilea F., **Bradu C.**, Cicirma M., Medvedovici A., Magureanu M., *Plasma treatment of sulfamethoxazole contaminated water: Intermediate products, toxicity assessment and potential agricultural reuse*, *Science of the Total Environment*, 90920 (2024), 168524 (IF: 8.2; AIS: 1.494; RIS: 2.410 Q1)
7. Brault P., Bilea F., Magureanu M., Bradu C., Aubry O., Rabat H., Hong D. *Plasma degradation of water organic pollutants: Ab initio molecular dynamics simulations and experiments*, *Plasma Processes and Polymers* 20(11) (2023) e2300116, doi.org/10.1002/ppap.202300116 (IF: 3.877; AIS: 0,74 Q2)
8. Raciulete M., Anastasescu C., Papa F,* , Atkinson I , **Bradu C** , Negrila C, Eftemie D.I., Culita D.C., Miyazaki A., Bratan V., Pandeale-Cusu J., Munteanu C., Dobrescu G., Sandulescu A., Balint I., *Band-Gap Engineering of Layered Perovskites by Cu Spacer Insertion as Photocatalysts for Depollution Reaction*, *Catalysts* 12 (2022) 1529, doi.org/10.3390/catal12121529 (IF: 4.146; AIS: 0.659 Q2).
9. Petcu G., Anghel E.M., Buixaderas, E., Atkinson I.; Somacescu S.; Baran A, Culita D. C., Trica B., Bradu C.; Ciobanu M., Parvulescu V., Au/Ti Synergistically Modified Supports Based on SiO₂ with Different Pore Geometries and Architectures, *Catalysts* 12 (2022) 1129 (IF: 4.501; AIS: 0.615 Q2)
10. Nica A.V., Olaru, E.A. **Bradu C.**, Dumitru A., Avramescu, S.M. *Catalytic Ozonation of Ibuprofen in Aqueous Media over Polyaniline-Derived Nitrogen Containing Carbon Nanostructures*, *Nanomaterials*, 12 (2022), 3468 (IF: 5.719; AIS: 0.737 Q2).
11. Lascu I., Locovei C., **Bradu C.**, Gheorghiu C., Tanase A.M., Dumitru A., *Polyaniline-Derived Nitrogen-Containing Carbon Nanostructures with Different Morphologies as Anode Modifier in Microbial Fuel Cells*, *International Journal of Molecular Science* 23 (2022) 11230 (IF: 6,028; AIS: 1,064) (IF: 4.146; AIS: 0.659 Q2)
12. Crini, G., Cosentino, C., Bradu, C., Fourmentin M., Torri G., Ruzimuradov O., Alaton I.A., Concetta Tomei M., Derco J., Barhoumi M., Prosen H., Malinović B.N., Vrabel M., Huq M.M., Soltan J., Lichtfouse, E., Morin-Crini, N, *Innovative technologies to remove*

- alkylphenols from wastewater: a review*, Environmental Chemistry Letters, 20(4) (2022) pp. 2597–2628 2019–2041 (IF: 9.027; AIS: 0.966 Q1)
13. Lichtfouse E., Morin-Crini N., **Bradú C.**, Boussouga Y. A., Aliaskari M., Schäfer A. I., Das S., Wilson L.D., Ike M., Inoue D., Kuroda M., Déon S., Flevet P., Crini G., *Methods for selenium removal from contaminated waters: a review*, Environmental Chemistry Letters, 20 (2022) 2019–2041 (IF: 9.027; AIS: 0.966 Q1)
 14. Mongiovi C., Crini G., Gabrion X., Placet V., Blondeau-Patissier V., Krystianiak A., Durand S., Beaugrand J., Dorlando A., Rivard C., Gautier L., Ribeiro A.R.L., Lacalamita D., Martel B., Staelens J-N., Ivanovska A., Kostić M., Heintz O., **Bradú C.**, Raschetti M., Morin-Crini N. *Revealing the adsorption mechanism of copper on hemp-based materials through EDX, nano-CT, XPS, FTIR, Raman, and XANES characterization techniques*, Chemical Engineering Journal Advances 10 (2022) 100282 (IF: -; AIS: -).
 15. Mongiovi C., Lacalamita D., Morin-Crini N., Gabrion X., Placet V., Ribeiro A.R.L., Ivanovska A., Kostić M., **Bradú C.**, Staelens J-N., Martel B., Raschetti M., Crini G. *Use of chènevotte, a valuable co-product of industrial hemp fiber, as adsorbent for copper ions: Kinetic studies and modelling*, Arabian Journal of Chemistry 15 (2022) 103742 (IF: 5.165; AIS: 0.676 Q2).
 16. Morin-Crini N., Lichtfouse E., Fourmentin M., Ribeiro A.R.L., Noutsopoulos C., Mapelli F., Fenyvesi E., Gurgel M., Vieira A., Picos-Corrales L. A., Moreno-Piraján J.C., Giraldo L., Sohajda T., Mahmudul M., Soltan H., Torri G., Magureanu M., **Bradú C.**, Crini G, *Removal of emerging contaminants from wastewater using advanced treatments. A review*, Environmental Chemistry Letters, 20 (2022) 1333-1375 (IF: 9.027; AIS: 0.966 Q1).
 17. Zavoianu R., Cruceanu A., Pavel O.D., **Bradú C.**, Florea M., Bîrjega M., *Green Epoxidation of Olefins with Zn_xAl/Mg_xAl-LDH Compounds: Influence of the Chemical Composition*, Catalysts 12 (2022) 145. <https://doi.org/10.3390/catal12020145> (IF: 4.146; AIS: 0.659 Q2).
 18. Crini G., **Bradú C.**, Fourmentin M., Cosentino C., Ribeiro A.R.L., Morin-Crini N. *Sorption of 4-n-nonylphenol, 4-n-octylphenol, and 4-tert-octylphenol on cyclodextrin polymers*, Environmental Science and Pollution Research 29 (2022) 171–181 (IF: 4.223; AIS: 0.603).
 19. Magureanu M*, **Bradú C***. *Catalysts: Special issue on plasma-catalysis for environmental and energy-related applications*, Catalysts 11 (2021) 1439 (IF: 4.146; AIS: 0.659 Q2).
 20. Magureanu M., Bilea F., **Bradú C.**, Hong, D. *A review on non-thermal plasma treatment of water contaminated with antibiotics*, Journal of Hazardous Materials 417 (2021) 125481 (IF: 10.588; AIS: 2.375 Q1).
 21. Mongiovi C., Lacalamita D., Morin-Crini N., Gabrion X., Ivanovska A., Sala F., Placet V., Rizzi V., Gubitosa J., Mesto E., Lado Ribeiro A.R., Fini P., De Vietro N., Schingaro E., Kostić M., Cosentino C., Cosma P., **Bradú C.**, Chanet, G., Crini, G. *Use of chènevotte, a valuable co-product of industrial hemp fiber, as adsorbent for pollutant removal. Part i: Chemical, microscopic, spectroscopic and thermogravimetric characterization of raw and modified samples*, Molecules 26 (2021) 4574 (IF: 4.411; AIS: 0.694 Q2).
 22. Mongiovi, C., Morin-Crini, N., Lacalamita, D., **Bradú C.**, Raschetti M., Placet V., Lado Ribeiro A.R., Ivanovska A., Kostić, M., Crini, G., *Biosorbents from plant fibers of hemp and flax for metal removal: Comparison of their biosorption properties*, Molecules 26 (2021) 4199 (IF: 4.411; AIS: 0.694 Q2).
 23. **Bradú C.**, Kutasi K., Magureanu M., Puac N., Živković S. *Reactive nitrogen species in plasma-activated water: generation, chemistry and application in agriculture*, Journal of Physics D: Applied Physics 53 (2020) 223001 (IF: 3.207; AIS: 1.513 Q2).
 24. Bilea F., **Bradú C.**, Magureanu M. *Potential of plasma treatment as water reclamation process for irrigation*, Journal of Physics D: Applied Physics 53 (2020) 224002 (IF: 3.207; AIS: 1.513 Q2).
 25. Bilea F., **Bradú C.**, Mandache N.B., Magureanu M. *Characterization of the chemical activity of a pulsed corona discharge above water*, Chemosphere 236 (2019) 124302 (IF: 5.108; AIS: 0.9 Q2).

26. **Bradu C.**, Căpăț C., Papa F., Frunza L., Olaru E.A., Crini G., Morin-Crini N., Euvrard E., Balint I., Zgura I., Munteanu C. *Pd-Cu catalysts supported on anion exchange resin for the simultaneous catalytic reduction of nitrate ions and reductive dehalogenation of organochlorinated pollutants from water*, Applied Catalysis A: General 570 (2019) 120–129 (IF: 4.521; AIS: 0.8 Q2).
27. Morin-Crini N., Loiacono S., Placet V., Torri G., **Bradu C.**, Kostić M., Cosentino C., Chanet G., Martel B., Lichtfouse E., Crini G. *Hemp-based adsorbents for sequestration of metals: a review*, Environmental Chemistry Letters 17 (2019) 393–408 (IF: 3.125; AIS: 0.6 Q1).
28. Iftimie S., **Bradu C.**, Dumitru A., *Carbon nanotubes and carbonized polyaniline nanostructures as 3D modified anode for microbial fuel cells*, Proceedings of the Romanian Academy, Series A, 20 (2019) 45-50 (IF: 1.402; AIS: 0.2).
29. Magureanu M., **Bradu C.**, Parvulescu V.I. *Plasma processes for the treatment of water contaminated with harmful organic compounds*, Journal of Physics D: Applied Physics 51 (2018) 313002 (IF: 2.829; AIS: 0.8 Q2).
30. Magureanu M., Mandache N.B., **Bradu C.**, Parvulescu V.I. *High efficiency plasma treatment of water contaminated with organic compounds. Study of the degradation of ibuprofen*. Plasma Processes and Polymers 15 (2018) 1700201 (IF: 2.846; AIS: 0.614 Q2).
31. Loiacono S., Morin-Crini N., Martel B., Chanet G., **Bradu C.**, Torri G., Crini G. *Zinc, copper, and manganese complexation by hemp: Chemical abatement and ecotoxicological impact | [Complexation du zinc, du cuivre et du manganèse par du chanvre : Efficacité chimique et impact écotoxicologique]*, Environnement, Risques et Santé 17 (2018) 240-252 (IF: 0.1).
32. **Bradu C.**, Magureanu M., Parvulescu V.I., *Degradation of the chlorophenoxyacetic herbicide 2,4-D by plasma-ozonation system*. Journal of Hazardous Materials 336 (2017) 52-56 (IF: 6.065; AIS: 1.173 Q1).
33. Sandu T., Sarbu A., Zavoianu R., Spatarelu C.P., Florea M., **Bradu C.**, Mara E.L., Dragut D.V., Alexandrescu E., Zaharia A., Radu A.L., *New ways to use the red mud waste as raw material for inorganicorganic hybrid hydrogels*, International Journal of Mineral Processing 169 (2017) 111–118 (IF: 1.561; AIS: 0.552).
34. Priac A., Morin-Crini N., Druart C., Gavaille S., **Bradu C.**, Lagarrigue C., Torri G., Winterton P., Crini G. *Alkylphenol and alkylphenol polyethoxylates in water and wastewater: A review of options for their elimination*, Arabian Journal of Chemistry 10 (2017) S3749-S3773 (IF: 2.684; AIS: 0.596 Q2).
35. Magureanu M., Dobrin D., **Bradu C.**, Gherendi F., Mandache N.B., Parvulescu V.I. *New evidence on the formation of oxidizing species in corona discharge in contact with liquid and their reactions with organic compounds*, Chemosphere 165 (2016) 507-514 (IF: 4.208; AIS: 0.932 Q2).
36. Charles J., **Bradu C.**, Morin-Crini N., Sancey B., Winterton P., Torri G., Badot P.-M., Crini G. *Pollutant removal from industrial discharge water using individual and combined effects of adsorption and ion-exchange processes: Chemical abatement*, Journal of Saudi Chemical Society 20 (2016) 185-2016 (IF: 2.887; AIS: 0.518 Q2).
37. Papa F., Balint I., Negrila C., Olaru E. A., Zgura I., **Bradu C***. *Supported Pd–Cu Nanoparticles for Water Phase Reduction of Nitrates. Influence of the Support and of the pH Conditions*, Industrial & Engineering Chemistry Research 53 (2014) 19094–19103 (IF: 2.235; AIS: 0.618 Q2).
38. Charles J., Crini G., Morin-Crini N., Badot P-M., Trunfio G., Sancey B., de Carvalho M., **Bradu C.**, Avramescu S., Winterton P., Gavaille S., Torri G. *Advanced oxidation (UV-ozone) and cyclodextrin sorption: Effects of individual and combined action on the chemical abatement of organic pollutants in industrial effluents*, Journal of the Taiwan Institute of Chemical Engineers 45 (2014) 603-608 (IF: 2.637; AIS: 0.489 Q2).
39. Dobrin D., Magureanu M., **Bradu C.**, Mandache N. B., Ionita P., Parvulescu V. I. *Degradation of methylparaben in water by corona plasma coupled with ozonation*,

- Environmental Science and Pollution Research 21 (2014) 12190-12197 (IF: 2.757; AIS: 0.653).
40. Sancey B., **Bradu C.**, Crini G. *1,2-Dichlorobenzene oxidation using individual and combined effects of ozone and ultraviolet irradiation: chemical abatement and impact on water toxicity*, Environmental Engineering and Management Journal 13 (2014) 735-742 (IF: 1.258; AIS: 0.069).
 41. Charles J., Crini G., **Bradu C.**, Torri G., Gavaille S., Sancey B., Morin-Crini N., Trunfio G., Badot P.-M., Winterton P., Lagarrigue C. *Optimisation of an industrial wastewater decontamination plant: An environment-oriented approach*, Canadian Journal of Chemical Engineering 92 (2014) 391–400 (IF: 1.313; AIS: 0.311).
 42. Dobrin D., **Bradu C.**, Magureanu M., Mandache N.B., Parvulescu V.I. *Degradation of diclofenac in water using a pulsed corona discharge*, Chemical Engineering Journal 234 (2013) 389–396 (IF: 4.058; AIS: 0.861 Q1).
 43. Radu S., Dumitrescu V., **Bradu C.** *Catalyst activity modification during catalytic cracking process*, Revista de Chimie 64 (2013) 852-857 (IF: 0.677; AIS: 0.056).
 44. Magureanu M., Piroi D., Mandache N. B., **Bradu C.**, Medvedovici A., Parvulescu V. I. *The Mechanism of Plasma Destruction of Enalapril and Related Metabolites in Water*, Plasma Processes and Polymers 10 (2013) 459-468 (IF: 3.730; AIS: 0.722 Q2).
 45. Magureanu M., **Bradu C.**, Piroi D., Mandache N. B., Parvulescu V.I. *Pulsed Corona Discharge for Degradation of Methylene Blue in Water*, Plasma Chemistry and Plasma Processing 33 (2013) 51–64 (IF: 1.599; AIS: 0.656 Q2).
 46. Udrea I., Capat C., Olaru E.A., Isopescu R., Mihaï M., Mateescu C.; **Bradu C.** *Vaterite Synthesis via Gas-Liquid Route under Controlled pH Conditions*, Industrial & Engineering Chemistry Research 51 (2012) 8185-8193 (IF: 2.206; AIS: 0.636 Q2).
 47. Popa C.V., Lungu L., Săvoiu M., **Bradu C.**, Dinoiu V., Dăneț A. F. *Total antioxidant activity, phenols and flavonoids content of several plant extracts*, International Journal of Food Properties 15 (2012) 691-701 (IF: 0.877; AIS: 0.208 Q2).
 48. Magureanu M., Piroi D., Mandache N.B., David V., Medvedovici A., **Bradu C.**, Parvulescu V.I. *Degradation of antibiotics in water by non-thermal plasma treatment*, Water Research 45 (2011) 3407- 3416 (IF: 4.865; AIS: 1.303 Q1).
 49. **Bradu C.***, Frunza L., Mihalache N., Avramescu S.M., Neață M., Udrea I. *Removal of Reactive Black 5 azo dye from aqueous solutions by catalytic oxidation using CuO/Al₂O₃ and NiO/Al₂O₃*, Applied Catalysis B: Environmental 96 (2010) 548–556 (IF: 4.749; AIS: 1.425 Q1).
 50. Dima S.O., Sarbu A., Dobre T., **Bradu C.**, Antohe N., Radu A.L., Nicolescu T.V., Lungu A. *Molecularly Imprinted Membranes for Selective Separations*, Materiale Plastice 46 (2009) 372-378 (IF: 0.873; AIS: 0.022).
 51. Dima S.O., Dobre T., Sârbu A., Ghiurea M., **Bradu C.**, Avramescu S. *Proofs for molecular imprinting of an acrylic copolymer by phase inversion*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science 71 (2009) 21-30 (IF: 0.253; AIS: 0.04).
 52. Sarbu A., Dima S.O., Dobre T., Udrea I., **Bradu C.**, Avramescu S., Mihalache N., Radu A.L., Nicolescu T.V., Lungu A., Melinte S. *Polystyrene Wastes Recycling by Lightweight Concrete Production*, Revista de Chimie 60 (2009) 1350-1356 (IF: 0.552; AIS: 0.030).
 53. Palaghiciuc G., Baciuc I., Oprea E., **Bradu C.** *Comparative Study on Natural Compounds with Antioxidants Properties from two Echinacea Specie*, Revista de Chimie 60 (2009) 435-438 (IF: 0.552; AIS: 0.030).
 54. Avramescu S. M., Mihalache N., **Bradu C.**, Neata M., Udrea I. *Catalytic Ozonation of Acid Red 88 from Aqueous Solutions*, Catalysis Letters 129 (2009) 273-280 (IF: 2.021; AIS: 0.582).
 55. **Bradu C.***, Udrea I., Neață M., Mihalache N., Avramescu S. M., Racovițeanu G., Vulpașu E. *Catalytic oxidation of methyl tert-butyl ether with hydrogen peroxide from aqueous solutions*, Revista de Chimie 60 (2009) 252-257 (IF: 0.552; AIS: 0.030).

56. Avramescu S. M., **Bradu C.**, Udrea I., Mihalache N., Ruță F. *Degradation of oxalic acid from aqueous solutions by ozonization in presence of NiO/Al₂O₃ catalysts*, Catalysis Communication 9 (2008) 2386–2391 (IF: 2.791; AIS: 0.764).
57. Avramescu S.M., **Bradu C.**, Neata M., Udrea I. *Eliminarea unor coloranti din solutii apoase prin procedee de oxidare catalitica [The elimination of some dyes from aqueous solutions by catalytic oxidation processes]*, Revista de Chimie 56 (2005) 281-285 (IF: 0.278; AIS: 0.02).
58. Avramescu S.M., Ruță F., **Bradu C.**, Udrea I. *Ozonizarea orto-nitrofenolului in solutii apoase. Aprecierea gradului de avansare a reactiei [The ozonization of orto-nitrophenol in aqueous solutions. Determination of the evolution degree of the reaction]*, Revista de Chimie 55 (2004) 771-714 (IF: 0.308; AIS: 0.02).
59. Udrea I., **Bradu C.***, Avramescu S.M. *Eliminarea 2-nitrofenolului din ape prin ozonizare [The 2-nitrophenol removal from water by catalytic ozonation and adsorption on activated carbon]*, Revista de Chimie 55 (2004) 877-881 (IF: 0.308; AIS: 0.02).
60. Udrea I., **Bradu C.***, *Ozonation of substituted phenols in aqueous solutions over CuO-Al₂O₃ catalyst*, Ozone Science & Engineering 25 (2003) 335-343 (IF: 0.475; AIS: 0.50).
61. Sarbu A., Gheroghiu C., Udrea I., **Bradu C.** *Acrylic fibres as catalyst carriers: I - The preparation of modified porous fibres with adsorptive properties*, Revue Roumaine de Chimie 45 (2000) 923-927 (IF: 0.259; AIS: 0.07).

Other articles:

62. Ursache E. M., **Bradu C.***, Nitrogen-based nutrient pollution of water bodies: impact on the aquatic ecosystems and human health, Proc. Rom. Acad., Series B, 26(1) (2024) 37–45 (Clarivante Analytics - Additional Web of Science Indexes: Zoological Record)
63. Crini, G., **Bradu, C.**, Cosentino C., Staelens J.N., Martel B., Fourmentin, M., Loiacono S., Chanet G., Torri G., Morin-Crini N., *Simultaneous Removal of Inorganic and Organic Pollutants from Polycontaminated Wastewaters on Modified Hemp-Based Felts*, Revista de Chimie, 72 (2021) 25-43.
64. Crini G., Mongiovía C., Placet V., Cosentino C., Martel B, **Bradu C.**, Morin-Crini N., *Feltro di lino come materiale adsorbente per il trattamento delle acque contaminate da metalli*, LA CHIMICA E L'INDUSTRIA online | ANNO V | N° 1 | GENNAIO/FEBBRAIO 2021 (DOI: <http://dx.medra.org/10.17374/CI.2021.103.1.36>);
65. Sol-Gel Materials with Pesticide Delivery Properties; Raileanu M., Todan L., Crisan M., Braileanu A., Rusu A., **Bradu C.**, Carpov A., Zaharescu M.; Journal of Environmental Protection, 1 (2010) 302-313;
66. Catalytic Oxidation of 2-Nitrophenol in Aqueous Solution by Hydrogen Peroxide over Some Oxide Catalysts, **Bradu C.***, Avramescu S.M., Udrea I., Mihalache N., Progress in Catalysis, 13 (2004) 1-12;

Conference papers (Proceedings):

International conferences:

1. Dobrin D, Magureanu M. , Bradu C., Mandache N.B., Parvulescu V.I. Combination of non-thermal plasma and ozonation for the degradation of endocrine disrupting compounds in water *International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2014; Bran; Romania; 22 May 2014 through 24 May 2014*, , Article number 6850938, Pages 1047-1052 (Indexat ISI)
2. Magureanu M., Piroi D., Mandache N.B., Bradu C., Medvedovici A., Parvulescu V.I. Degradation of pharmaceutical compounds in aqueous solution using non-thermal plasma *13th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2012; Brasov; Romania; 24 May 2012 through 26 May 2012*, Article number 6231955, Pages 1375-1379 (Indexat ISI)
3. Zavoianu R., Pavel O. D., Cruceanu A., Florea M., Barjega R., Rotaru A., Bradu C., Rotaru P. Influence of the preparation method on the ampicillin incorporation in hydrotalcite-like

compounds, *5th International Symposium of Nanoporous Materials, Vancouver, Canada 25 - 28 May 2008*, 717-728 (Indexat ISI)

4. Bradu C., Udrea I., Catalytic Oxidation of 2-Nitrophenol in Aqueous Solution by Hydrogen Peroxide over CuO-Al₂O₃ and NiO-Al₂O₃ Catalysts. *13th Romanian International Conference on Chemistry and Chemical Engineering, București, România, 17-19 septembrie 2003*, 42-47;
5. Udrea I., Bradu C., Pisoschi A. 2001. Degradation of ortho-nitrophenol from aqueous solutions by ozonation. *International Conference on Materials science and Engineering, BRAMAT, Brașov, România, 1-2 martie 2001*, Vol I, p 345-350;
6. Udrea I., Bradu C., Nenu C., Loloiu T. 1998. Catalytic oxidation of phenols in aqueous solutions. *13th International Congress of Chemical and Process Engineering, Praga, 1998*, paper no. A36 (ref no. 0110).

National conferences:

7. Udrea I., Bradu C., Capăț C., Buleandra M., Avramescu S.M., Chiru E., Sandu C., Dragne M. Ozonizarea catalitică – procedeu performant pentru îndepărtarea micropoluantilor organici persistenți din apa destinată consumului uman. Seminarul Științific: Conformarea uzinelor de apa la directiva CE 98/83/EC privind calitatea apei destinată consumului uman, București, România, 2002, S III 4-1;
8. Udrea I., Sârbu A., Gheorghiu C., Bradu C., Activitatea unor catalizatori obținuți prin modificarea fibrelor acrilice cu compuși anorganici în procesele de epurare a apelor uzate. A 14-a Sesiune de Comunicări Științifice, Călimănești - Căciulata, România, Romania, octombrie 1998, proceeding vol.III p.1214-1219;
9. Udrea I., Sârbu A., Gheorghiu C., Bradu C. Fibre acrilice modificate cu compuși de Ni, Cu, Fe - noi catalizatori în procese de epurare a apelor. A XXIII-a Sesiune de Comunicări Științifice, Călimănești - Căciulata, România, octombrie 1997, proceeding vol.II, p. 696-702;
10. Ion R.M., Bradu C., Udrea I. Degradarea fotocatalitică a poluanților fenolici din ape reziduale. Simpozionul “Mediul și Industria”, Bucureștii, România, septembrie 1997, p 134-143;
11. Bradu C., Udrea I., Ion R.M., Ilie V. Oxidarea catalitică - metodă eficientă de eliminare a impurificatorilor refractari din apele reziduale Simpozionul “Mediul și Industria”, Bucureștii, România, septembrie 1997, p. 126 – 136.

Book chapters:

1. *Polymères réticulés de bêta-cyclodextrine*, Euvrard E., Morin-Crini N., Bradu C., Gavaille S., Winterton P., Lagarrigue C., DruarT C., Poupeney A., Avramescu S., Fourmentin S. et Crini G. in *Complexation de substances émergentes et mécanismes d'adsorption, in Cyclodextrines : propriétés, chimie et applications* – (Collection Pratiques & Techniques), 2015; Coord Jean-Paul Barrière, Presses universitaires de Franche-Comté, (ISBN 978-2-84867-520-6), p. 281-300
2. *Comportarea în mediu a substanelor în Particularități structurale ale compartimentelor de mediu; Relevanță proprietăților fizico-chimice ale substanțelor în evaluarea comportării lor în mediu*, in *Fundamente legislative și științifice pentru evaluarea substanțelor chimice*, 2016; Bradu C., Oprina-Pavelescu M. – Editura Universitară București, (ISBN 978-606-28-0450-3), p. 115-211
3. *Procédés d'oxydation avancée pour le traitement des eaux*, Bradu C, Olaru E.A., Magureanu M et Crini G. in *Eaux industrielles contaminées - Réglementation, paramètres chimiques et biologiques & procédés d'épuration innovants*- (Collection : Pratiques & techniques, Série : Environnement et Développement durable) coord. Nadia Morin-Crini – Grégorio Crini, Presses universitaires de Franche-Comté, 2017, (ISBN : 978-2-84867-589-3) p. 417-445

4. *Hemp-Based Materials for Metal Removal*, Morin-Crini N., Loiacono S., Placet V., Torri G., Bradu C., Kostić M., Cosentino C., Chanut G., Martel B., Lichtfouse E., Crini G. in *Green Adsorbents for Pollutant Removal Innovative materials (Series: Environmental Chemistry for a Sustainable World)* Eds. Grégorio Crini, Eric Lichtfouse, Springer, 2018, (ISBN 978-3-319-92162-4) p.1-34.
5. *Remediation of Emerging Contaminants*, Morin-Crini N., Lichtfouse E., Fourmentin M., Lado Ribeiro A.R., Noutsopoulos C., Mapelli F., Fenyvesi E., Gurgel M., Vieira A., Picos-Corralles L. A., Moreno-Piraján J.C., Giraldo L., Sohajda T., Mahmudul M., Soltan H., Torri G., Magureanu M., Bradu C., Crini G. In: *Emerging Contaminants Vol. 2. Environmental Chemistry for a Sustainable World*, vol 66. Eds: Morin-Crini N., Lichtfouse E., Crini G. Springer, 2021. (ISBN: 978-3-030-69089-2 / eBook ISBN: 978-3-030-69090-8) p. 1-106.
6. *Technologies to Remove Selenium from Water and Wastewater*, Lichtfouse E., Morin-Crini N., Bradu C., Boussouga Y.A., Aliaskari M., Schäfer A.I., Das D., Wilson L.D., Ike M., Inoue D., Kuroda M., Déon S., Fievet P., Crini G. In: *Emerging Contaminants Vol. 2. Environmental Chemistry for a Sustainable World*, vol 66. Eds: Morin-Crini N., Lichtfouse E., Crini G. Springer, 2021 (ISBN: 978-3-030-69089-2 / eBook ISBN: 978-3-030-69090-8) p 207-303.
7. *Advanced Treatments for the Removal of Alkylphenols and Alkylphenol Polyethoxylates from Wastewater*, Crini G., Cosentino C., Bradu C., Fourmentin M., Torri G., Ruzimuradov O., Arslan-Alaton I., Tomei M.C., Derco J., Barhoumi M., Prosen H., Malinović B.N., Vrabel M., Mahmudul M., Soltan H., Lichtfouse E., Morin-Crini N., In: *Emerging Contaminants Vol. 2. Environmental Chemistry for a Sustainable World*, vol 66. Eds: Morin-Crini N., Lichtfouse E., Crini G. Springer, 2021. (ISBN: 978-3-030-69089-2 / eBook ISBN: 978-3-030-69090-8) p. 305-398.
8. *Hemp-Based Materials for Applications in Wastewater Treatment by Biosorption-Oriented Processes: A Review*, Mongioví C., Morin-Crini N., Placet V., **Bradu C.**, Lado Ribeiro A. R., Ivanovska A., Kostić M., Martel B., Cosentino C., Torri G., Rizzi V., Gubitosa J., Fini P., Cosma P., Lichtfouse E., Lacalamita D., Mesto E., Schingaro E., De Vietro N., Crini G., In: *Cannabis/Hemp for Sustainable Agriculture and Materials* Eds: Agrawal D. C., Kumar R., Dhanasekaran M., Springer, 2022. (ISBN 978-981-16-8777-8 / eBook ISBN 978-981-16-8778-5).

Edited volumes:

Plasma-Catalysis for Environmental and Energy-Related Applications; Catalysts 11, Editors: Măgureanu M., Bradu C., Editura: MDPI, ISSN 2073-4344

Patents:

1. Catalizatori si procedee pentru tratarea apelor impurificate cu diverși poluanți organici, Autori: Udrea Ion, Căpăț Constantin, Bradu Corina, Chiru Epsică, Sandu Ciprian, Sandu Marin, Racovițeanu Gabriel, Buleandră Marian-Mihai, Avramescu Sorin-Marius – Brevet RO nr. 119694 B1, Int.Cl. B01J 23/00; C02 F 9/04, 27.02.2004;
2. Procedeu de obținere a granulelor de polipirol conținând enzime imobilizate covalent, Autori: Sârbu Andrei, Sandu Teodor, Săndulescu Robert,, Cristea Cecilia, Dima Ștefan Ovidiu, Udrea Ion, Bradu Corina, Dumitru Anca Aurelia, Vulpe Silviu, Iovu Horia, Sârbu Liliana, Bodoki Ede – Brevet RO nr. 128661 B1, Int.Cl. G01N 27/327; G01N 27/333; C12 Q 1/28; C12 Q 1/28, 26.02.2016;
3. Catalizator și procedeu pentru tratarea apelor impurificate cu azotați și compuși organici clorurați, Autori: Bradu Corina, Căpăț Constantin, Olaru Elena-Alina, Papa Florica, Balint Ioan, State Răzvan, Frunză Ligia, Zgură Irina - Brevet RO nr. 132035 B1, Int.Cl. B01J23/44, C02F 9/04, 29.11.2019.

4. Procedeu de tratare cu oxidanți-coagulanți generați din nămol roșu a apelor cu încărcare organică mare, Autori: Zăvoianu Rodica, Sârbu Liliana, Pavel Octavian Dumitru, Cruceanu Anca, **Bradu Corina**, Olaru Elena Alina, Sârbu Andrei, Sandu Teodor, Bacalum Fănica, Zaharia Ana-Maria, Mara Eleonora Luminița, Bîrjega Ruxandra, Cosașu Dan, Olaru Andreea Gabriela, Mărioara Cristina Maria – Brevet RO nr. 133166 B1, Int.Cl. C02F 1/52, C02F 1/72, C02F 101/30; 28.02.2022.