

Lista de lucrări științifice și proiecte

1. Teza de doctorat:

Titlul “Studii și cercetări privind poluarea solului cu ioni ai metalelor grele”, Coordonator: **prof. dr. ing. Ionel Constantinescu[†]** – Universitatea Politehnica București, Coordonator al stagiului de pregătire: **prof. dr. Franco-Ajmone Marsan** – Università degli Studi di Torino, susținută public în 2012

2. Cele mai relevante 10 publicații științifice

2.1. H. Binner, P. Wojda, F. Yunta, T. Breure, A. Schievano, E. Massaro, A. Jones, J. Newell, R. Paradelo Nunez, **I. Popescu Boajă**, E. Baltrenaite-Gedienė, T. Tuttolomondo, N. Iacuzzi, G. Bondi, V. Zupanc, L. Mamy, L. Pacini, M. De Feudis, V. Cardelli, A. Kicinska, M. Stock, H. Liu, E. Demiraj, C. Schillaci, **A Systematic Review and Characterization of the Major and Most Studied Urban Soil Threats in the European Union**. Water, Air, & Soil Pollution, Springer, 2024, ISSN: 1573-2932, <https://link.springer.com/article/10.1007/s11270-024-07288-x>

2.2. I. Assif, M.I. Bhat, **I. Popescu Boajă**, P.P. Chakravorty, L. D. Devkota, V. Dragicevic, R.K. Enang, K. Ghazaryan, D. Gonfa, N. Jain, D. Lucchesini, S. Mohammadi, F. Mohammed, K. Mushonga, H. Tamba, C. Ogunkunle, J. Pichtel, S. Turab Raza, J. Schneider, S. Siddiqui, S. Tetsopgang, A. Varela, Z. A. Wondimgezahu, **Food and Agriculture Organization of the United Nations – Checklist for soil remediation**, 2025. Rome, Italy, ISBN 978-92-5-139635-3 <https://openknowledge.fao.org/server/api/core/bitstreams/9ba8af9a-6c68-48ba-93d4-e5c88222faa1/content>

2.3. R. Balint, **I. Popescu Boajă**, **Assisted phytoextraction as a nature-based solution for the sustainable remediation of metal(loid) contaminated soils**, Integrated Environmental Assessment and Management, 2024, 20: 2003-2022, ISSN: 1551-3793, <https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/ieam.4907>

2.4. D. Long, T. Voice, R. Stanescu, I. Bica, I. Stanescu, **I. Popescu**, D. Gaitanaru, **Solving Contaminant Problems for a Sustainable Environment through Application of Environmental Engineering and Sciences Concepts – 2012 Edition**, Conspress, Bucuresti, 2012, ISBN: 978-973-100-205-7

2.5. S. Colombano, N. Couto, P. Tyrologou, E. Gianni, M. Falconi, F. Fuin, G. Kara, A. Laganà, D. Müller-Grabherr, **I. Popescu**, J. Silva, **In Situ Thermal Desorption Monograph**. IMPEL, COMMON FORUM, EIONET, NICOLE report ISTD, 342 pages, 2025. Brussels, ISBN 978-2-931225-35-6 <https://www.impel.eu/contents/libraryfile/insituthermal-desorption-final-report.pdf>

2.6. T. Ambaye, F. Battaglia-Brunet, V. Bert, M. Clemmens, L. Lary de Latour, D. Dubin, M. Falconi, W. Gevaerts, S. Gluhar, A. Kaurin, D. Lestan, M. Mallada, **I. Popescu**, A. Sconocchia, F. Silvestri, F. Swartjes, S. Thijs, H. Thouin, M. Vaccari, G. Voglar, **Phytoremediation monograph**. IMPEL, COMMON FORUM, EIONET, NICOLE report PHYTO, 199 pages, 2025. Brussels, ISBN 978-2-931225-36-3 <https://www.impel.eu/contents/libraryfile/phytoremediation-final-report.pdf>

- 2.7. M. Falconi, D. Müller-Grabherr, F. Swartjes, W. Gevaerts, P. Tyrologou, N. Couto, F. Benedetti, **I. Popescu Boajă**, M. Cozzani, F. Fuin, G. Hatipoğlu, A. Laganà, J. Reinikainen, **Multi Phase Extraction (MPE)**. IMPEL, COMMON FORUM, EIONET, NICOLE report MPE, 123 pages, **2022**. Brussels, ISBN 978-2-931225-29-5 <https://www.impel.eu/contents/libraryfile/mpe-impel-final-report-2022-10-mpe-en.pdf>
- 2.8. M. Falconi, D. Müller-Grabherr, F. Swartjes., **I. Popescu Boajă**, M. Confalonieri, N, Couto, M. Falconi, G. Kara, K. Morgan, A. Sconocchia, R. Tietz, **Soil Washing (SW)**. IMPEL, COMMON FORUM, EIONET, NICOLE report SW, 122 pages, **2023**. Brussels, ISBN: 978-2-931225-30-1 <https://www.impel.eu/contents/libraryfile/sw-impel-final-report-2022-10-sw-en.pdf>
- 2.9. A.M. Vijdea, **I. Popescu**, A.A. Ivanov, V.E. Alexe, N.S. Asimopolos, L.L. Balan, **Geochemical Background Values for the Characterisation of Sediment Contamination with Trace Elements in Romania: A Case Study in the Lower Danube Basin**. Applied Sciences, 2025, ISSN: 2076-3417, AIS:0,438 <https://doi.org/10.3390/app15052458>
- 2.10. **I. Popescu**, M. Biasioli, F.Ajmone-Marsan, R. Stanescu, **Liability of potentially toxic elements in soils affected by smelting activities** Chemosphere, Vol.90, pp. 820-826, 2013, ISSN 0045-6535, DOI: 10.1016/j.chemosphere.2012.09.091, AIS:0,9 <https://doi.org/10.1016/j.chemosphere.2012.09.091>

3. Cărți cu ISBN

3.1. În calitate de co-autor

3.1.1. D. Long, T. Voice, R. Stanescu, I. Bica, I. Stanescu, **I. Popescu**, D. Gaitanaru, **Solving Contaminant Problems for a Sustainable Environment through Application of Environmental Engineering and Sciences Concepts – 2012 Edition**, Conspress, Bucuresti, 2012, ISBN: 978-973-100-205-7

3.1.2. Gy. Deak, A.M. Badilita, **I. Popescu**, C.M. Raischi, P.A. Manoliu, G. Dorobanțu, G.S. Tanase, T. M. Danalache, A.G. Antohe, M. Tudor, **Research Tools and Techniques for Sturgeons' Spawning Migration Monitoring**, Universitas, Petrosani, 2013, ISBN: 978-973-741-339-0
https://www.researchgate.net/publication/321488592_Research_Tools_and_Techniques_for_sturgeons_Spawning_Migration_Monitoring

3.1.3. D. Long, T. Voice, R. Stanescu, I. Bica, I. Stanescu, **I. Popescu**, D. Gaitanaru, **Solving Contaminant Problems for a Sustainable Environment through Application of Environmental Engineering and Sciences Concepts – 2014 Edition**, Conspress, Bucuresti, 2014, ISBN: 978-973-100-328-3

3.1.4. M. Falconi, F. Swartjes, F. Benedetti, **I. Popescu Boajă** et al., **Raport privind Oxidarea Chimică in-situ (ISCO) - IMPEL, COMMON FORUM, EIONET, NICOLE report no 2020/09 ISCO RO**". Brussels, 2021, ISBN 978-2-931225-05-9 <https://www.impel.eu/contents/libraryfile/isco-impel-final-report-2020-09-isco-ro.pdf>

3.1.5. M. Falconi, D. Müller-Grabherr, T. Albergaria F. Benedetti, **Iustina Popescu Boajă** et al., **Raport privind extracția vaporilor din sol (SVE). IMPEL, COMMON FORUM, EIONET, NICOLE report no 2020/09 SVE RO** Brussels, 2021, ISBN 978-2-931225-16-5 https://igr.ro/wp-content/uploads/2022/11/SVE_IMPEL_final-report_2020-09-SVE-RO-.pdf

3.1.6. M. Falconi, D. Müller-Grabherr, F. Swartjes, W. Gevaerts, P. Tyrologou, N. Couto, F. Benedetti, **I. Popescu Boajă**, M. Cozzani, F. Fuin, G. Hatipoğlu, A. Laganà, J. Reinikainen, **Multi Phase Extraction (MPE). IMPEL, COMMON FORUM, EIONET, NICOLE report MPE, 123 pages, 2022.** Brussels, ISBN 978-2-931225-29-5 <https://www.impel.eu/contents/libraryfile/mpe-impel-final-report-2022-10-mpe-en.pdf>

3.1.7. M. Falconi, D. Müller-Grabherr, F. Swartjes., **I. Popescu Boajă**, M. Confalonieri, N. Couto, M. Falconi, G. Kara, K. Morgan, A. Sconocchia, R. Tietz, **Soil Washing (SW). IMPEL, COMMON FORUM, EIONET, NICOLE report SW, 122 pages, 2023.** Brussels, ISBN: 978-2-931225-30-1 <https://www.impel.eu/contents/libraryfile/sw-impel-final-report-2022-10-sw-en.pdf>

3.1.8. T. Ambaye, F. Battaglia-Brunet, V. Bert, M. Clemmens, L. Lary de Latour, D. Dubin, M. Falconi, W. Gevaerts, S. Gluhar, A. Kaurin, D. Lestan, M. Mallada, **I. Popescu**, A. Sconocchia, F. Silvestri, F. Swartjes, S. Thijs, H. Thouin, M. Vaccari, G. Voglar, **Phytoremediation monograph. IMPEL, COMMON FORUM, EIONET, NICOLE report PHYTO, 199 pages, 2025.** Brussels, ISBN 978-2-931225-36-3 <https://www.impel.eu/contents/libraryfile/phytoremediation-final-report.pdf>

3.1.9. S. Colombano, N. Couto, P. Tyrologou, E. Gianni, M. Falconi, F. Fuin, G. Kara, A. Laganà, D. Müller-Grabherr, **I. Popescu**, J. Silva, **In Situ Thermal Desorption Monograph. IMPEL, COMMON FORUM,**

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<https://www.impel.eu/contents/libraryfile/insitutthermal-desorption-final-report.pdf>

3.1.10. M. Falconi, D. Müller-Grabherr, F. Swartjes, W. Gevaerts, P. Tyrologou, J. Silva, N. Couto, D. Fiaccavento, C., Fiori, A. Kaltsidou, G., Kara, M., Maltschnig, O. Ojal, **I. Popescu**, E. Siamatra, F. Silverstri, **Biopiling monography**. IMPEL, EIONET, NICOLE, COMMON FORUM, EFG 103 pages, **2026**. Brussels, *In press* <https://www.impel.eu/contents/libraryfile/2025vwg08-01-w-and-l-remediation-biopiling-monography-report.pdf>

3.1.11. **I. Popescu**, P. Zdruli, L. Pietola, P. Melgarejo, T. Pinto Correia, P. Panagos, **EU Soil Health Glossary**, **2026**, Brussels, *In press*

3.2. În calitate de co-editor

3.2.1. Gy. Deak, F. Vosniakos, **I. Popescu**, G. Dorobanțu, G. Tănase, M. Tudor, M. Golumbeanu, **Book of Abstracts – International Conference New tools for sustainable management of aquatic living resources**, Bucuresti, Romania, ISBN: 978-973-741-357-4, 2014, 135 pagini

3.2.2. I. Assif, M..I. Bhat, **I. Popescu Boajă**, P.P. Chakravorty, L. D. Devkota, V. Dragicevic, R.K. Enang, K. Ghazaryan, D.Gonfa, N. Jain, D. Lucchesini, S. Mohammadi, F. Mohammed, K. Mushonga, H. Tamba, C. Ogunkunle, J. Pichtel, S. Turab Raza, J. Schneider, S. Siddiqui, S. Tetsopgang, A. Varela, Z. A. Wondimgezahu, **Food and Agriculture Organization of the United Nations – Checklist for soil remediation**, 21 pages, **2025**. Rome, Italy, ISBN 978-92-5-139635-3
<https://openknowledge.fao.org/server/api/core/bitstreams/9ba8af9a-6c68-48ba-93d4-e5c88222faa1/content>

4. Articole în jurnale cotate ISI

- 4.1. **I. Popescu**, M. Biasioli, F. Ajmone-Marsan, R. Stanescu, **Lability of potentially toxic elements in soils affected by smelting activities** Chemosphere, Vol.90, pp. 820-826, 2013, ISSN 0045-6535, DOI: 10.1016/j.chemosphere.2012.09.091, **AIS:0,942** <https://doi.org/10.1016/j.chemosphere.2012.09.091>
- 4.2. **I. Popescu**, R. Nimirciag, G. Vina, F. Ajmone-Marsan, **Spatial distribution of potentially toxic elements in soils polluted by mining activities**, Chemistry Magazine, Vol.5, 477-481, 2013, ISSN 0034-7752, **AIS:0,063** <https://bch.ro/pdfRC/POPESCU%20IUSTINA.pdf%205%2013.pdf>
- 4.3. **I. Popescu**, R. Stanescu, M. Biasioli, F. Ajmone-Marsan, I. Constantinescu, **Assessing human risks through CSOIL exposure model for a soil contamination associated to heavy metals**, U.P.B. Sci. Bull., Series B, Vol. 75: 1, 2013, ISSN: 1223-7027
https://www.researchgate.net/publication/285786260_Assessing_human_risks_through_CSOIL_exposure_model_for_a_soil_contamination_associated_to_heavy_metals
- 4.4. Gy. Deak, A.M. Badilita, **I. Popescu**, M. Tudor, **Research on sturgeon migration behaviour using a new monitoring, control and alarming system**, Journal of Environmental Protection and Ecology, Vol. 15, 2014, ISSN 1311-5065, **AIS:0,023** <https://scibulcom.net/en/article/kXG5JCmNK10dYOa0vhLd>
- 4.5. T. Danalache, A.M. Badilita, Gy. Deak, E. Holban, **I. Popescu**, A. Daescu, M. Raischi, G. Ghita, C.G. Nicolae, S. Diaconescu, **Assessment of Bastroe channel possible impact on Lower Danube Sturgeon migration**, AACL Bioflux, 2017, ISSN 1844-9166, <http://www.bioflux.com.ro/docs/2017.1011-1018.pdf>
- 4.6. A.-M. Anghel, F. Marinescu, M. Ilie, G. Ghiță, P. Ionescu, I. Mărcuș, C. Tociu, A. Moncea, M. Mîțiu, **I. Popescu**, I. Laslo, D. Dumitru. **Advanced processing of environmental data for establishing the ecological status of the lower Danube water in terms of nutrients**, Journal of Environmental Protection and Ecology, 2017, ISSN 1311-5065, **AIS:0,033** <https://scibulcom.net/en/article/7r1qRkk7s9iy9gLgYP0N>
- 4.7. Tociu C., Anghel A-M, Marinescu F., Ilie M., Holban E., Matei M., Dumitru F.D., **I. Popescu**, L. Laslo, A. Daescu, **Possibilities for efficient use of valuable materials from aluminum slag to remove specific pollutants in wastewater**, Journal of Environmental Protection and Ecology, 2017, ISSN 1311-5065, **AIS:0,033** <https://scibulcom.net/en/article/XJO8GEFzWMtsRbvUBmvi>
- 4.8. M. Ilie, G. Ghita, M. Matei, Gy. Deak, D.F. Dumitru, A.M. Moncea, F. Marinescu, L.A. Laslo, D.F. Fronescu, V. Daescu, **Numerical modeling and simulation of wastewater treatment processes in the sewage system**, Journal of Environmental Protection and Ecology, 2017, ISSN 1311-5065, **AIS:0,033** <https://scibulcom.net/en/article/7r1qRkk7s9iy9gLgYP0N>
- 4.9. E Holban., M. Matei , S. Fronescu, A. Daescu, M. Raischi, G. I. Petrache, M. Ilie, D. Dumitru, A. Moncea, F. Marinescu, C. Tociu, V. Daescu, **I. Popescu**, **Assessment of atmospheric pollution in a cement factory area situated in the eastern part of Romania**, Journal of Environmental Protection and Ecology, 2017, ISSN 1311-5065, **AIS:0,033** <https://scibulcom.net/en/article/2qoyL1G5nRsggsm9pUN8>
- 4.10. R. Balint, **I. Popescu Boajă**, **Assisted phytoextraction as a nature-based solution for the sustainable remediation of metal(loid) contaminated soils**, Integrated Environmental Assessment and Management, 2024, 20: 2003-2022, ISSN: 1551-3793, **AIS:1,319** <https://doi.org/10.1002/ieam.4907>

- 4.11. H. Binner, P. Wojda, F. Yunta, T. Breure, A. Schievano, E. Massaro, A. Jones, J. Newell, R. Paradelo Nunez, **I. Popescu Boajă**, E. Baltrenaite-Gedienė, T. Tuttolomondo, N. Iacuzzi, G. Bondi, V. Zupanc, L. Mamy, L. Pacini, M. De Feudis, V. Cardelli, A. Kicinska, M. Stock, H. Liu, E. Demiraj, C. Schillaci, **A Systematic Review and Characterization of the Major and Most Studied *Urban Soil Threats* in the European Union**. Water, Air, & Soil Pollution, Springer, 2024, ISSN: 1573-2932, AIS:0.411 <https://link.springer.com/article/10.1007/s11270-024-07288-x>
- 4.12. A.M. Vijdea, **I. Popescu**, A.A. Ivanov, V.E. Alexe, N.S. Asimopolos, L.L. Balan, **Geochemical Background Values for the Characterisation of Sediment Contamination with Trace Elements in Romania: A Case Study in the Lower Danube Basin**. Applied Sciences, 2025, ISSN: 2076-3417, AIS:0.454 <https://doi.org/10.3390/app15052458>
- 4.13. **I. Popescu**, A.R. Caramitu, A. Bors, M.A. Diminescu, L.I. Stoian, **Computational Design of Mineral-Based Materials: Iron Oxide Nanoparticle-Functionalized Polymeric Films for Enhanced Public Water Purification**. Polymers 17, 2106, 2025, ISSN: 2073-4360, AIS:0.752 <https://doi.org/10.3390/polym17152106>
- 4.14. I. Sandu; C.T. Fleaca; I. Antohe; F. Dumitrache; I. Urzica; S. Brajnicov; **I. Popescu**; M. Dumitru **Formation of Ordered Ionic Salt Agglomerates Through Evaporative Crystallization in Hanging Drop Systems**. Applied Sciences, 2025, 15, 9280, ISSN: 2076-3417, AIS:0.454 <https://doi.org/10.3390/app15179280>
- 4.15. A.R. Caramitu; **I. Popescu**; M. Grigoroscuta; A. Kuncser; P.C. Ganea; A. Galatanu; M. Galatanu, G. Aldica; P. Badica; M. Burdusel et al. **Advanced Epoxy Resin/Boron Nitride Composites for High-Performance Electrotechnical Applications and Geological Instrumentation**. Materials 2025, 18, 4860. ISSN: 1996-1944, AIS:0.534 <https://doi.org/10.3390/ma18214860>
- 4.16. **I. Popescu**, R. Balint, M. Enache, A.-M. Turculeț, R. Szabo1, A.-M. Vijdea, A. Borș. **Unlocking Critical Raw Materials from Copper Tailings at Roșia Poieni: A Pathway to Sustainable Resource Recovery and Environmental Stewardship**. Sustainability, 2026, ISSN: 2071-1050, *in press*.
- 4.17. **I. Popescu**, S. Rădan, A.-M. Vijdea, A.A. Ivanov, M. Mocuta. **Chemical Stratification and Spatiotemporal Variability of the Anthroposaline Lake Baia Baciului**, Waters, 2026, ISSN: 2073-4441, *in press*

5. Articole în jurnale cotate BDI și ISI Proceedings

5.1. I. Popescu, R. Stanescu, **Human Exposure at trace metals from mining activities – Case study: Zlatna, Romania**, Proceedings of the 12th International GeoConference SGEM, ISSN 1314-2704, pp. 99-106, 2012, DOI: 10.5593/sgem2012

https://www.academia.edu/4099098/Human_exposure_at_trace_metals_from_mining_activities_Case_study_Zlatna_Romania

5.2. I. Popescu, R. Nimirciag (Balint), **Environmental impact of closing mining activities – A case study from Bălan, Romania**, Proceedings of the 12th International GeoConference SGEM, ISSN 1314-2704, pp. 73-80, 2012, DOI: 10.5593/sgem2012

https://www.academia.edu/1255971/Environmental_impact_of_closing_mining_activities_A_case_study_from_Balan_Romania

5.3. I. Popescu, M. Biasioli, F. Ajmone-Marsan, R. Stanescu, **Potentially toxic metals contamination in soils. A comparison of tools to assess their lability (EDTA, SBET, soil solution)**, Proceedings of the Third International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2011) & SECOTOX Conference, 2011, ISBN 978-960-6865-43-5

<https://iris.unito.it/handle/2318/95684?mode=complete>

5.4. A. Miron, C. Modrojan, O. Orbulet, C. Costache, I. Popescu, Treatment of acid blue 25 solution by electro-coagulation, U.P.B. Sci. Bull., Series B, Vol. 72, Iss. 1, 2010, ISSN: 1223-7027

<https://www.scientificbulletin.pub.ro/static/pdfs/full5296.pdf>

5.5. I. Popescu, Gy. Deak, I., G. Dorobantu, **Assessment of soil texture influence on nitrates leachability in unsaturated soils**, Proceedings of International Conference of Unsaturated soils: Research and Applications, 2014, ISBN 978-1-138-00150-3

<https://www.taylorfrancis.com/chapters/edit/10.1201/9781003070580-28/assessment-soil-texture-influence-nitrates-leachability-unsaturated-soils-popescu-gy-de%C3%A1k-dorobantu>

5.6. R. Nimirciag (Balint), I. Popescu, F. Ajmone-Marsan, Removal of leached metals from flooded/draind contaminated soils using zeolites, Proceedings of International Conference of Unsaturated soils: Research and Applications, 2014, ISBN 978-1-138-00150-3

<https://www.taylorfrancis.com/chapters/edit/10.1201/9781003070580-110/removal-leached-metals-flooded-drained-contaminated-soils-using-zeolites-balint-popescu-ajmone-marsan>

5.7. V-M. Radu, A. Ivanov, P. Ionescu, E. Diacu, I. Popescu, C. Tociu, Multivariate statistical analysis of metals in Lower Danube sediments, Bulletin of Romanian Chemical Engineering Society, Vol 3, Nr 1, 2017, ISSN 2360-4697

https://www.researchgate.net/publication/319165769_MULTIVARIATE_STATISTICAL_ANALYSIS_OF_METALS_IN_LOWER_DANUBE_SEDIMENTS

5.8. M. Ilie, F. Marinescu, G. Ghita, A.-M. Anghel, C. Tociu, I. Popescu, M. Matei, E., Holban, Gy. Deák, M. Raischi, C. Cirstinoiu, B. Uritescu, Spatial distribution of heavy metal contamination and ecological risk assessment in water from the Danube River, International Journal of Environmental Science, Volume 2, 2017, ISSN: 2367-8941

https://www.researchgate.net/publication/321026937_Spatial_distribution_of_heavy_metal_contamination_and_ecological_risk_assessment_in_water_from_the_Danube_River

- 5.9.** A.M. Badilita, T. Danalache, M. Raischi, Gy. Deák, A. Cristea, E. Holban, S. Zamfir, G. Badea, I. Gheorghe, M. Boboc, M. Matei, B. Uritescu, C. Cirstinoiu, G. Tudor, **I. Popescu Boajă**, D. Stefan, **Identification of anthropogenic factors and assessment of their possible impact on preservation of sturgeon species from the Lower Danube**, Proceedings of ISB-INMA-TEH' 2017 – Agricultural and Mechanical Engineering, 2017, ISSN: 2537 – 3773
<https://www.cabidigitallibrary.org/doi/pdf/10.5555/20193267779>
- 5.10.** V.M. Radu, **I. Popescu Boajă**, A. A. Ivanov, G. Dinca, R. Szabo, **Forthcoming Opportunities for Obtaining Energy from New Renewable Sources in Romania**, In: Kolhe, M.L. (eds) Renewable Energy Systems in Smart Grid. Lecture Notes in Electrical Engineering, vol 938. Springer, 2023
<https://doi.org/10.1007/978-981-19-4360-7>
- 5.11.** **I. Popescu Boajă**, V.M. Radu, G. Dinca, R. Szabo, M.A. Anghel, **Spatial Distribution and Mobility of Potentially Toxic Elements in the Soils of Romania**, In: Ksibi, M., et al. Recent Advances in Environmental Science from the Euro-Mediterranean and Surrounding Regions (3rd Edition). EMCEI 2021. Advances in Science, Technology & Innovation. Springer, Cham. Springer, 2024, pp. 315–318,
<https://doi.org/10.1007/978-3-031-43922-3>
- 5.12.** A.M. Vijdea, A.G. Tataru, **I. Popescu**, **Preliminary data on land deformation trends at Slanic Prahova using remote sensing data**, *Muzeul Olteniei Craiova. Oltenia*. 41, No. 1/2025 ISSN 2068-0139 ISSN-L 1454-6914
http://olteniastudiisicomunicaristiintelenaturii.ro/cont/41_1/I.%20GEOLOGY/4.Vijdea.pdf
- 5.13.** J. Pump, K. De Schamphelaere, P. Stankovics, G. Cioci, S. Bickel, M.J.I. Briones, G. Ferenc, P. Harkes, D.G. Karpouzas, Pia Kotschik, **I. Popescu**, E. Pugliesi, V. Silva, F. Toth, **Outlook on the knowledge gaps to soil pollution and restoration - Scoping Document**, Soils For Europe, 2025, ISSN 3033-0211, <https://doi.org/10.3897/soils4europe.e150764>
- 5.14.** A.M. Borș **I. Popescu**, C. Gîrlea, **Polar aprotic solvents in the sustainable recycling of epoxy insulations by friability - an ecological method of copper-resin separation/ Solvenți aprotici polari în reciclarea sustenabilă a izolațiilor epoxidice prin friabilizare - o metodă ecologică de separare cupru-rășină**, *Academica*, 421-422, 2026, ISSN: 1220-5737, *in press*

6. Prezentări în cadrul unor manifestări științifice

6.1. I. Popescu, D. Long, T. Voice, R. Balint, R. Stănescu, The impact of gardening on heavy metals speciation in soils affected by smelters, 11th European Meeting on Environmental Chemistry, Portoroz – Slovenia, December 8–11, 2010, ISBN: 978-961-6311-66-3

6.2. I. Popescu, M. Biasioli, F. Ajmone-Marsan and R. Stănescu, Potentially toxic metals contamination in soils. A comparison of tools to assess their lability (EDTA, SBET, soil solution), Proceedings of the Third International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2011)&SECOTOX Conference, Skiathos - Greece, June 19-24, 2011, ISBN: 978-960-6865-43-5

6.3. I. Popescu, M. Biasioli, F. Ajmone-Marsan, R. Stănescu, I. Constantinescu, Potentially toxic metals contamination in soils. A comparison of tools to assess their lability (selective and sequential procedures), 17th Romanian International Conference on Chemistry and Chemical Engineering – Sinaia, September 7-10, 2011

6.4. I. Popescu, R. Balint, Environmental pollutants assessment – trace metals contamination of soil, International Conference Environment – Landscape – European Identity, Bucharest, November 4 – 6, 2011

6.5. I. Popescu, R. Nimirciag (Balint), D. Long, T. Voice, R. Stănescu, Speciation of lead in smelter contaminated pasture and garden soils, 7th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries – EMCC7, Corfu - Greece, April 27 – May 1 2012

6.6. I. Popescu, R. Nimirciag (Balint), Environmental impact of closing mining activities - A case study from Bălan, Romania, The 12th International GeoConference SGEM, Albena – Bulgaria, June 17-23 2012

6.7. I. Popescu, R. Stănescu, Human Exposure at trace metals from mining activities – Case study: Zlatna, Romania, The 12th International GeoConference SGEM, Albena – Bulgaria, June 17-23 2012

6.8. I. Popescu, Remediation of lead-polluted soil with fish bones, The IV National Congress of Researchers and Inventors 2012 , May 23-26, 2012

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6.10. R. Nimirciag (Balint), I. Popescu, F. Ajmone-Marsan, Bioaccessibility of metals in flooded soils assessed by in vitro simple bioavailability extraction test, 7th European Conference on Pesticides and Related Organic Micropollutants in the Environment, Porto-Portugal, October 7-10, 2012

6.11. G. Dorobanțu, Gy. Deak, I. Popescu, The impact of land use changes in urban planning, 1st International U.O.C. – B.E.N.A. Conference – The sustainability of pharmaceutical, medical and ecological education and research (SPHAMEER), Constanta, Romania, June 20-23, 2013

6.12. I. Popescu, Gy. Deak, G. Dorobanțu, G. Tănase, Ecological risk assessment of nutrients discharges from Danube River to Black Sea, Proceedings of the International conference “Marine Research Horizon 2020” (MARES), Varna, Bulgaria, September, 17-20, 2013

- 6.13.** A.M. Bădiliță, Gy. Deak, A. Ionașcu, **I. Popescu**, G. Tănase, Improved monitoring of migratory anadromous marine sturgeons using DKTB telemetry station, Proceedings of the International conference “Marine Research Horizon 2020” (MARES), Varna, Bulgaria, September, 17-20, 2013
- 6.14.** V.M. Radu, P. Ionescu, Gy. Deak, **I. Popescu**, A. Varduca, E.Diacu, Parametrical intercorrelations algorithms between water quality indicators in the Danube River, Proceedings of the International conference “Marine Research Horizon 2020” (MARES), Varna, Bulgaria, September, 17-20, 2013
- 6.15.** P. Ionescu, V.M. Radu, Gy. Deak, A. Varduca, **I. Popescu**, E.Diacu, Lead distribution at aqueous - solid phase interfaces in aquatic environment, Proceedings of the International conference “Marine Research Horizon 2020”, Varna, Bulgaria, September, 17-20, 2013
- 6.16.** **I. Popescu**, T. Voice, D. Long, R. Balint (Nimirciag), R. Stănescu, The influence of lead speciation in soil on human bioaccessibility, One Health Summit, Davos, Switzerland, November 17-20, 2013
- 6.17.** M. Cristea, Gy. Deak, **I. Popescu**, M. Chiriac, G. Tanase, M. Raischi, The interactions between biotic and abiotic factors in Lower Danube River, International Conference New tools for sustainable management of aquatic living resources - AQUALIRES, 17-18 January 2014
- 6.18.** G. Dorobanțu, Gy. Deak, **I. Popescu**, T. Dănălache, New directions for urban sprawl and the impact on environmental compartments, International Conference New tools for sustainable management of aquatic living resources – AQUALIRES, 17-18 January 2014
- 6.19.** **I. Popescu**, G. Dorobantu, Gy. Deak, M., Radu, P. Ionescu, P., Spatio-temporal trends of potentially toxic metals in surface sediments of the Lower Danube River, International Conference New tools for sustainable management of aquatic living resources - AQUALIRES 2014, 17-18 January 2014
- 6.20.** I. Zaharia, I. Diaconu, E. Ruse, G. Nechifor, E. Marcu, **I. Popescu**, The removal of organic preservatives through concentration in the organic phase by using bulk liquid membranes, International Conference New tools for sustainable management of aquatic living resources - AQUALIRES 2014, 17-18 January 2014
- 6.21.** M. Radu, C. Ene, **I. Popescu**, L. Bodea, Influence of social and environmental issues on humans’ health and life quality, International Conference New tools for sustainable management of aquatic living resources - AQUALIRES 2014, 17-18 January 2014
- 6.22.** Gy. Deak, **I. Popescu**, M. Olteanu, M. Raischi, G. Tănase, Danube sturgeons’ migration monitoring. Case study: Bâstroe channel, International Conference Green infrastructure and sustainable societies/cities, Izmir, Turkey, 5-8 May 2014
- 6.23.** **I. Popescu**, Gy. Deak, G. Dorobanțu, G. Tănase, International Conference Green infrastructure and sustainable societies/cities, Izmir, Turkey, 5-8 MAY 2014
- 6.24.** **I. Popescu**, Gy. Deak, I. Zaharia, G. Dorobanțu, G. Tănase, Assessment of soil texture influence on nitrates leachability in unsaturated soils, Proceedings of International Conference of Unsaturated soils: Research and Applications, Sydney, Australia, July 2-4, 2014

- 6.25.** R. Nimirciag (Balint), **I. Popescu**, F. Ajmone-Marsan, Removal of leached metals from flooded /drained contaminated soils using zeolites, Proceedings of International Conference of Unsaturated soils: Research and Applications, Sydney, Australia, July 2-4, 2014
- 6.26.** Gy Deak, M. Raischi, A.M. Badilita, T. Danalache, A. Cristea, E. Holban, S. Zamfir, M.G. Boboc, M., Matei, B. Uritescu, **I. Popescu Boajă**, D. Stefan, G. Tudor, Actual status, pressures and preserving perspectives of sturgeon species from lower Danube River, 8th International Symposium on Sturgeons, Viena, Austria, 2017
- 6.27.** A.M. Badilita, T. Danalache, M. Raischi, Gy. Deák, A. Cristea, E. Holban, S. Zamfir, G. Badea, I. Gheorghe, M. Boboc, M. Matei, B. Uritescu, C. Cirstinoiu, G. Tudor, **I. Popescu Boajă**, D. Stefan, Identification of anthropogenic factors and assessment of their possible impact on preservation of sturgeon species from the Lower Danube, ISB-INMA-TEH' 2017 Conference– Agricultural and Mechanical Engineering, Bucharest, Romania, 2017
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- 6.31.** V.-M. Radu, **I. Popescu Boajă**, G. Dinca, R. Szabo, A.M. Anghel, The potential recovery of critical elements from secondary raw materials existent in Romania, EMCEI 2021, Tunis, 2021
- 6.32.** I. Popescu Boajă, V.-M. Boajă, D.-M. Boajă, „Soil management and sustainable approaches for achieving the EU Green Deal”, ICOSTEE, Szeged, Hungary, 2022
- 6.33.** A. Surleanu, I. Popescu Boajă, D.-M. Boajă, A.G. Mărcuța „An in-depth analysis of the soil quality importance for achieving the Sustainable Development Goals and the EU Green Deal in rural areas”, Proceedings of Ninth International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2022) and SECOTOX, Mykonos, Grecia, 2022
- 6.34.** I Popescu Boajă „Assessing progress towards SDGs implementation in Romania”, SUSTAINTHON – REMTECH EUROPE, Italia, 2022
- 6.35.** I. Popescu Boajă „Management of Mining Waste in Romania” – IMPEL - MIW Meeting – Caligari, Italia, 2022
- 6.36.** I. Pencea, R.N. Turcu, M. Radu, I. Boajă, G. Dincă, R. Szabo, F. Niculescu, A.L. Timiș, A. C. Macovei, F.G. Miu, C. Tiță „Mineralogical characterization of a Romanian abandoned tailings yard aiming recovery of the positive metals and critical raw materials and site rehabilitation through a zero-waste approach”, ROMAT 2022, Bucharest, 2022

- 6.37. R. Szabo, I. Popescu Boajă, A. Tătaru, A.M. Turculet, Comparison of sample preparation methods for characterization of soil geochemistry by handheld X-RAY Fluorescence. REMTECH EUROPE CONFERENCE, FERRARA, ITALY, September 2023
- 6.38. C. Filipeciuc, E. Tudor, I. Stoian, A. Ovidiu, I. Scutelnicu, A. Ulmeanu, A. Tătaru, I. Popescu Boajă, Sustainable soil management using Ground Penetrating Radar technique, REMTECH EUROPE CONFERENCE, FERRARA, ITALY, September 2023
- 6.39. C. Schillaci, I. Popescu, E. Baltrėnaitė-Gedienė, E. Miglio, S. Sala, F. van Egmond, M. Fantappiè, B. Pereira, L. Flichev, S. Di Lonardo, P. Henning Krogh, M. Hrabalíkova, E. Nadal-Romero, A. Ladenberger, M. van Liedekerke, Soil data sharing in EU, a survey of available soil datasets found in the scientific literature, EGU Conference, Vienna, Austria, 2023
- 6.40. K. Rosenow, I. Popescu, A. Krzywoszynska, One year into the Mission Soil: achievements, lessons learned, and future opportunities for the Living Lab community, Open Living Labs Days 2024: Driving systemic change through Soci(et)al Engagement, for real impact, Timisoara, Romania, 2024
- 6.41. I. Popescu, A. Bors, L. Dumitrescu, A.P. Chirita, A.M. Turculet, R. Szabo, Critical raw materials (CRM) recovery from mining waste and the remediation of soils contaminated with potentially toxic elements (PTE) in the context of climate change, KOMTECH International Scientific and Technical Conference, Szczyrk, Poland, November 2024
- 6.42. A.M. Bors, I. Popescu, L. Dumitrescu, A.P. Chirita, Critical Raw Materials Recovery from Mining Waste and the Remediation of Soils Contaminated with Potentially Toxic Elements in the Context of Climate Change, International Conference on Hydraulics and Pneumatics, HERVEX 2024, Govora, Romania, November 2024
- 6.43. I. Popescu, Comparison of sample preparation methods for characterization of soil geochemistry by handheld X-RAY Fluorescence, Remtech Europe Conference, Ferrara, Italy, September 2023
- 6.44. I. Popescu, Sustainable soil management using Ground Penetrating Radar technique”. Remtech Europe Conference, Ferrara, Italy, September 2023
- 6.45. I. Popescu, V. Rajovic, A. Vijdea et al., **GeoNetSee project**, Capitalisation Workshop Boosting knowledge and Competitiveness in the Danube region, Bratislava, Slovakia, 25-28 martie 2025
- 6.46. I. Popescu – Soil Health and Ecosystem Services project, IMPEL Water and Land International Conference, Creta, 30 sep-3 oct 2025
- 6.47. I. Popescu – Soil pollution indicators, SOLO project Think Thank Working Groups Workshop, Evora, Portugalia, 14-17 octombrie 2025
- 6.48. I. Popescu, A.-M. Vijdea, V. Rajović, D. Đokić, K. Ratković, M. Simeunović, N. Kovač, The Geonetsee Real-Time Geoscientific Network: A Regional Infrastructure For Seismic And Geohazard Monitoring In Southeastern Europe, GEOSCIENCE Geosymposium, Măgurele, România, 30-31 oct 2025

6.49. L.-I. Stoian, E. Tudor, A. Ulmeanu, A. Ovidiu, I. Scutelnicu, A. Tătaru, **I. Popescu**, Geoelectrical investigation of subsurface stability in the Slănic area, GEOSCIENCE Geosymposium, Măgurele, România, 30-31 oct 2025

6.50. **I. Popescu**, A.-M. Vijdea, EUSDR Cooperation Opportunities in Risk Monitoring and Resilience, Budapest, Hungary, 11-12 June 2026

6.51. **I. Popescu**, M. Falconi, EU Member States' preparedness to implement Soil monitoring and Resilience Directive, Madeira, Portugal, 16-17 July 2026

7. Listă de proiecte de cercetare-dezvoltare-inovare pe bază de contract/ grant

7.1. Sinteze geologice ale resurselor naturale de interes economic – minerale nemetalice din sudul Carpaților (grăfit, talc, azbest, garnet), Contract nr. 259/2012 – **membru în echipa de lucru**

7.2. Monitorizarea impactului asupra mediului a lucrărilor de îmbunătățire a condițiilor de navigație pe Dunăre între Călărași și Brăila, km 375 și km 175 (martie 2011 – aprilie 2017), Contract nr. 53/2011 – **membru în echipa de lucru**

7.3. Cercetări privind levigarea nitrăților în apa freatică dintr-o zonă vulnerabilă, PN 09060110 - Contract nr. 6N/ Act adițional nr. 2/2013 – **responsabil proiect**

7.4. Dezvoltarea procedurilor de evaluare și control al riscului la poluări accidentale a apelor de suprafață curgătoare din România – PN 09060238, Contract nr. 6N /Act. adițional 1/2013 – **membru în echipa de lucru**

7.5. Evaluarea riscului unor evacuări accidentale de pop-uri din stațiile de epurare a apelor uzate, consecințe și efecte asupra biotei - PN 09 06 01 08, Contract nr. 6N/2009, Act adițional nr. 1/2013 – **responsabil proiect**

7.6. BUILD SEE- Addressing the divide between EU indications and their practical implementation in their green construction and eco-social requalification of residential areas in South East Europe Regions - South East Europe Transnational Cooperation Programme (2012-2014) – **membru în echipa de management**

7.7. Cercetări privind expansiunea aglomerațiilor urbane și rolul planificării integrate de mediu în amenajarea durabilă a teritoriului – PN 09060357 - Contract nr. 6N/2009 Act. adițional 2/2013 – **membru în echipa de lucru**

7.8. Cercetări privind utilizarea materialelor geosintetice pentru refacerea ecologică și redarea în circuitul economic a depozitelor de deșeuri industriale nepericuloase – PN 09060132 – Contract nr. 6N/2009, Act adițional nr. 1/2013 – **responsabil proiect**

7.9. Cercetări privind modelarea dispersiei poluanților în atmosfera pe baza intercomparării unor modele din noua generație – PN 09 06 01 14 – Contract nr. 6N/2009, Act adițional nr. 1/2014 – **responsabil proiect**

7.10. Studiu privind monitoringul calității componentelor fizico-chimice și biologice din Delta Dunării și zona costieră adiacentă în contextul impactului transfrontalier al canalului Bâstroe, pe perioada 2010 – prezent, și analiza consecințelor asupra mediului în Rezervația Biosferei Delta Dunării și zona costieră adiacentă determinate de proiectul Bâstroe" Contract nr. 158/2013, beneficiar Ministerul Mediului și Schimbărilor Climatice – **membru în echipa de lucru**

7.11. Studiu pentru realizarea protecției de mal a zonei umede Divici-Pojejena, Caraș-Severin – **membru în echipa de lucru**

7.12. Cercetări privind dezvoltarea unui model GIS în vederea utilizării în planificarea gestiunii deșeurilor municipale la nivel local sau regional PN 09060353.1 – **membru în echipa de lucru**

7.13. Cercetări privind reducerea substanțelor periculoase din apele uzate orașenești prin utilizarea produselor naturale PN 16 04 03 04.1 - **membru în echipa de lucru**

7.14. Proiect complex – Tehnologii inovative pentru irigarea culturilor în condiții de climat arid, semiarid și subumed-uscă (Acronim – SMARTIRRIG), PN-III-P1-1.2-PCCDI-2017-0254, nr. contract 27PCCDI/2018 – **membru în echipa de lucru**

7.15. Program Nucleu - PN 19-45-02-02 – Studiul resurselor secundare de pulberi tehnogene din România în vederea identificării potențialului de minerale industriale și materii prime critice și high-tech, 2021 - **membru în echipa de lucru**

7.16. Program Nucleu - PN 19-45-02-01- RoQ-Stone – Rocile de construcție din România – caracteristici calitative, valoare de patrimoniu cultural, importanța științifică 2021-2022 - **membru în echipa de lucru**

7.17. Program Nucleu - PN 19-45-01-02 - Elaborarea hărților naționale hidrogeologice și de vulnerabilitate a acviferelor, un suport necesar pentru autorități în stabilirea de măsuri adecvate de protejare a apelor subterane, 2022 - **membru în echipa de lucru**

7.18. Program Nucleu - PN 23-39-04-03 - CHAIN - Creșterea rezilienței la impactul schimbărilor climatice asupra resurselor secundare prin fito-minerit asistat ca eco-tehnologie pentru economia circulară – **responsabil proiect**

7.19. An AI/IoT-based system of GEOSensor NETworks for real time monitoring of unStable tErrain and artificial structures (GeoNetSee) – Interreg Danube (2023-2026) - **responsabil proiect de cercetare**

7.20. Contract de cercetare privind realizarea studiilor și cercetărilor pentru elaborarea metodologiei științifice de stabilire a valorilor-limită de emisie în apele de suprafață (Industria metalelor feroase și neferoase – Lot 1), atribuit prin licitație publică pentru realizarea activităților de cercetare din cadrul proiectului SIPOCA 859 / MySMIS 134289 (2022) - **director de proiect de cercetare**

7.21. Contract de cercetare privind realizarea studiilor și cercetărilor pentru stabilirea valorilor-limită de emisie în apele de suprafață (Industria chimică – Lot 2), contract atribuit prin licitație publică pentru realizarea activităților de cercetare din cadrul proiectului SIPOCA 859 / MySMIS 134289 (2022) - **director de proiect de cercetare**

7.22. Contract de cercetare privind realizarea studiilor și cercetărilor pentru stabilirea valorilor-limită de emisie în apele de suprafață (Industria agro-zootehnică – Lot 3), contract atribuit prin licitație publică pentru realizarea activităților de cercetare din cadrul proiectului SIPOCA 859 / MySMIS 134289 (2022) - **director de proiect de cercetare**

7.23. Contract de cercetare privind realizarea studiilor și cercetărilor pentru stabilirea valorilor-limită de emisie în apele de suprafață (domeniul deșeurilor – Lot 4), contract atribuit prin licitație publică pentru realizarea activităților de cercetare din cadrul proiectului SIPOCA 859 / MySMIS 134289 (2022) – **responsabil proiect de cercetare**

7.24. Contract de cercetare privind realizarea studiilor și cercetărilor pentru stabilirea valorilor-limită de emisie în apele de suprafață (domeniul apelor uzate – Lot 5), contract atribuit prin licitație publică pentru realizarea activităților de cercetare din cadrul proiectului SIPOCA 859 / MySMIS 134289 (2022) – **responsabil proiect de cercetare**

7.25. Contract de cercetare privind realizarea studiilor și cercetărilor pentru elaborarea metodologiei științifice de prognoză a acumulării emisiilor (Lot 6), contract atribuit prin licitație publică pentru realizarea activităților de cercetare din cadrul proiectului SIPOCA 859 / MySMIS 134289 (2022) – **responsabil proiect de cercetare**

7.26. Waste Management and Circular Economy: Value retention circular processes (2022-2024) – **membru în echipa de lucru**

7.27. Water and Land: Water and Land Remediation, – LIFE24-27-IMPEL - European Union Network for the Implementation and Enforcement of Environmental Law – (2021-2027) – **responsabil proiect de cercetare**

7.28. Water and Land: Mining Industry an Historical Waste – LIFE24-27-IMPEL - European Union Network for the Implementation and Enforcement of Environmental Law (2022-2027) – **responsabil proiect de cercetare**

7.29. Water and Land: Nitrate and Groundwater – best practices to limit pollution as responsible for Romania – LIFE24-27-IMPEL - European Union Network for the Implementation and Enforcement of Environmental Law (2022-2027) – **responsabil proiect de cercetare**

7.30. Cross-cutting tools and approaches: Geospatial Intelligence for Environmvental Compliance Assurance (GIECA) – LIFE24-27-IMPEL - European Union Network for the Implementation and Enforcement of Environmental Law (2022-2027) – **responsabil proiect de cercetare**

7.31. Water and Land: Soil Health and Ecosystem Services (STATE) – LIFE24-27-IMPEL - European Union Network for the Implementation and Enforcement of Environmental Law – (2025-2027) – **lider de proiect de cercetare**

7.32. Soluție de monitorizare integrată a fenomenelor naturale și antropice declanșatoare de riscuri societale, pentru siguranța populației din zona afectată - Oraș Slănic, Județ Prahova (GEOMONITOR:SOL-2024-28) UEFISCDI, PN IV, Soluții- (2025-2026) – **responsabil proiect de cercetare**