

LISTA DE LUCRĂRI

A. LUCRĂRI REPREZENTATIVE

1. **Damian G.E.**, Micle V., Sur I. M., Removal of heavy metals from contaminated soil using chitosan as washing agent – a preliminary study, *Journal of Environmental Protection and Ecology*, 21 (3), pp. 823-829 (2020), I.F. 0,692.
2. **Damian G.E.**, Micle V., Sur I. M., Mobilisation of Cu and Pb from multi-metal contaminated soils by dissolved humic substances extracted from Leonardite and factors affecting the process, *Journal of Soils and Sediments*, I.F. 2,627, 19(7), pp. 2869-2881, DOI: 10.1007/s11368-019-02291-w (2019).
3. **Damian G.E.**, Micle V., Sur I. M., Chirila Babau A. M., From environmental ethics to sustainable decision-making: assessment of potential ecological risk in soils around abandoned mining areas-case study “Larga de Sus mine” (Romania), *Journal of Agricultural and Environmental Ethics*, I.F. 1,24, 32 (1), pp. 27-49 (2019).
4. **Damian G.E.**, Micle V., Sur I. M., Lead and copper removal from multi-metal contaminated soils through soil washing technique using humic substances as washing agent: the influence of the washing solution pH, *Studia Universitatis Babeş-Bolyai, Seria Chimia*, IF= 0,305, LXIV, 1, pp. 41-52 (2019).
5. Varvara S., Popa M., Bostan R., **Damian G.**, Preliminary considerations on the adsorption of heavy metals from acidic mine drainage using natural zeolite, *Journal of Environmental Protection and Ecology*, IF= 0,679., 14(4), pp.1506-1514 (2013),
6. Babau M., Micle V., **Damian G. E.**, Varvara S., Health risk assessment analysis in two highly polluted mining areas from Zlatna (Romania), *Journal of Environmental Protection and Ecology*, IF= 0,679., 18, No 4, pp. 1416–1424 (2017).
7. **Damian G.E.**, New approaches regarding remediation techniques of heavy metal contaminated soils from mining areas, *Studia Ambientum*, 1/2018, pp. 15-31 (2018).
8. Varvara S., Berghian-Grosan C., **Damian G.**, Popa M., Popa F., Combined Electrochemical, Raman Analysis and Machine Learning Assessments of the Inhibitive Properties of an 1,3,4-Oxadiazole-2-Thiol Derivative against Carbon Steel Corrosion in HCl Solution, *Materials*, 15(6), 2224 (2022), I.F. 3,623
9. Chirila Băbău A.M., Micle V., **Damian G.E.**, Sur I. M, Sustainable Ecological Restoration of Sterile Dumps Using *Robinia pseudoacacia*, *Sustainability*, 13 (24), 140021 (2021), I.F. 3,251.

10. Sur I.M., Micle V., **Damian G.E.**, Assessment of heavy metal contamination and bioremediation potential of thiobacillus ferrooxidans in soils around copper quarry, *Journal of Environmental Protection and Ecology*, 21 (1), pp.56–62 (2020), I.F. 0,692.

B. TEZA DE DOCTORAT

“Studii și cercetări privind depoluarea prin spălare a solurilor poluate cu metale grele”. IOSUD Universitatea Tehnică din Cluj Napoca. Conducător Științific: prof. univ. dr. ing. Micle Valer. Data susținerii publice: 16.09.2019. Confirmare în baza O.M.E.C. Nr. 5345 din 25 noiembrie 2019. Diploma de Doctor în Ingineria Mediului seria J Nr. 0033898.

C. BREVETE DE INVENȚIE

Brevet de invenție național nr. 133822/2021 cu titlul “Instalație și procedeu de depoluare prin spălare a solurilor poluate cu metale grele”. OSIM. Inventatori: Damian Gianina Elena și Micle Valer.

D. ARTICOLE/STUDII IN EXTENSO PUBLIFICATE IN REVISTE DIN FLUXUL STIINTIFIC INTERNATIONAL PRINCIPAL

D.1) Articole publicate în reviste de specialitate indexate ISI

D. 1.1) Articole/studii publicate în reviste științifice internaționale

1. Varvara S., Berghian-Grosan C., **Damian G.**, Popa M., Popa F., Combined Electrochemical, Raman Analysis and Machine Learning Assessments of the Inhibitive Properties of an 1,3,4-Oxadiazole-2-Thiol Derivative against Carbon Steel Corrosion in HCl Solution, *Materials*, 15(6), 2224 (2022), I.F. 3,623*.
2. Chirila Băbău A.M., Micle V., **Damian G.E.**, Sur I. M, Sustainable Ecological Restoration of Sterile Dumps Using *Robinia pseudoacacia*, *Sustainability*, 13 (24), 140021 (2021), I.F. 3,251*.
3. **Damian G.E.**, Micle V., Sur I. M., Removal of heavy metals from contaminated soil using chitosan as washing agent – a preliminary study, *Journal of Environmental Protection and Ecology*, 21 (3), pp. 823-829 (2020), I.F. 0,692*.
4. Varvara S., Dorneanu S.A., Okos A., Bostan R., Popa M., **Damian G.**, Ilea P., Dissolution of nickel in bromide-based solutions used as lixivants for waste printed circuit boards, *Journal of Environmental Protection and Ecology*, 21 (2), pp. 551-560 (2020), I.F. 0,692*.
5. Sur I.M., Micle V., **Damian G.E.**, Assessment of heavy metal contamination and bioremediation potential of thiobacillus ferrooxidans in soils around copper quarry,

Journal of Environmental Protection and Ecology, 21 (1), pp.56–62 (2020), I.F. 0,692*.

6. Chirila-Babau A. M., Micle V., **Damian G.E.**, Sur I. M., Preliminary investigations regarding the potential of robinia pseudoacacia L. (leguminosae) in the phytoremediation of sterile dumps, *Journal of Environmental Protection and Ecology*, 21 (1), pp.46–55 (2020), I.F. 0,692*.
7. **Damian G.E.**, Micle V., Sur I. M., Mobilisation of Cu and Pb from multi-metal contaminated soils by dissolved humic substances extracted from Leonardite and factors affecting the process, *Journal of Soils and Sediments*, 19(7), pp. 2869-2881, DOI: 10.1007/s11368-019-02291-w (2019), I.F. 2,627*.
8. **Damian G.E.**, Micle V., Sur I. M., Chirila Babau A. M., From environmental ethics to sustainable decision-making: assessment of potential ecological risk in soils around abandoned mining areas-case study “Larga de Sus mine” (Romania), *Journal of Agricultural and Environmental Ethics*, 32 (1), pp. 27-49 (2019), I.F. 1,24*.
9. **Damian G.E.**, Micle V., Sur I. M., Experimental investigations concerning the effectiveness of humic substances to extract heavy metals through soil washing, *Journal of Environmental Protection and Ecology*, 20(3), pp.1132-1139 (2019), IF= 0,679*.
10. Micle V., Pop D., Sur I.M., Rogozan G.C., **Damian G.E.**, Non linear model for estimating the residual pollutant concentration after thermal desorption of the crude oil polluted soil, *Journal of Environmental Protection and Ecology*, 20(3), pp.1120-1131 (2019), IF= 0,679*.
11. Babau M., Micle V., **Damian G. E.**, Varvara S., Health risk assessment analysis in two highly polluted minig areas from Zlatna (Romania), *Journal of Environmental Protection and Ecology*, 18 (4), pp. 1416–1424 (2017), IF= 0,679*.
12. Varvara S., Popa M., Bostan R., **Damian G.**, Preliminary considerations on the adsorption of heavy metals from acidic mine drainage using natural zeolite, *Journal of Environmental Protection and Ecology*, 14(4), pp.1506-1514 (2013), IF= 0,679*.

D. 1.2) Articole publicate în reviste cotate ISI Thomson Reuters din țară

1. **Damian G.E.**, Micle V., Sur I. M., Lead and copper removal from multi-metal contaminated soils through soil washing technique using humic substances as washing agent: the influence of the washing solution pH, *Studia Universitatis Babeș-Bolyai, Seria Chimia*, IF= 0,305*, LXIV, 1, pp. 41-52 (2019).

*IF al revistei la momentul publicării articolului

D.2) Articole publicate în reviste de specialitate indexate BDI

1. **Damian G.E.**, Micle V., Sur I.M, Study regarding the Pedological properties of the soil in the “Larga de Sus” mining area in order to establish the appropriate soil remediation technology, *Pangeea* (2021).
2. **Damian G.E.**, New approaches regarding remediation techniques of heavy metal contaminated soils from mining areas, *Studia Ambientum*, 1/2018, pp. 15-31 (2018), indexare: ProQuest - Serials Solutions Ulrichsweb(TM) (2010), EBSCO – EBSCOhost Online Research Databases (2011).
3. **Damian G.E.**, Micle V., Sur I. M., Assessment of Heavy Metal Contamination in the Soils nearby “Larga de Sus” Mine (Romania), *ProEnvironment*, 12 (38), pp. 136-141 (2019).
4. Sur I. M., Zoltan R., Micle V., **Damian G.E.**, Investigations on the Quality of Soil and Air in the Somes Nord Industrial Area of the City of Cluj-Napoca, *ProEnvironment*, 12 (38), pp. 150-153 (2019).
5. **Damian G.E.**, Micle V., Sur I. M., Soluble potassium salts of humic acids as washing agent for lead and copper polluted soils. *Ecoterra*, 16(2), pp.5-10 (2019).

E. PUBLICAȚII IN EXTENSO APĂRUTE ÎN VOLUME ALE UNOR CONFERINȚE INTERNAȚIONALE DE SPECIALITATE

1. **Damian G.E.**, Micle V., Sur I.M., Preliminary investigations regarding the potential of humic substances to extract Nickel from contaminated soil, *International Conference Contaminated Sites Banska Bystrica, Slovak Republic, 8-10 Octombrie 2018 - Conference Proceedings*, pp. 141-142 (2018).
2. **Damian G. E.**, Micle V., Sur I. M., Lab scale experimental investigations regarding the efficacy of using humic substances in heavymetals removal by soil washing, *GLOREP 2108 Conference, Timisoara 15-17 November, 2018, Conference Proceeding*, ISBN 978-606-35-0238-5, pp.45-47 (2018).
3. Chirilă Băbău A.M., Micle V., **Damian G.E.**, Sur I.M., Studies concerning the phytoremediation of sites degraded by mining activities with *Robinia pseudoacacia*, *GLOREP 2108 Conference, Timisoara 15-17 November, 2018, Conference Proceeding*, ISBN 978-606-35-0238-5, pp.374-375 (2018).
4. Micle V., Pop D., Sur I. M., Rogozan G. C., **Damian G. E.**, Mathematical modelling of thermal desorption of the crude oil polluted soil, *GLOREP 2108 Conference, Timisoara 15-17 November, 2018, Conference Proceeding*, ISBN 978-606-35-0238-5, pp.176-178 (2018).

F. ALTE LUCRĂRI ȘI CONTRIBUTII ȘTIINȚIFICE

F.1) Lucrări științifice comunicate (prezentate) în cadrul unor manifestări științifice internaționale

1. **Gianina Damian**, Simona Varvara, Sorin Aurel Dorneanu, Alexandru Okos, Maria Popa, Roxana Bostan, Liana Muresan and Petru Ilea, XPS AND SEM-EDX INVESTIGATIONS OF THE DISSOLUTION PRODUCTS OF SEVERAL METALS IN AN ACIDIC BROMINE-CONTAINING LIXIVIANT", *VII International Congress "Engineering, Environment and Materials in Process Industry*, organized by the University of East Sarajevo and Faculty of Technology Zvornik, Jahorina, Bosnia and Herzegovina, March 17th to March 19th, 2021.
2. **Gianina Damian**, Simona Varvara, Sorin Aurel Dorneanu, Maria Popa, Roxana Bostan, Liana Muresan, Petru Ilea, Electrochemical Behavior of Several Metals from Waste Printed Circuit Boards in Acidic Brominated Lixiviants, *The 71st Annual Meeting of the International Society of Electrochemistry: "Electrochemistry towards Excellence"*, BelgradeOnline, 30 August - 4 September 2020.
3. **Damian G.**, Micle V., Sur I.M., Removal of heavy metals from contaminated soil using chitosan as washing agent-a preliminary study, *International U.A.B. – B.E.N.A. Workshop, Environmental Engineering & Sustainable Development*, Alba Iulia, Romania, 20-21 iunie 2019 (Book of Abstracts: pp. 22, ISSN 2457-2829, AETERNITAS Publishing House, Alba Iulia 2019).
4. **Damian G.E.**, Micle V., Sur I. M., Assessment of heavy metal contamination in the soils nearby "Larga de Sus" mine (Romania), *9th International Symposium "Soil Minimum Tillage Systems"*, Cluj Napoca, Romania, 8-9 mai 2019.
5. Sur I. M., Zoltan R., Micle V., **Damian G.E.**, Investigations on the Quality of Soil and Air in the Somes Nord Industrial Area of the City of Cluj-Napoca, *9th International Symposium "Soil Minimum Tillage Systems"*, Cluj Napoca, Romania, 8-9 mai 2019.
6. Sur I. M., Micle V., **Damian G.E.**, Assessment of heavy metal contamination and bioremediation potential of thiobacillus ferrooxidans in soils around a copper quarry, *International U.A.B. – B.E.N.A Workshop, Environmental Engineering and Sustainable Development*, Alba Iulia, Romania, 20-21 iunie 2019 (Book of Abstracts: pp. 44, ISSN 2457-2829, AETERNITAS Publishing House, Alba Iulia 2019).
7. Chirilă Băbău A.M., Micle V., **Damian G.E.**, Sur I.M., Study on the bioaccumulation and translocation factors of lead and copper in *Pseudoacacia L. (Leguminosae)*, *International U.A.B. – B.E.N.A Workshop, Environmental Engineering and Sustainable Development*, Alba Iulia, Romania, 20-21 iunie 2019

- (Book of Abstracts: pp. 20, ISSN 2457-2829, AETERNITAS Publishing House, Alba Iulia 2019).
8. Varvara S., Dorneanu S.A., Okos A., Bostan R., Popa M., **Damian G.**, Ilea P., Dissolution of nickel in bromide-based solutions used as lixiviants for waste printed circuit boards, *International U.A.B. – B.E.N.A. Workshop, Environmental Engineering and Sustainable Development*, Alba Iulia, Romania, 20-21 iunie 2019 (Book of Abstracts: pp. 80, ISSN 2457-2829, AETERNITAS Publishing House, Alba Iulia 2019).
 9. **Damian G.E.**, Micle V., Sur I. M., Chirila Babau A. M., From environmental ethics to sustainable decision-making: assessment of potential ecological risk in soils around abandoned mining areas-case study “Larga de Sus mine” (Romania), *Book of Abstracts-12th International Conference Environmental Legislation, Safety Engineering and Disaster Management ELSESEDIMA 2018*, Universitatea Babeș-Bolyai, Facultatea de Știința și Ingineria Mediului 17-19 mai 2018, Cluj Napoca.
 10. Chiril Babau A.M. Micle V., Sur I.M., **Damian G.E.**, Ethical issues in ecological restoration of sterile dumps and potential of plant species for phytoremediation: seed germination of *Robinia pseudoacacia* in various amendments with heavy metals, *Book of Abstracts-12th International Conference Environmental Legislation, Safety Engineering and Disaster Management ELSESEDIMA 2018*, Universitatea Babeș-Bolyai, Facultatea de Știința și Ingineria Mediului 17-19 mai 2018, Cluj Napoca.
 11. Băbău A. M., Micle V., **Damian G. E.**, Varvara S., Health risk assessment analysis applied in order to choose optimum remediation method of highly polluted mining areas (Poster), *International U.A.B. – B.E.N.A. Conference, Environmental Engineering & Sustainable Development*, Alba Iulia, Romania, 25-27 mai 2017 (Book of Abstracts: pp. 29, ISSN 2457-2829, AETERNITAS Publishing House, Alba Iulia 2017).
 12. Varvara S., Popa M., Bostan R., **Damian G.**, Preliminary considerations on the adsorption of heavy metals from acidic mine drainage using natural zeolite, *Book of Abstracts-UAB-B.E.N.A. International Conference 2013*, Universitatea „1 Decembrie 1918” Alba Iulia, (2013).

F.2) Lucrări științifice comunicate (prezentate) în cadrul unor manifestări științifice naționale

1. **Damian G.E.**, Dorneanu S. A., Varvara S., Popa M., Bostan R., Ilea P., Effect of pH on the electrochemical behavior of Zn, Fe and Ni in brominated leaching systems, *Simpozionul național cu participare internațională Environment & Progress, ediția a XII-a*, 15 Noiembrie 2019, Cluj-Napoca.
2. **Damian G.E.**, New approaches regarding remediation techniques of heavy metal contaminated soils from mining areas, *Simpozionul National cu Participare*

Internatională Environment & Progress 2017, Universitatea Babes-Bolyai, Facultatea de Știința și Ingineria Mediului, 10 noiembrie 2017, Cluj Napoca

3. **Damian G.**, Varvara S., Bostan R., Preliminary investigation on the use of different natural sorbents for removal of heavy metals from acid mine drainage. Case study: „Larga de Sus” mine, *Simpozion Național Studențesc „IF-IM-CAD” 2013, București, Jurnal of Young Scientist*, 1, pp. 95-104 (2013).
4. **Damian G.**, Impactul exploatării miniere „Larga de Sus”, perimetrul minier Zlatna, județul Alba asupra mediului înconjurător, *Sesiunea Națională de Comunicări Științifice a Studenților IN-EXTENSO 2013*, Alba Iulia, *Buletinul Științific al Universității „ 1 Decembrie 1918” Alba Iulia* (2013).
5. **Damian G.**, Botezan A., David D., Studiu privind solicitările produse din vibrații în poduri. Vibrațiile- surse de energie alternativă, *Sesiunea Națională de Comunicări Științifice a Studenților IN-EXTENSO 2011*, Alba Iulia, *Buletinul Științific al Universității „ 1 Decembrie 1918” Alba Iulia* (2011).
6. **Damian G.**, David D., Studiu privind factorii de influență ai contaminării solurilor din Zlatna, *Sesiunea Națională de Comunicări Științifice a Studenților IN-EXTENSO 2010*, Alba Iulia, *Buletinul Științific al Universității „1 Decembrie 1918” Alba Iulia* (2010).

F.3) Alte lucrări și contribuții științifice

1. Bostan R., **Damian G.**, Pitea G., Popa M., Varvara S., *The use of Aesculus hippocastanum L. extract as green corrosion inhibitor of carbon steel in hydrochloric acid – articol in-extenso – MEDIUL CA RISC SI URGENTA*, Ed. Valea Verde 2021, ISBN 978-606-8834-42-9, pp. 107-119.