

# СПИСОК ПУБЛИКАЦИЙ СНААПИ 2020-2023

## 2022

1. Abdo S., Nekhoroshkov P.S., Zinicovscaia I. et al., 2022, Status of the Coastal Marine Environment in the Southern Red Sea, Yemen, as Reflected by Elements Accumulated in the Skeletons of Scleractinian (Stony) Corals. *Arch Environ Contam Toxicol* 83, 95–108. <https://doi.org/10.1007/s00244-022-00940-9>
2. Aničić Urošević, M., Kuzmanoski, M., Miličević, T., Kodranov, I., Vergel, K., & Popović, A., 2022, Moss bag sensitivity for the assessment of airborne elements at suburban background site during spring/summer season characterized by Saharan dust intrusions. *Air Quality, Atmosphere & Health*, 1-21.
3. Abdushukurov D.A., Abdusamadzoda D., Duliu O.G., Zinicovscaia I., Nekhoroshkov P.S., 2022, On the Geochemistry of Major and Trace Elements Distribution in Sediments and Soils of Zarafshon River Valley, Western Tajikistan. *Appl. Sci.*, 12, 2763. <https://doi.org/10.3390/app12062763>
4. Badawy W. M., Sarhan Y., Duliu O. G., Kim J., Yushin N., Samman H. E., ... & Shcheglov A., 2022, Monitoring of air pollutants using plants and co-located soil—Egypt: Characteristics, pollution, and toxicity impact: *Environmental Science and Pollution Research*, Volume 29, Issue 14, pp 21049-21066. DOI: 10.1007/s11356-021-17218-7
5. Cepoi L., Zinicovscaia I., Valuta A., Codreanu L., Rudi L., Chiriac T., ... & Peshkova A., 2021, Bioremediation capacity of edaphic cyanobacteria *Nostoc linckia* for chromium in association with other heavy-metals-contaminated soils: *Environments*, Volume 9, Issue 1, p 1. <https://doi.org/10.3390/environments9010001>
6. Cepoi L., Zinicovscaia I., Valuță A., Codreanu L., Rudi L., Chiriac T., ... & Peshkova A., 2022, Peculiarities of the Edaphic Cyanobacterium *Nostoc linckia* Culture Response and Heavy Metal Accumulation from Copper-Containing Multimetal Systems: *Toxics*, Volume 10, Issue 3, pp 1-16. <https://doi.org/10.3390/toxics10030113>
7. Cepoi L., Zinicovscaia I., Rudi L., Chiriac T., Djur S., Yushin N., & Grozdov D., 2022, Assessment of Metal Accumulation by *Arthospira platensis* and Its Adaptation to Iterative Action of Nickel Mono-and Polymetallic Synthetic Effluents: *Microorganisms*, Volume 10, Issue 5, p 1041. doi: 10.3390/microorganisms10051041
8. Cepoi L., Zinicovscaia I., Rudi L., Chiriac T., Turchenko V., Changes in the *Dunaliella salina* biomass composition during silver nanoparticles formation. *Nanotechnology for Environmental Engineering*. doi: 10.1007/s41204-022-00218-4
9. Cepoi L., Rudi L., Chiriac T., Valuta A., Zinicovscaia I., Misicu V., Rudic V., 2022, Silver Nanoparticles as Stimulators in Biotechnology of Porphyridium cruentum. In: Tiginyanu I., Sontea V., Railean S. (eds) 5th International Conference on Nanotechnologies and Biomedical Engineering. ICNBME 2021. IFMBE Proceedings, vol 87. Springer, Cham. [https://doi.org/10.1007/978-3-030-92328-0\\_68](https://doi.org/10.1007/978-3-030-92328-0_68)
10. Chaligava O., Grozdov D., Yushin N., Zinicovscaia I., Vergel K., 2022, Distribution of Natural and Anthropogenic Radionuclides in Soil Samples in Recreational Zones of Moscow. *Water Air Soil Pollution*, Volume 233, Issue 11, 448. <https://doi.org/10.1007/s11270-022-05930-0>
11. Chilian A., Bancuta O.R., Bancuta I., Popescu I. V., Gheboianu A. I., Tănase N.M., Tuican M., Zaharia M., Zinicovscaia I., 2022, Extraction of heavy metals and phosphorus from sewage sludge with elimination of antibiotics and biological risks. *Chemical Engineering Journal*, 437 (1), 135298 (IF: 13,273; AIS: 1,669). <https://doi.org/10.1016/j.cej.2022.135298>
12. Chmielowska-Bąk J., Shcheglova E., Rosik K., Yushin N., Zinicovscaia I., & Deckert J., 2022, Oxidative RNA modifications as an early response of soybean (*Glycine max* L.) exposed to copper and lead: *Frontiers in Plant Science*, p 3437. DOI: 10.3389/fpls.2021.828620
13. Ciocarlan A., Dragalin I., Aricu A., Lupascu L., Ciocarlan N., Vergel K., Duliu O.G., Hristozova G., Zinicovscaia I., 2022, Chemical Profile, Elemental Composition, and Antimicrobial Activity of Plants of the *Teucrium* (Lamiaceae) Genus Growing in Moldova. *Agronomy*, 12, 772. <https://doi.org/10.3390/agronomy12040772>
14. Culicov O.A., Trtić-Petrović T., Nekhoroshkov P.S., Zinicovscaia I., Duliu O.G., 2022, On the Geochemistry of the Danube River Sediments (Serbian Sector). *International Journal of Environmental Research and Public Health*. 19(19):12879. <https://doi.org/10.3390/ijerph191912879>
15. Culicov O., Stegarescu A., Soran M.-L., Lung I., Opris O., Ciorăția A., Nekhoroshkov P., 2022, The Effect of Copper Salts on Bioactive Compounds and Ultrastructure of Wheat Plants. *Molecules*, 27, 4835. <https://doi.org/10.3390/molecules27154835>
16. Gorelova S.V., Muratova A.Y., Zinicovscaia I., Okina O.I., Kolbas A., 2022, Prospects for the Use of *Echinochloa frumentacea* for Phytoremediation of Soils with Multielement Anomalies. *Soil Syst.*, 6, 27. <https://doi.org/10.3390/soilsystems6010027>
17. Gorelova S., Murat S., Gins M.S., Frontasyeva M., 2022, Phytoextraction of toxic elements by Amaranthus Tricolor grown on technogenically polluted soils in open ground conditions: *Chimica Techno Acta*, Volume 9, 2, No.202292S. <https://doi.org/10.15826/chimtech.2022.9.2.S8>
18. Humelnicu D., Zinicovscaia I., Humelnicu I., Ignat M., Yushin N., & Grozdov D., 2022, Study on the SBA-15 Silica and ETS-10 Titanosilicate as Efficient Adsorbents for Cu (II) Removal from Aqueous Solution: *Water*, Volume 14, Issue 6. <https://doi.org/10.3390/w14060857>
19. Ivlieva A., Petritskaya E., Rogatkin D., Yushin, N., Grozdov D., Vergel K., Zinicovscaia I., 2022, Does Nanosilver Have a Pronounced Toxic Effect on Humans? *Appl. Sci.*, 12, 3476. <https://doi.org/10.3390/app12073476>
20. Ivlieva A., Zinicovscaia I., Petritskaya E., Yushin N., Rogatkin D., Peshkova A., 2022, Assessment of Gold Nanoparticles Uptake in Tissues of Female Mice and Their Offspring Using Neutron Activation Analysis. In: Tiginyanu I., Sontea V., Railean S. (eds) 5th International Conference on Nanotechnologies and Biomedical Engineering. ICNBME 2021. IFMBE Proceedings, vol 87. Springer, Cham. [https://doi.org/10.1007/978-3-030-92328-0\\_51](https://doi.org/10.1007/978-3-030-92328-0_51)
21. Khiem L.H., Zinicovscaia I., My T.T.T., Frontasyeva M., My N.T.B., Son N.A., Trung D.V., Nam L.D., Thi N., Sang M., Duy N.N., Hung N.Q., Hai B.V., Mai N.N., Thang D.D., Dinh N.T., 2022, Investigation of Airborne Trace Element Pollution in Hai Phong City (Vietnam) Using *Barbula Indica* Moss and Neutron Activation Analysis. *Journal of Radioanalytical and Nuclear Chemistry*. <https://doi.org/10.1007/s10967-022-08567-9>
22. Lalrammawia K., Buragohain A., Kakki B., Zote L., Marak N. K., Lalmuangpui R., ... & Muthukumaran R. B., 2022, Determination of multi elements in tobacco plant of northeast India by neutron activation analysis and atomic absorption spectrometry: *Biological Trace Element Research*, Volume 200, Issue 10, pp 4534-4549. DOI: 10.1007/s12011-021-03040-2

23. Madadzada A.I., Nuhuyeva Sh.S., Mammadov E.A., Ibrahimov Z.A., Jabbarov N.J. Strelkova L.P., Frontasyeva M.V., 2022. Heavy metal atmospheric deposition study in Azerbaijan based on moss technique and neutron activation analysis: Ecological Chemistry and Engineering S, Volume 29, Issue 2, pp. 143-153. <https://doi.org/10.2478/eces-2022-0011>
24. Nekhoroshkov P., Zinicovscaia I., Vergel K., Grozdov D., Chaligava O., Kravtsova A., 2022, Macro- and Microelements and Radionuclides in the Mussel *Mytilus galloprovincialis* from Recreational and Harbor Sites of the Crimean Peninsula (The Black Sea). Hydrobiology, Volume 1, Issue 3, pp 304-316. <https://doi.org/10.3390/hydrobiology1030022>
25. Nekhoroshkov P., Peshkova A., Zinicovscaia I., Vergel K., 2022, Assessment of the Atmospheric Deposition of Heavy Metals and Other Elements in the Mountain Crimea Using Moss Biomonitoring Technique. Atmosphere, 13, 573. <https://doi.org/10.3390/atmos13040573>
26. Plohák P., Švehláková H., Svozilíková Krakovská A. S., Turčová B., Stalmachová B., & Nováková J., 2022, Impact of Chromium, Arsenic and Selected Environmental Variables on The Vegetation and Soil Seed Bank of Subsidence Basins.: Carpathian Journal of Earth and Environmental Sciences, Volume 17, Issue 2, pp 401-412.
27. Soran M. L., Lung I., Opris O., Culicov O., Cioroia A., Stegarescu A., & Borodi G., 2021, The Effect of TiO<sub>2</sub> Nanoparticles on the Composition and Ultrastructure of Wheat: Nanomaterials, Volume 11, Issue 12, p 3413. doi:10.3390/nano11123413
28. Świsłowski P., Vergel K., Zinicovscaia I., Rajfur M., Wacławek M., 2022, Mosses as a biomonitor to identify elements released into the air as a result of car workshop activities. Ecological Indicators, 138, 108849. <https://doi.org/10.1016/j.ecolind.2022.108849>
29. Tepanosyan G., Sahakyan L., Gevorgyan A., Frontasyeva M., 2022, Factors conditioning the content of chemical elements in soil and mosses in Armenia. Journal of Trace Elements and Minerals, <https://doi.org/10.1016/j.jtemin.2022.100029>
30. Tien D.P.T., My T.T.T., Khiem L.H., Frontasyeva M., Zinicovscaia I., Son N.A., Do V.D., 2022, Studying airborne trace elements in featured areas in Red River Delta and South Central Vietnam using moss technique and neutron activation. J Radioanal Nucl Chem 331, 2743–2750. <https://doi.org/10.1007/s10967-022-08331-z>
31. Vergel K., Zinicovscaia I., Yushin N., Chaligava O., Nekhoroshkov P., & Grozdov D., 2022, Moss Biomonitoring of Atmospheric Pollution with Trace Elements in the Moscow Region, Russia: Toxics, Volume 10, Issue 2, p 66. doi:10.3390/toxics10020066
32. Vinković A., Laptev G., Yaprak G.i., Slavova K., Joksimović D., Troškot-Čorbić T., Frontasyeva M., Duliu O. G., Bylyku E., Shyti M., Humbatov F., Nuhanović M., Smječanin N., Nonova T., Dobrev L., Pashalidis I., Melikadze G., Ioannidou A., Tsabarlis C., Aidarkhanova A., David D., Zinicovscaia I., Kamnev A., Horvat M., Nečemer M., Jaćimović R., Yucel H., Kalayci Y., Dirican A., Sert I., Plotsen M., Korychenskiy K., Khatir S. M. A., Sander S. G., Deufraimis K., Fajković H., Klanjšček T., Vdović N., Legović T., Obhodăš J., 2022, Could atmospheric carbon be driving sedimentation? Journal of Soils and Sediments. <https://doi.org/10.1007/s11368-022-03282-0>, <https://www.researchgate.net/publication/362242496>
33. Vodyanitskii Y., Mirkina T., Zamulina I., Bauer T., Zinicovscaia I., 2022, Role of the total Na in the retention of microelements in soils on marine deposits. Geochemistry: Exploration, Environment, Analysis. <https://doi.org/10.1144/geochem2021-069>
34. Yakhnenko A., Zinicovscaia I., Yushin N., Chaligava O., Nebesnykh I., Grozdov D., Khanaev I., Octavian G. Duliu O.G., Maikova O., Kravchenko E., 2022, Endemic sponge Lubomirskia baicalensis as a bioindicator of chemical elements pollution in Lake Baikal. Marine Pollution Bulletin, Volume 182, 114025. <https://doi.org/10.1016/j.marpolbul.2022.114025>
35. Yushin N., Zinicovscaia I., Cepoi L., Chiriac T., Rudi L., & Grozdov D., 2022, Biosorption and Bioaccumulation Capacity of Arthospira platensis toward Europium Ions: Water (Switzerland), Volume 14, Issue 13, pp 1-13. DOI:10.3390/met12091465
36. Yushin N., Zinicovscaia I., Cepoi L., Chiriac T., Rudi L., & Grozdov D., 2022, Biosorption and Bioaccumulation Capacity of Arthospira platensis toward Yttrium Ions: Metals, Volume 12, Issue 9, pp 1-17. DOI:10.3390/met12091465
37. Yushin N., Zinicovscaia I., Cepoi L., Chiriac T., Rudi L., & Grozdov D., 2022, Application of Cyanobacteria Arthospira platensis for Bioremediation of Erbium-Contaminated Wastewater: Materials, Volume 15, Issue 17, p 6101. <https://doi.org/10.3390/ma15176101>
38. Zinicovscaia I., Chaligava O., Yushin N., Grozdov D., Vergel K., Hramco C., 2022, Moss Biomonitoring of Atmospheric Trace Element Pollution in the Republic of Moldova. Archives of Environmental Contamination and Toxicology, Volume 82, pp 355-366. <https://doi.org/10.1007/s00244-022-00918-7>
39. Zinicovscaia I., Cepoi L., Rudi L., Chiriac T., Yushin N., & Grozdov D., 2022, Arthospira platensis as Bioremediator of Rhenium Mono-and Polymetallic Synthetic Effluents: Microorganisms, Volume 10, Issue 11, p 2109. <https://doi.org/10.3390/microorganisms10112109>
40. Богданова Я.А., Прохорова Н.В., Вергель К.Н., Фронтасьева М.В., Особенности накопления тяжелых металлов и металлоидов фитомассе бокоплодного мха *Pleurozium schreberi* (brid.) Mitt. в условиях Красносамарского Лесного Массива (Самарская область) и национального парка «Бузулукский бор» (Оренбургская область). Биологические науки. Самарский научный вестник, 2022, т. 11, №1, стр. 24-30. DOI:10.55355/sn2022111101
41. Журавлева А.Н., Бухарина И.Л., Свозилик В., Фронтасьева М.В., Загребин Е.А., Мониторинг следовых элементов на территории Удмуртской республики методом нейтронного активационного анализа. Лесной вестник. Forestry Bulletin, 2022, т. 26, №3, стр. 54-61. DOI: 10.18698/2542-1468-2022-3-54-61
42. Швецова М.С., Каманина И.З., Зиньковская И.И., Мададзада А.И., Некоршков П.С., Каплина С.П., Геохимическая оценка почв рекреационных зон Москвы. Вестник Московского Университета. Серия 17. Почвоведение, 2022, №3, стр.85-92. [Shvetsova M. S., Kamanina I. Z., Zinicovscaia I.I., Madadzada A. I., Nekhoroshkov P.S., Kaplina, S.P., 2022, Geochemical assessment of soils in recreational zones of Moscow, Moscow University Soil Science Bulletin, Issue 3, pp 85-92.]

## 2021

1. Ciocarlan, A., Hristozova, G., Aricu, A., Dragalin, I., Zinicovscaia, I., Yushin, N., Grozdov, D., Popescu, V. Determination Abdushukurov D. A., Abdusamadzoda D., Duliu O. G., Frontasyeva M. V. Geochemical and Isotope Anomalies in Sioma River Gorge, Western Tajikistan. Radiation, MDPI, 1, 145–152. 18 May 2021. (2021).
2. Badawy W.M., Duliu O.G., El Samman H., El-Taher A., Frontasyeva M.V. A review of major and trace elements in Nile River and Western Red Sea sediments: An approach of geochemistry, pollution, and associated hazards. Applied Radiation and Isotopes. Available online 25 January 2021. <https://doi.org/10.1016/j.apradiso.2021.109595>
3. Badawy W., Sarhan Y., Duliu O., Kim J., Yushin N., El Samman H., Hussein A. A., Frontasyeva M., Shcheglov A. Monitoring of Air Pollutants Using Plants and Co-Located Soil – Egypt: Characteristics, Pollution, and Toxicity Impact. [https://www.researchgate.net/publication/350716118\\_Monitoring\\_of\\_Air\\_Pollutants\\_Using\\_Plants\\_and\\_Co-Located\\_Soil\\_-Egypt\\_Characteristics\\_Pollution\\_and\\_Toxicity\\_Impact](https://www.researchgate.net/publication/350716118_Monitoring_of_Air_Pollutants_Using_Plants_and_Co-Located_Soil_-Egypt_Characteristics_Pollution_and_Toxicity_Impact)

4. Barandovski L., Šajn R., Baćeva Andonovska K., Frontasyeva M.V., Stafilov T. Modeling of the ambient radiation dose level by using passive moss biomonitoring in Macedonia. *J Radioanal Nucl Chem* 330, 267–278 (2021).
5. Betsou C., Diapouli E., Tsakiri E., Papadopoulou L., Frontasyeva M., Eleftheriadis K., Ioannidou A. First-Time Source Apportionment Analysis of Deposited Particulate Matter from a Moss Biomonitoring Study in Northern Greece. *Atmosphere*, MDPI. 12, 208. (2021).
6. Bittá J., Svozilík V., A. Svozilíková Krakovská A. "Effect of the covid-19 lockdown on air pollution in the Ostrava region". *International Journal of Environmental Research and Public Health* 18.16 (2021).
7. Bittá J., Svozilík V., A. Svozilíková Krakovská A. "The neural network assisted land use regression". In: *Atmosphere* 12.4 (2021).
8. Cepoi L., Zinicovscaia I., Rudi L., Chiriac T., Pantelica A., Apostol A., Djur S., Ganea L., Iancu D. Biomass of *Arthrospira platensis* (spirulina) enriched with lithium by bioaccumulation and biosorption process. *Food Bioscience*. (2021).
9. Cepoi L., Rudi L., Zinicovscaia I., Chiriac T., Mîscu V., Rudic V. Biochemical changes in microalga *Porphyridium cruentum* associated with silver nanoparticles biosynthesis. *Archives of Microbiology*, 203(4), 1547-1554. (2021).
10. Chaligava O., Shetekauri S., Badawy W.M., Frontasyeva M.V., Zinicovscaia I., Shetekauri T., Kvlibidze A., Vergel K., Yushin N. "Characterization of Trace Elements in Atmospheric Deposition Studied by Moss Biomonitoring in Georgia." *Archives of Environmental Contamination and Toxicology* 80, 350–367. (2021).
11. Chaligava O., Nikolaev I., Khetagurov K., Lavrinenko Y., Bazaev A., Frontasyeva M., Vergel K., Grozdov D. "First Results on Moss Biomonitoring of Trace Elements in the Central Part of Georgia, Caucasus." *Atmosphere* 12 (3), 317. (2021).
12. Ciocarlan, A., Hristozova, G., Aricu, A., Dragalin, I., Zinicovscaia, I., Yushin, N., Grozdov, D., Popescu, V. Determination of the elemental composition of aromatic plants cultivated industrially in the republic of Moldova using neutron activation analysis. *Agronomy*, 11(5), 1011 (2021).
13. Ciocarlan, A., Lupascu, L., Aricu, A., Dragalin, I., Popescu, V., Geana, E.-I., Ionete, R.E., Vornicu, N., Duliu, O.G., Hristozova, G., Zinicovscaia, I. Chemical composition and assessment of antimicrobial activity of lavender essential oil and some by-products. *Plants*, 10(9), 1829 (2021).
14. Hoover R.B., Frontasyeva M., Pavlov S., Rozanov A.Y, Wallis D.H., Wickrasassinghe N. C. ENAA and SEM Investigations of Carbonaceous Meteorites: Implications to the Distribution of Life and Biosphere.
15. Hristozova, G., Zapryanova, P., Marinova, S. Cadmium content in soils and oriental tobacco leaves: A study in tobacco-growing regions of Southeast Bulgaria. *AIP Conference Proceedings*, 2377, 050003 (2021).
16. Hunova, I., ed. Ambient Air Quality in the Czech Republic [online]. 1. Basel, Switzerland: MDPI, (2021).
17. Ivlieva A.L., Petritskaya E.N., Rogatkin D. A., Demin V. A., Glazkov A. A., Zinicovscaia I., Pavlov S. S., Frontasyeva M. V. Impact of chronic oral administration of silver nanoparticles on cognitive abilities of mice. *Physics of Particles and Nuclei Letters*. Vol. 18(2), 250–265. (2021).
18. Kamnev A.N., Frontsyeva M.V., Kravtsova A.V., Nekhoroshkov P.S., Pan'kova E.S., Golubeva E.I. Ability of brown algae *Cystosira barbata* (*Cystoseira barbata*) to accumulate heavy metals. IAEA TECDOC on publication on pollution studies in selected coastal areas. (2021).
19. Kılıç Ö., Belivermiş M., Sıkdokur E., Sezer N., Erentürk S.A., Hacıyakupoglu S., Chaligava O., Frontasyeva M., Zinicovscaia I., Madadzada A. "Temporal Changes of Atmospheric Deposition of Major and Trace Elements in European Turkey, Thrace Region." *Journal of Radioanalytical and Nuclear Chemistry* 329, 371–381. (2021).
20. Kirillov A., Grozdov D., Zinicovscaia I., Vasilenko T. Elemental composition of the Chelyabinsk meteorite determined by neutron activation analysis *Journal of Radioanalytical and Nuclear Chemistry*, (2021).
21. Lalrammawia K., Buragohain A., Kakki B., Zote L., Marak N.K., Lalrinhupui, Malsawmluangi, Lalmuangpui R., Kumar N.S., Jahau L., Sudarshan M., Chaligava O., Yushin N., Grozdov D., Nekhoroshkov P., Vergel K., Zinicovscaia I., Muthukumaran R.B. "Determination of Multi Elements in Tobacco Plant of Northeast India by Neutron Activation Analysis and Atomic Absorption Spectrometry." *Biological Trace Element Research*. (2021).
22. Lavrenko, Y., Plieva, A., Zinicovscaia, I., Hristozova, G., Frontasyeva, M., Tkachenko, K., Dogadkin, D.N., Gromyak, I.N., Kolotov, V.P. Elemental composition of infusions of herbs (Tisanes) of north Ossetia (the Caucasus). *Agriculture* (Switzerland), 11(9), 841 (2021).
23. Lazo P., Quarry F., Frontasyeva M. et al. The Evaluation of TM Atmospheric Deposition in Albania. In book: The Evaluation of Air Quality in Albania by Moss Biomonitoring and Metals Atmospheric Deposition.
24. Lung I., Oprea O., Sorana M.L., Culicov O., Ciorăță A., Stegărescu A., Zinicovscaia I., Yushin N., Vergel K., Kacso I., Borodi Gh., Pârvu M. The Impact Assessment of CuO Nanoparticles on the Composition and Ultrastructure of *Triticum aestivum* L. *Int. J. Environ. Res. Public Health*. 18, 6739. (2021).
25. Milićević T., Anićić Urošević M., Relić D., Vuković G., Nikolić D., Vergel K., Popović A. Environmental pollution influence to soil- plant-air system in organic vineyard: bioavailability, environmental, and health risk assessment. *Environmental science and pollution research international*. 28. (2021).
26. Nekhoroshkov, P.S., Bezuidenhout, J., Frontasyeva, M.V., Zinicovscaia, I.I., Yushin, N.S., Vergel, K.N.. Petrik, L., Trace elements risk assessment for consumption of wild mussels along South Africa coastline. *Journal of Food Composition and Analysis*, 98, p.103825. (2021).
27. Nekhoroshkov, P., Zinicovscaia, I., Nikolayev, D., Lychagina, T., Pakhnevich, A., Yushin, N., Bezuidenhout, J. Effect of the Elemental Content of Shells of the Bivalve Mollusks (*Mytilus galloprovincialis*) from Saldanha Bay (South Africa) on Their Crystallographic Texture. *Biology*, 10(11), p.1093. (2021).
28. Nekhoroshkov P., Bezuidenhout J., Zinicovscaia I., Yushin N., Vergel K., Frontasyeva M.. Levels of Elements in Typical Mussels from the Southern Coast of Africa (Namibia, South Africa, Mozambique): Safety Aspect. *Water*. 13(22):3238. (2021).
29. Nguyen H. Q., Le H., Trinh T. T. M., N. T. B. M., Frontasieva M., Zinicovscaia I., Nguyen A. S., Tran T. T., Le D. N., Khuat T. H., Nguyen N. M., Trinh D. T., Duong V. T., Nguyen T. T. H. Biomonitoring of chemical element air pollution in Hanoi using *Barbula indica* MOSS. *Environmental Engineering and Management Journal*. 20, 5, 791-800. (2021).
30. Suárez Muñoz M., Díaz Rizo O., González Hernández P., Melián Rodríguez C., Gelen Rudnikas A., Díaz López C., Pérez-Gamatges A., Martínez-Villegas N., de Jesús Barros Cossío J., Badawy W., Frontasieva M., Isaac Olive K., Hernández Díaz R. Integración de las técnicas analíticas nucleares en la caracterización de peloides cubanos. Caso de estudio: San Diego de los Baños. Available from:

[https://www.researchgate.net/publication/356289417\\_Integracion\\_de\\_las\\_tecnicas\\_analiticas\\_nucleares\\_en\\_la\\_caracterizacion\\_de\\_peloideos\\_cubanos\\_Caso\\_de\\_estudio\\_San\\_Diego\\_de\\_los\\_Banos](https://www.researchgate.net/publication/356289417_Integracion_de_las_tecnicas_analiticas_nucleares_en_la_caracterizacion_de_peloideos_cubanos_Caso_de_estudio_San_Diego_de_los_Banos) [Nov 30 2021]. (in Spanish)

31. Pavlikova I., Motyka O., Plasek V., BITTA J. Monitoring of Heavy Metals and Nitrogen Concentrations in Mosses in the Vicinity of an Integrated Iron and Steel Plant: Case Study in Czechia. *Applied Sciences* [online]. 11(17), 8262. (2021).
32. Pavlikova I., Hladky D., Šutarova P., Jancik P., Osrodka L., Krajny E. Společná česko - polská měření přeshraničního přenosu znečišťujících látek v ovzduší. Ostrava, Czech Republic: Vysoká škola bářská - Technická univerzita Ostrava, (2020).
33. Pavlikova I., Hladky D., Šutarova P., Jancik P., Osrodka L., Krajny E. Joint Czech-Polish measurements of transboundary transfer of air pollutants. Ostrava, Czech Republic: VSB - Technical University of Ostrava. (2020).
34. Pavlikova I., Hladky D., Šutarova P., Jancik P., Osrodka L., Krajny E. Wspólne czesko - polskie pomiary transgranicznego transportu zanieczyszczeń powietrza: Praca zbiorowa. Katowice, Polska: Institut Meteorologii i Gospodarki Wodnej – Państwowy Instytut Badawczy. (2020).
35. Pavlikova I., Hladky D., Motyka O., Vergel K. N., Strelkova L. P., Shvetsova M. S. Characterization of PM10 sampled on the top of a former mining tower by the high-volume wind direction-dependent sampler using INAA. *Atmosphere*. (2021).
36. Pokatilov V. S., Salamatin D. A., Bokov A. V., Salamatin A. V., Velichkov A., Mikhin M. V., Grozdov D. S., Vergel K. N., Sigov A. S., Makarova A. O., Budzynski M., Tsvyashchenko A. V. Hyperfine interactions in the Bi<sub>1-x</sub>LaxFeO<sub>3</sub> ferrites (x = 0.0225, 0.075, 0.9). *Hyperfine Interact* 242, 33 (2021).
37. Rudi L., Zinicovscaia I., Cepoi L., Chiriac T., Peshkova A., Cepoi A., Grozdov D.. Accumulation and effect of silver nanoparticles functionalized with Spirulina platensis on rats. *Nanomaterials*, s. 11, 2992. (2021).
38. Safonov A., Popova N., Andrushenko N., Boldyrev K., Yushin N., Zinicovscaia I. Investigation of the materials for the reactive permeable barrier for cadmium and chromium(VI) removal in the aquifer near the solid domestic waste landfill. *Environ Sci Pollut Res*. 28:4645–4659. (2021).
39. Sergeeva A. S., Zinicovscaia I., Grozdov D., Yushin N. Assessment of Some rare earth elements, Hf, Th, and U in the Donetsk region using moss bags technique. *Atmospheric Pollution Research*, 12(9). (2021).
40. Sergeeva A. S., Zinicovscaia I., Vergel K., Yushin N., Aničić Urošević M. The effect of heavy industry on air pollution studied by active moss biomonitoring in Donetsk region (Ukraine). *Archives of Environmental Contamination and Toxicology*, (2021).
41. Svozilík V., Svozilíková Krakovská A., Bittá J., Jančík P. "Comparison of the air pollution mathematical model of pm10 and moss biomonitoring results in the tritia region". In: *Atmosphere* 12.6 (2021).
42. Tkachenko K., Kosareva I., Frontasyeva M.. The Influence of Manganese on Growth Processes of *HordeumL.* (Poaceae) Seedlings. *Plants*, MDPI. 10, 1009. (2021).
43. Zinicovscaia I., Hramco C., Chaligava O., Yushin N., Grozdov D., Vergel K., Duca G. "Accumulation of Potentially Toxic Elements in Mosses Collected in the Republic of Moldova." *Plants* 10 (3), 471. (2021).
44. Zinicovscaia I., Yushin N., Humelnicu D., Grozdov D., Ignat M., Demcak S., Humelnicu I. Sorption of Ce(III) by silica SBA-15 and titanosilicate ETS-10 from aqueous solution. *Water*. 13, 3263. (2021).
45. Zinicovscaia I., Grozdov D., Yushin N., Safonov A., Proshin I., Volkov M., Pryadka A., Belyaev V., Shubralova E., Tsygankof O. Analysis of the rolled cotton cloth fixed on the outer surface of the International Space Station using neutron activation analysis and complementary techniques. *Acta Astronautica* 189 (2021) 278–282. (2021).
46. Zinicovscaia I., Yushin N., Grozdov D., Vergel K., Nekhoroshkov P., Rodlovskaya E. Treatment of rhenium-containing effluents using environmentally friendly sorbent, *Saccharomyces cerevisiae* biomass. *Materials*. 14(16), 4763. (2021).
47. Zinicovscaia I., Yushin N., Abdusamadzoda D., Grozdov D., Humelnicu I., Ignat M., Humelnicu D. Removal of vanadium ions from aqueous solutions using different type of hydroxyapatites: adsorption isotherm, kinetics and thermodynamic studies. *Environmental Engineering and Management Journal*. 20(6), 871-881. (2021).
48. Zinicovscaia I., Yushin N., Grozdov D., Safonov A., Ostrovaya T., Boldyrev K., Kryuchkov D., Popova N. Bio-zeolite use for metal removal from copper-containing effluents. *Journal of Environmental Health Science and Engineering*. (2021).
49. Zinicovscaia I., Cepoi L., Rudi L., Chiriac T., Grozdov D., Vergel K. Effect of zinc-containing systems on *Spirulina platensis* bioaccumulation capacity and biochemical composition. *Environmental Science and Pollution Research*, 28, 52216–52224. (2021).
50. Zinicovscaia I., Ivlieva A. L., Petritskaya E. N., Rogatkin D. A., Yushin N., Grozdov D., Vergel K., Mamulová Kutláková K. Assessment of TiO<sub>2</sub> Nanoparticles Accumulation in Organs and Their Effect on Cognitive Abilities of Mice. *Physics of Particles and Nuclei Letters*. Vol. 18, No. 3, pp. 378–384. (2021).
51. Zinicovscaia I., Yushi, N., Abdusamadzoda D., Grozdov D., Safonov A., Rodlovskaya E. Metal Removal from Zinc-Containing Effluents Using *Shewanella xiamenensis* Biofilm Formed on Zeolite. *Materials*. 14, 1760. (2021).
52. Zote L., Lalrammawia K., Buragohain A., Lalrinhlupuii, Kakki B., Lalmuanpuui R., Pachaua Z., Vanlalhraua J., Bose Muthukumaran R., Kumar N. S., Jahau L., Sudarshan M., Yushin N., Nekhoroshkov P., Grozdov D., Sergeeva A., I. Zinicovscaia. Macro-, Micro-and TraceElement Distribution in Areca Nut, Husk and soil of Northeast India. *Environmental Monitoring and Assessment*. 193, 65. (2021).
53. Алексеенок Ю.В., Вергель К.Н., Юшин Н.С.. Оценка уровней загрязнения территории Республики Беларусь атмосферными выпадениями тяжелых металлов с использованием биоиндикации // Успехи современного естествознания. №10. С. 43-50. (2021).

## 2020

1. Abdusamadzoda D., Abdushukurov D. A., Duliu O. G., Zinicovscaia I., Assessment of the Heavy Metals Pollution of Soil and Sediment in Zarafshon Valley. *Toxics*, 2020
2. Abdusamadzoda D., Abdushukurov D., Duliu O., Zinicovscaia I., Nekhoroshkov P., Major and trace elements in sediments and soils of the Zerafshon area, north - west Tajikistan. *Mendeley Data*, V2, 2020, <https://doi.org/10.17632/vj24br7qnt.2>
3. Abdusamadzoda D., Abdushukurov D., Duliu O., Zinicovscaia I., Nekhoroshkov P., Major and trace elements in sediments and soils of the Zerafshon area, north - west Tajikistan. *Mendeley Data*, V3, 2020, [doi: 10.17632/vj24br7qnt.3](https://doi.org/10.17632/vj24br7qnt.3)
4. Abdusamadzoda D., Abdushukurov D., Duliu O., Zinicovscaia I., Yushin N., M. Investigations of the atmospheric deposition of major and trace elements in Western Tajikistan by using the *Hylocomium splendens* moss as bioindicators. *Archives of Environmental Contamination and Toxicology* 2020,78(1), 60–67, (IF 2.135), <https://doi.org/10.1007/s00244-019-00687-w>
5. Abdusamadzoda D., Abdushukurov D., Zinicovscaia I., Duliu O., Vergel K., Assessment of the geochemical and ecological conditions in surface sediments of the Varzob River. *Microchemical Journal* 158 (2020) 105173, (IF 3.206), <https://doi.org/10.1016/j.microc.2020.105173>

6. Badawy W. M., Duliu O. G., Frontasyeva M. V., El-Samman H., Mamikhine S. V., Dataset of elemental compositions and pollution indices of soil and sediments: Nile River and delta -Egypt. **Data in brief** 28, 105009, 2020, <https://doi.org/10.1016/j.dib.2019.105009>
7. Badawy W., Frontasyeva M.V., Ibrahim M., Vertical Distribution of Major and Trace Elements In A Soil Profile From The Nile Delta, Egypt. **Ecological Chemistry and Engineering**, S, 2020, <https://doi.org/10.2478/eces-2020-0018>
8. Barandovski L., Stafilov T., Šajn R., Frontasyeva M., Baćeva-Andonovska K., Atmospheric Heavy Metal Deposition in North Macedonia from 2002 to 2010 Studied By Moss Biomonitoring Technique. **Atmosphere**, 2020, [doi:10.3390/atmos11090929](https://doi.org/10.3390/atmos11090929)
9. Cepoi L., Zinicovscaia I., Rudi L., Chiriac T., Misicu V., Djur S., Strelkova L., Grozdov D., Vergel K., Spirulina platensis as renewable sorbent for heavy metals accumulation from multi-element synthetic effluents. **Environmental Science and Pollution Research**, 2020, 27:31793–31811, <https://doi.org/10.1007/s11356-020-09447-z>
10. Cepoi L., **Zinicovscaia I.**, Rudi L., Chiriac T., Misicu V., Djur S., Strelkova L., Vergel K., Nekhoroshkov P., Growth and heavy metals accumulation by Spirulina platensis biomass from multicomponent copper containing synthetic effluents during repeated cultivation cycles. **Ecological Engineering**, 142, 2020, 105637, (IF 3.406), DOI: [10.1016/j.ecoleng.2019.105637](https://doi.org/10.1016/j.ecoleng.2019.105637)
11. Cepoi L., Zinicovscaia I., Rudi L., Chiriac T., Rotari I., Turchenko V., Djur S., Effect of PEG-coated silver and gold nanoparticles on Spirulina platensis biomass during its growth in closed system. **Coatings**, 2020, 10(8), 717, IF 2.436, <https://doi.org/10.3390/coatings10080717>
12. Chaligava O., Shetekauri S., Badawy W. M., Frontasyeva M.V., Zinicovscaia I., Shetekauri T., Kvividze A., Vergel K., Yushin N., Characterization of trace elements in atmospheric deposition studied by moss biomonitoring in Georgia. **Archives of Environmental Contamination and Toxicology**, IF: 2.240, 2020. DOI: [10.1007/s00244-020-00788-x](https://doi.org/10.1007/s00244-020-00788-x)
13. Chmielowska-Bąk J., Holubek R., Frontasyeva M., Zinicovscaia I., İşidoğru S., Tough Sprouting – Impact of Cadmium on Physiological State and Germination Rate of Soybean Seeds. **Acta Societatis Botanicorum Poloniae**. 2020 <http://pbsociety.org.pl/journals/index.php/asbp/article/view/asbp.8923>
14. Frontasyeva M., Harmens H., Uzhinskiy A., Chaligava O. and participants of the moss survey, Mosses as biomonitor of air pollution: 2015/2016 survey on heavy metals, nitrogen and POPs in Europe and beyond. Dubna: **JINR**, 2020, 136 p. ISBN 978-5-9530-0508-1
15. Gorbunov A.V., Lyapunov S.M., Frontasyeva M.V., Pavlov S.S., Some regularities of mercury accumulation in the muscles of freshwater fish. **Global Journals**. 2020, <https://globaljournals.org/ev/GJSFR/6831293955e4e65be516597.67853686.pdf>
16. Gorbunov A.V., Lyapunov S.M., Frontasyeva M.V., Pavlov S.S., Studies on the Intake of Cl, Br, I, Se in Human Body with Food in Central Regions of the European Part of Russia. Chapter in the Book Kristina Mastanjević (Editor). **Current Research in Agricultural and Food Science**, 2020, <https://doi.org/10.9734/bpi/crafs/v1>
17. Gorelova S.V., Gorbunov A.V., Frontasyeva M.V., Sylina A., Toxic elements in the soils of urban ecosystems and technogenic sources of pollution. **WSEAS Transactions on Environment and Development**, 2020, DOI: [10.37394/232015.2020.16.62](https://doi.org/10.37394/232015.2020.16.62)
18. Holubek R., Deckert J., Zinicovscaia I., Yushin N., Vergel K., Frontasyeva M., Sirotnik AV., Bajia DS., Chmielowska-Bąk J., The Recovery of Soybean Plants after Short-Term Cadmium Stress. **Plants**, 2020, DOI: [10.3390/plants9060782](https://doi.org/10.3390/plants9060782)
19. Hoover R.B.F., Frontasyeva M., Pavlov S., Epithermal Neutron Activation Analysis of Carbonaceous Chondrites and the Polonnaruwa/Aralaganwila Stones. Aspects Min Miner Sci. 6(1). **AMMS**. 000626. 2020. DOI: [10.31031/AMMS.2020.06.000626](https://doi.org/10.31031/AMMS.2020.06.000626)
20. Hristozova G., Marinova S., Motyka O., Svozilík V., Zinicovscaia I., Multivariate assessment of atmospheric deposition studies in Bulgaria based on moss biomonitor: trends between the 2005/2006 and 2015/2016 surveys. **Environmental Science and Pollution Research volume 27**, 39330–39342 (2020)
21. Hristozova G., Marinova S., Svozilík V., Nekhoroshkov P., Frontasyeva M.V., Biomonitoring of elemental atmospheric deposition: spatial distributions in the 2015/2016 moss survey in Bulgaria. **Journal of Radionalytical and Nuclear Chemistry** 323, 839–849 (2020)
22. Khiem L. H., Sera K., Hosokawa T., Nam L. D., Quyet N. H., Frontasyeva M., Trinh T. T. M., Nguyen T. B. M., Zinicovscaia I., Nguyen T. N., Trinh D. T., Khuat T. H., Nguyen N. M., Duong V. T., Nguyen A. S., Tran T. T., Sonexay X., Active Moss Biomonitoring Technique for Atmospheric Elemental Contamination in Hanoi using Proton Induced X-ray Emission. **Journal of Radioanalal.al and Nuclear Chemistry**, 2020, <https://doi.org/10.1007/s10967-020-07253-y>
23. Klimša, L., I. Melčáková, J. Nováková, M. Bártková, A. Hlaváč, A. Krakovská, V. Dombek a P. András., Recipient Pollution Caused by Small Domestic Wastewater Treatment Plants with Activated Sludge. **Carpathian Journal of Earth and Environmental Sciences**. 2020, 15(1), 19-25. DOI:[10.26471/cjees/2020/015/104](https://doi.org/10.26471/cjees/2020/015/104)
24. Kosior G., Frontasyeva M., Ziembik Z., Zinicovscaia I., Dolhańcuk-Śródka A., Godzik B., The moss biomonitoring method and neutron activation analysis in assessing of pollution by trace elements in selected National Parks of Poland. **Archives of Environmental Contamination and Toxicology**, 2020, (IF 2.135), <https://doi.org/10.1007/s00244-020-00755-6>
25. Kovacova Z., Demcak S., Balintova M., Pla C., Zinicovscaia I., Influence of the wooden sawdust treatment on Cu(II) and Zn(II) removal from water. **Materials**, 2020, 13(16), 3575; IF 3.057, <https://doi.org/10.3390/ma13163575>
26. Lazo P., Allajbeu Sh., Bekteshi L., Frontasyeva M., Kane S., Qarri F., Stafilov T., The Evaluation of Air Quality in Albania by Moss Biomonitoring and Metals Atmospheric Deposition. **Book**, Springer Nature, Switzerland, 2020, DOI:[10.1007/978-3-030-62355-5](https://doi.org/10.1007/978-3-030-62355-5) <https://www.springer.com/gp/book/9783030623555#aboutBook>
27. Milićević T., Aničić Urošević M., Relić D., Jovanović G., Nikolić D., Vergel K., Popović A., Environmental pollution influence to soil–plant–air system in organic vineyard: bioavailability, environmental, and health risk assessment. **Environmental Science And Pollution Research**, 2020, <https://doi.org/10.1007/s11356-020-10649-8>
28. Motyka O., Pavlíková I., Bitta J., Frontasyeva M., Jančík P., Moss biomonitoring and air pollution modelling on a regional scale: delayed reflection of industrial pollution in moss in a heavily polluted region? **Environmental Science and Pollution Research** 27, 2020, 32569–32578, DOI:[10.1007/s11356-020-09466-w](https://doi.org/10.1007/s11356-020-09466-w)
29. Motyka O., Štrbová K., Zinicovscaia I., Chlorophyll content in two medicinal plant species following nano-TiO<sub>2</sub> exposure. **Bulletin of Environmental Contamination and Toxicology**, 2020, (IF 1.65), <https://doi.org/10.1007/s00128-020-02787-z>
30. Povar I., Zinicovscaia I., Spinu O., Ubaldini S., Mitina T., Lupascu T., Duca G., Thermodynamic analyzing of heavy metals precipitation for recovery from industrial wastewaters. **Environmental Engineering and Management**, 2020, Vol. 19, No. 2, 281-288.
31. Safonov A., Popova N., Andrushenko N., Boldyrev K., Yushin N., Zinicovscaia I., Investigation of materials for reactive permeable barrier in removing cadmium and chromium (VI) from aquifer near a solid domestic waste landfill. **Environmental Science and Pollution Research**, 2020, DOI: [10.1007/s11356-020-10743-x](https://doi.org/10.1007/s11356-020-10743-x)

32. Shammas M., Zinicovscaia I., Humelnicu D., Cepoi L., Nirwan V., Demčák Š., Fahmi A., Bioinspired elecetrosyn hybrid nanofibers based on biomass templated within polymeric matrix for metal removal from wastewater. **Polymer Bulletin**, 2020, 77:3207–3222, [DOI: 10.1007/s00289-019-02916-7](https://doi.org/10.1007/s00289-019-02916-7)
33. Svozilíková Krakovská A., Svozilík V., Zinicovscaia I., Vergel K., Jančík P., Analysis of Spatial Data from Moss Biomonitoring in Czech-Polish Border. **Atmosphere**, 2020, 11(11), 1237; <https://doi.org/10.3390/atmos1111237>
34. Tkachenko K., Frontasyeva M., Vasilev A., Avramov L., Shi L., Major and trace element content of wild life plants *Tribulus Terrestris* L. **PLANTS (Switzerland)**, 2020, 9, 1764, [DOI:10.3390/plants9121764](https://doi.org/10.3390/plants9121764)
35. Tugulan L., Secu M., Bercu V., Cotrubin M., Duliu O.G., Concordant ESR and TL depositional age of Romanian Plane loess in: A. K. Shukla (ed.) Spectroscopic Techniques for Archaeological and Cultural Heritage Research, **IOP Publishing**, Bristol, UK, 2020, <https://doi.org/10.1088/978-0-7503-2616-2ch5>
36. Vergel K., Zinicovscaia I., Yushin N., Gundorina S., Assessment of atmospheric deposition in Central Russia using moss biomonitor, neutron activation analysis and GIS technologies. **Journal of Radioanalytical and Nuclear Chemistry**, 2020, [DOI: 10.1007/s10967-020-07234-1](https://doi.org/10.1007/s10967-020-07234-1)
37. Yushin, N., Chaligava, O., Zinicovscaia, I., Vergel, K., & Grozdov D., Mosses as Bioindicators of Heavy Metal Air Pollution in the Lockdown Period Adopted to Cope with the COVID-19 Pandemic. **Atmosphere**, 11(11), 2020, [DOI: 10.3390/atmos11111194](https://doi.org/10.3390/atmos11111194)
38. Zinicovscaia I., Cepoi L., Rudi L., Chiriac T., Grozdov D., Pavlov S., Djur S., Accumulation of Dy, Sm, Tb, La, Nd and Yb by *Arthospira platensis* and their effect on biomass biochemical composition. **Journal of Rare Earths**, 2020, IF 3.1, <https://doi.org/10.1016/j.jre.2020.07.019>
39. Zinicovscaia I., Grozdov D., Yushin N., Abdusamadzoda D., Gundorina S., Rodlovskaya E., Kristavchuk O., Metal removal from chromium containing synthetic effluents by *Saccharomyces cerevisiae*. **Desalination and Water Treatment**, 2020, [DOI: 10.5004/dwt.2020.24987](https://doi.org/10.5004/dwt.2020.24987)
40. Zinicovscaia I., Gundorina S., Vergel K., Grozdov D., Ciocarlan A., Aricu A., Dragalin I., Ciocarlan N., Elemental analysis of Lamiaceae medicinal and aromatic plants growing in the Republic of Moldova using neutron activation analysis. **Phytochemistry Letters**, 35 , 2020, 119-127, (IF 1.338), <https://doi.org/10.1016/j.phytol.2019.10.009>
41. Zinicovscaia I., Management of the Quality of the Air in the Republic of Moldova Based on the Moss Biomonitoring Data. In book: **Proceedings of the Fourteenth International Conference on Management Science and Engineering Management**, J. Xu et al. (Eds.): 2020, p.311-325, [DOI: 10.1007/978-3-030-49829-0\\_22](https://doi.org/10.1007/978-3-030-49829-0_22)
42. Zinicovscaia I., Safonov A., Boldyrev K., Gundorina S., Yushin N., Petuhov O., Popova N., Selective metal removal from chromium-containing synthetic effluents using *Shewanella xiamenensis* biofilm supported on zeolite. **Environmental Science and Pollution Research**, 2020; 27:10495–10505, <https://doi.org/10.1007/s11356-020-07690-y>
43. Zinicovscaia I., Safonov A., Zelenina D., Ershova Y., Boldyrev K., Evaluation of biosorption and bioaccumulation capacity of cyanobacteria *Arthospira (spirulina) platensis* toward radionuclides. **Algal research**, 51, 2020, 102075, IF 4.008, <https://doi.org/10.1016/j.algal.2020.102075>
44. Zinicovscaia I., Sturza R., Duliu O. G., Grozdov D., Gundorina S., Ghendov-Mosanu A., Duca G., Determination of major and minor elements in Moldavan fruits by neutron activation analysis and assessment of their provenance. **International Journal of Environmental Research and Public Health**, 2020,17, 7112, (IF 2.849), [doi:10.3390/ijerph17197112](https://doi.org/10.3390/ijerph17197112)
45. Zinicovscaia I., Yushin N., Abdusamadzoda D., Grozdov D., Humelnicu I., Ignat M., Humelnicu D., Removal of vanadium ions from aqueous solutions using different type of hydroxyapatites: adsorption isotherm, kinetics and thermodynamic studies. **Accepted by Environmental Engineering and Management Journal**, 2020
46. Zinicovscaia I., Yushin N., Abdusamadzoda D., Grozdov D., Shvetsova M., Efficient Removal of Metals from Synthetic and Real Galvanic Zinc-Containing Effluents by Brewer's Yeast *Saccharomyces cerevisiae*. **Materials**, 2020, 13, 3624; [doi:10.3390/ma13163624](https://doi.org/10.3390/ma13163624)
47. Zinicovscaia I., Yushin N., Grozdov D., Boldyrev K., Rodlovskaya E., Ostrovnaya T., Metal removal from synthetic and real galvanic nickel – containing effluents by *Saccharomyces cerevisiae*. **Chemistry and Ecology**, 2020, <https://doi.org/10.1080/02757540.2020.1817404>
48. Zinicovscaia I., Yushin N., Grozdov D., Humelnicu I., Humelnicu D., Mitina T., Removal of chromium(III) ions from aqueous solutions using different types of hydroxyapatites. **Desalination and Water Treatment** 204 297–305, 2020, [DOI:10.5004/dwt.2020.26267](https://doi.org/10.5004/dwt.2020.26267)
49. Zinicovscaia I., Yushin N., Grozdov D., Vergel K., Ostrovnaya T., Rodlovskaya E., Metal removal from complex copper containing effluents by waste biomass of *Saccharomyces cerevisiae*. **Ecological Chemistry and Engineering S**, 2020, [DOI: 10.2478/eces-2020-0027](https://doi.org/10.2478/eces-2020-0027)
50. Zinicovscaia I., Yushin N., Grozdov D., Vergel K., Popova N., Artemiev G., Safonov A., Metal Removal from Nickel-Containing Effluents Using Mineral-Organic Hybrid Adsorbent. **Materials**, 2020, 13(19), 4462; <https://doi.org/10.3390/ma13194462>
51. Zinicovscaia I., Yushin N., Pantelica A., Demčák Š., Mitu A., Apostol A.I., Lithium biosorption by *Arthospira (Spirulina) platensis* biomass. **Ecological Chemistry and Engineering S**, 2020, [DOI: 10.2478/eces-2020-0017](https://doi.org/10.2478/eces-2020-0017)
52. Zinicovscaia I., Yushin N., Vegel K., Grozdov D., Moss Biomonitoring in Former Soviet Union Countries: A Review. In **Handbook of Research on Emerging Developments and Environmental Impacts of Ecological Chemistry** IGI Global, 2020, [DOI: 10.4018/978-1-7998-1241-8.ch024](https://doi.org/10.4018/978-1-7998-1241-8.ch024)
53. Горбунов А.В., Ермолов Б.В., Ляпунов С.М., Окина О.И., Фронтасьева М.В., Павлов С.С., Особенности распределения макро- и микроэлементов в урбанизированных средах городов Карелии. **Экология человека**, 2020, [DOI: 10.33396 / 1728-0869-2020-8-4-14](https://doi.org/10.33396/1728-0869-2020-8-4-14)
54. Горелова С.В., Горбунов А.В., Ляпунов С.М., Окина О.И., Фронтасьева М.В., Козлов С.А., Оценка воздействия крупной промышленной агломерации на загрязнение воздушной среды и почвы тяжелыми и токсичными металлами (На примере г. Тулы). **Экология урбанизированных территорий**, 2020, [DOI:10.24411/1816-1863-2020-12006](https://doi.org/10.24411/1816-1863-2020-12006)
55. Зиньковская И., Ивлиева А. Л., Петрицкая Е. Н., Рогаткин Д. А., Неожиданный эффект длительного перорального приема на-ночастиц серебра на рождаемость у мышей. **Экология человека**. 2020, № 10. С. 23–30. (Zinicovscaia I., Ivlieva A. L., Petritskaya E. N., Rogatkin D. A., Unexpected Reproductive Effect of Prolonged Oral Administration of Silver Nanoparticles in Laboratory Mice. *Ekologiya cheloveka [Human Ecology]*. 2020, 10, pp. 23-30), [DOI: 10.33396/1728-0869-2020-10-23-30](https://doi.org/10.33396/1728-0869-2020-10-23-30)
56. Кабылова А.С., Омарова Н.М., Фронтасьева М.В., Мониторинг атмосферных выпадений тяжелых элементов на территории Карагандинской области на основе анализа мхов-биоиндикаторов методом нейтронного активационного анализа. **Труды конференции в Башкирском университете**, 2020, <https://bashedu.ru/ru/novosti-khimicheskogo-fakulteta/sbornik-tezisov-v-vserossiiskoi-molodezhnoi-konferentsii>

57. Кабылова А.С., Омарова Н.М., Чалигава О., Фронтасьева М.В., Мхи как биоиндикаторы воздушных загрязнений тяжелыми металлами и другими токсичными элементами в Центральном Казахстане. Направлена в «Российскую академию естествознания "Студенческий научный форум 2020" научный журнал Академии Естествознания. **Препринт ОИЯИ** Р18-61-2020, 2020, <https://scienceforum.ru/2020/article/2018019807>
58. Лавриненко Ю.В., Плиева А.М., Христозова Г., Фронтасьева М.В., Зиньковская И., Ткаченко К.Г., Элементный состав травяных чаев, исследованных с помощью инструментального нейтронного активационного анализа и атомной абсорбционной спектрометрии. **Химия растительного сырья** 3, 305-314, 2020
59. Швецова М.С., Каманина И.З., Мададзада А.И., Нехорошков П.С., Юшин Н.С., Зиньковская И.И., Павлов С.С., Фронтасьева М.В., Определение следовых элементов (Cu, Sb, Pb, V, Zn) на территории рекреационных зон Москвы с помощью техники «мох в мешках». **Успехи современного естествознания**, 2020, DOI: [10.17513/use.37461](https://doi.org/10.17513/use.37461)
60. Швецова М.С., Каманина И.З., Мададзада А.И., Нехорошков П.С., Юшин Н.С., Зиньковская И.И., Павлов С.С., Фронтасьева М.В., Определение следовых элементов (Cu, Sb, Pb, V, Zn) на территории рекреационных зон Москвы с помощью техники «мох в мешках». **Успехи современного естествознания**, 2020, 8. 74-82; DOI [10.17513/use.37461](https://doi.org/10.17513/use.37461)