

LIST OF THE PUBLICATIONS

1. Agharabi, A., Jeddi, E.M., Karrat, L., Har, N., Ntarmouchant, A., **Forray, F.L.**, Gourari, L., Balica, C., Mircescu, C.V., Mali, B., & Bedeleian, H. (2025), Hydro-chemical study and assessment of drinking and irrigation water quality in the Oued Fez watershed (Fez city and surrounding areas, Saïs Basin, Morocco). *Environmental Advances*, 20: 100639. 10.1016/j.envadv.2025.100639 (IF: 5.2)
2. Onac, B.P., Feurdean, A., Haliuc, A., Hutchinson, S.M., **Forray, F.L.**, Demjén, A., Vulpoi, A., Dumbravă, R., Lőrincz, A., Ghemiş, C., Nae, A., Lascu, V.T., Gogâltan, F., & Meleg, I.N. (2025), Environmental changes in East-Central Europe from a Middle to Late Holocene Romanian cave sediment record. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 659. 10.1016/j.palaeo.2024.112672 (IF: 2.7)
3. **Forray, F. L.**, Dumitru, O. A., Atlas, Z. D., and Onac, B. P., (2024), Past anthropogenic impacts revealed by trace elements in cave guano: *Chemosphere*, v. 360, p. 142447. doi: 10.1016/j.chemosphere.2024.142447 (IF: 8.1)
4. Rudolph, M., Sahu, K.C., Savva, N., Szilágyi, A., Hórvölgyi, Z., Márton, P., Tajti, Á., Szép, K., Balog, B., Tripathi, M.K., Manikantan, H., **Forray, F.L.**, Manga, M., & Hantz, P. (2024), Bubble ascent and rupture in mud volcanoes. *Royal Society Open Science*, 11 (7): 231555. 10.1098/rsos.231555 (IF: 2.9)
5. Savin, C.F., Forray, F.L., Tănăsolia, C., & Begy, R.-C. (2023), Radiological assessment of carbonated spring waters in regard to the lithological characteristics of Harghita county, Romania. *The European Physical Journal Special Topics*, 232 (7): 977-996. 10.1140/epjs/s11734-023-00879-5. (IF: 2.8)
6. Mosonyi, E., & **Forray, F.L.** 2022, Metamorphic tourmaline and its petrogenetic significance from the Maramureş Mountains (East Carpathians, Romania). *Austrian Journal of Earth Sciences*, 115 (1): 146-166. <https://doi.org/10.17738/ajes.2022.0007> (IF: 0.8)
7. Nicula, A. M., Ionescu, A., Pop, I.-C., Roba, C., **Forray, F.L.**, Orăşeanu, I., Baciuc, C., 2021. Geochemical features of the thermal and mineral waters from the Apuseni Mountains (Romania). *Frontiers in Earth Science* 9, 648179. <https://doi.org/10.3389/feart.2021.648179> (IF: 3.23)
8. Faur, L., Draguşin, V., Dimofte, D., Forray, F.L., Ilie, M., Marin, C., Mirea, I.-C., Panaiotu, C., Manăilescu, C., Soare, B., Timar-Gabor, A., Tirla, L., 2021. Multi-proxy study of a Holocene soil profile from Romania and its importance for speleothem based paleoenvironmental reconstructions. *Minerals* 11(8), 873. <https://doi.org/10.3390/min11080873> (IF: 2.644)
9. Remizovschi, A., Carpa, R., **Forray, F.L.**, Chiriac, C., Roba, C.-A., Beldean-Galea, S., Andrei, A.-S., Szekeres, E., Baricz, A., Lupan, I., Knut, R., & Coman, C. 2020, Mud volcanoes and the presence of PAHs. *Scientific Reports*, 10, 1253. doi.: 10.1038/s41598-020-58282-2 (IF: 4.525)
10. Cleary, D.M., Feurdean, A., Tanţau, I., **Forray, F.L.** 2019, Pollen, $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ guano-derived record of late Holocene vegetation and climate in the southern Carpathians, Romania. *Review of Palaeobotany and Palynology*, doi: 10.1016/j.revpalbo.2019.03.002. (IF: 2.002)
11. Florea, L.J., Banks, S., **Forray, F.L.**, 2019. Importance of suspended sediments and dissolved organic carbon to carbon exports in karst - the Vadu Crişului karst basin in the Pădurea Craiului Mountains, Romania. *Chemical Geology*, 527, 118735. doi:10.1016/j.chemgeo.2018.04.015 (IF:3.347)
12. Cleary, D.M., Onac, B.P., Tantau, I., **Forray, F.L.**, Wynn, J.G., Ionita, M., Tămaş, T., 2018. A guano-derived $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ record of climate since the Medieval Warm Period

- in NW Romania. *Journal of Quaternary Science* 33 (6):677-688. doi:10.1002/jqs.3044 (IF: 2.324)
13. Sarbu, S.M., Flot, J-F., Aerts, J.W., Van Spanning, R.J.M., Baciu, C., Ionescu, A., Kis, B-M, Incze, R., Sikó-Barabási, S., Para, Z., Hegyeli, B., Atudorei, V., Barr, C., Neelson, K.H., **Forray, F.L.**, Lascu, C., Popa, R., 2018. Sulfur Cave (Romania), an extreme environment with microbial mats in a CO₂-H₂S/O₂ gas chemocline dominated by mycobacteria. *International Journal of Speleology* 47 (2):173-187. doi:10.5038/1827-806X.47.2.2164 (IF:1.559)
 14. Cleary, D.M., Wynn, J.G., Ionita, M., **Forray, F.L.**, Onac, B.P., 2017. Evidence of long-term NAO influence on East-Central Europe winter precipitation from a guano-derived $\delta^{15}\text{N}$ record. *Scientific Reports* 7(1), 14095. doi.org/10.1038/s41598-017-14488-5 (IF:4.259)
 15. Drăgușin, V., Balan, S., Blamart, D., **Forray, F.L.**, Marin, C., Mirea, I., Nagavciuc, V., Perșoiu, A., Tîrlă, L., Tudorache, A., Vlaicu, M., 2017. Transfer of environmental signals from surface to the underground at Ascunsă Cave, Romania. *Hydrology and Earth System Sciences* 21(10), 5357-5373. <https://doi.org/10.5194/hess-21-5357-2017> (IF:4.437)
 16. Dumitru, O.A., **Forray, F.L.**, Fornós, J.J., Ersek, V., Onac, B.P., 2017. Water isotopic variability in Mallorca: a path to understanding past changes in hydroclimate. *Hydrological Processes* 31(1), 104-116. doi. 10.1002/hyp.10978. (IF:3.014)
 17. Cleary, D.M., Onac, B.P., **Forray, F.L.**, Wynn, J.G., 2016. Effect of diet, anthropogenic activity, and climate on $\delta^{15}\text{N}$ values of cave bat guano. *Palaeogeography, Palaeoclimatology, Palaeoecology* 461, 87-97. doi: 10.1016/j.palaeo.2016.1008.1012. (IF:2.578)
 18. **Forray, F.L.**, Onac, B.P., Tanțău, I., Wynn, J.G., Tămaș, T., Coroiu, I., Giurgiu, A., 2015. A Late Holocene environmental history of a bat guano deposit from Romania: an isotopic, pollen and microcharcoal study. *Quaternary Science Reviews* 127, 141-154 doi: 10.1016/j.quascirev.2015.05.022. (IF:4.571)
 19. Onac, B.P., Hutchinson, S.M., Geantă, A., **Forray, F.L.**, Wynn, J.G., Giurgiu, A.M., Coroiu, I., 2015. A 2500-year Late Holocene multi-proxy record of vegetation and hydrologic changes from a cave guano-clay sequence in SW Romania. *Quaternary Research* 83, 437-448. doi: 10.1016/j.yqres.2015.01.007. (IF:2.583)
 20. Onac, B.P., **Forray, F.L.**, Wynn, J.G. & Giurgiu, A.M. 2014, Guano-derived $\delta^{13}\text{C}$ -based paleo-hydroclimate record from Gaura cu Musca Cave, SW Romania. *Environmental Earth Sciences*, 71 (9): 4061-4069. DOI 10.1007/s12665-013-2789-x. (IF:1.572)
 21. **Forray, F.L.**, Smith, A.M.L., Navrotsky, A., Wright, K., Hudson-Edwards, K.A. & Dubbin, W.E. 2014, Synthesis, characterization and thermochemistry of synthetic Pb-As, Pb-Cu and Pb-Zn jarosites. *Geochimica et Cosmochimica Acta*, 127: 107-119. (IF:4.250)
 22. Servida, D., Comero, S., Dal Santo, M., De Capitani, L., Grieco, G., Marescotti, P., Porro, S., **Forray, F.L.**, Gál, Á. & Szakács, A. 2013, Waste rock dump investigation at Roșia Montană gold mine (Romania): a geostatistical approach. *Environmental Earth Sciences*, 70 (1): 13-31. (IF:1.572)
 23. Pop, D., Ionescu, C., **Forray, F.**, Tămaș, C.G. & Benea, M. 2011, "Transylvanian gold" of hydrothermal origin: an EMPA study in an archaeological provenancing perspective. *European Journal of Mineralogy*, 23 (6): 911-923. (IF:1.486)

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25. **Forray, F.L.**, Drouet, C. & Navrotsky, A. 2005, Thermochemistry of yavapaiite $KFe(SO_4)_2$: Formation and decomposition. *Geochimica et Cosmochimica Acta*, 69 (8): 2133-2140. **(IF:3.897)**
26. Navrotsky, A., **Forray, F.L.** & Drouet, C. 2005, Jarosite stability on Mars. *Icarus*, 176 (1): 250-253. **(IF:3.244)**
27. Lane, M.D., Bishop, J.L., Dyar, M.D., Cloutis, E., **Forray, F.L.**, Hiroi, T., 2005. Integrated spectroscopic studies of anhydrous sulfate minerals. *Lunar and Planetary Science XXXVI*, #1442.
28. **Forray, F.L.** & Hallbauer, D.K. 2000, A study of the pollution of the Aries River (Romania) using capillary electrophoresis as analytical technique. *Environmental Geology*, 39 (12): 1372-1384. **(IF:0.424)**
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30. **Forray, F.**, 2002. Environmental pollution in the Aries river catchment basin. Case study: Rosia Montana mining exploitation. *Studia UBB, Geologia* Special Issue 1, 189-198.
31. **Forray, F.L.**, 2001a. Application of factor analysis in study of pollution of the Aries River (Apuseni Mountains, Romania). *Studia UBB, Geologia* XLVI, 47-58. Romanian.
32. **Forray, F.L.**, 2001b. Using pollution index to establish the contamination level of Aries River (Apuseni Mountains, Romania). *Studia UBB, Geologia* XLVI, 153-159. Romanian.
33. Onac, B.P., **Forray, F.L.**, 2000. Camiro 1.0 - The Romanian cave minerals database program. *Romanian Journal of Mineralogy* 80, 1, 57-62.
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35. **Forray, F.**, Andreica, A., 1997. Telur 1.0 - Identification system for minerals. *Studia UBB, Geologia* XLII, 13-21.
36. Ghergari, L., Tămaş, T., Damm, P., **Forray, F.**, 1997. Hydrothermal paleokarst in Pestera din Valea Rea (Bihor Mountains, Romania). *Theoretical and Applied Karstology* 10, 115-125.
37. Ghergari, L., **Forray, F.**, Andrei, V., 1996. Contributions to the petrographic and mineralogical study of the rock salt from Cacica (Suceava county). *Studia UBB, Geologia* XLI, 165-180.
38. **Forray, F.**, Bucur, I.I., 1995. Some new data concerning the upper Cretaceous deposits from Chergheş (Hunedoara country). *Studia UBB, Geologia* XL, 29-38.
39. Mârza, I., Ghergari, L., **Forray, F.**, Tămaş, C.G., 1995. The glauch - glamm formation associated to the hydrothermal deposits from the Apuseni Mountains: Genetic and metallogenetic mechanism. *Studia UBB, Geologia* XL, 185-194.
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Books and book chapters

1. Lee, F., **Forray, F.L.** and Banks, S.M., 2020. Water isotopes, carbon exports, and landscape evolution in the Vadu Crișului karst basin of Transylvania, Romania. In: C. Bertrand, S. Denimal, M. Steinmann and P. Renard (Editors), Eurokarst 2018, Besançon. Advances in the hydrogeology of karst and carbonate reservoirs. Springer, pp. 31-46.
2. **Forray, F.L.** 2019, Metaliferi Mountains: Zidită Cave. In: Cave and Karst Systems of Romania (Ponta, G.M., & Onac, B.P., Eds.), Springer, p. 271-275.
3. **Forray, F.L.** 2019, Pădurea Craiului Mountains: Izbândiș Cave System. In: Cave and Karst Systems of Romania (Ponta, G.M., & Onac, B.P., Eds.), Springer: p. 399-404.
4. Bucur I., Balica C., Bedeleian H., Benea M., Chira C., Codrea V., Filipescu S., **Forray F.**, Gal A., Popa M., Săsăran E., Tanțău, I., 2008. Repere geologice în Apuseni și sud-vestul Carpaților Meridionali. Ed. Presa Universitară Clujeană, Cluj-Napoca, 225 p.
5. **Forray, F.L.**, 2003, A nehézfém-szennyezés megállításának vizsgálata a verespataki bányavidéken (Research on the possibilities of stopping the heavy metal pollution in the Rosia Montana mining region). In Tanulmányok a természettudományok tárgyköréből. (Ujvárosi, L. (Ed.), Editura Scientia, Cluj-Napoca, 247-273 p.
6. **Forray, F.L.**, 2002, A nehézfémek csigavázba történő bioakkumulációjának használata környezetszennyezési felméréseknél (Bioaccumulation of heavy metals in gastropods shells as tool for environmental pollution monitoring). In Tanulmányok a természettudományok tárgyköréből. (Nagy, L. (Ed.), Editura Scientia, Cluj-Napoca, 203-227 p.