

# Discover the vast area of expertise of LabEx RESSOURCES21 through a selection of excellent articles below

## Our read suggestions of end 2021 – beginning 2022

◆ **Multiple sulfur isotopes signature of thermochemical sulfate reduction (TSR): insights from Alpine Triassic Evaporites (2021)** by G. Barré, É. Thomassot, R. Michels, P. Cartigny, P. Strzeczynski, and L. Truche; Earth and Planetary Science Letters 576, 117231.

Article in HAL: <https://hal.archives-ouvertes.fr/hal-03396230v1>

Article on the Journal website: <https://doi.org/10.1016/j.epsl.2021.117231>

◆ **New insights in the leaching kinetics of cathodic materials in acidic chloride media for lithium-ion battery recycling (2021)** by Xuan, W., Braga, A de Sousa; Korbel, C., Chagnes, A; Hydrometallurgy, 204, 105705.

Article in HAL: <https://hal.inria.fr/hal-03297024/>

Article on the Journal website: <https://doi.org/10.1016/j.hydromet.2021.105705>

◆ **Towards the efficient flotation of monazite from silicate-rich tailings with fatty acids collectors using a lanthanum salt as a selective phosphate activator (2021)** by Geneyton, A., Filippov, L.O., Heinig, T., Buaron, N., Menad N.-E; Minerals Engineering 160 106704.

Article in HAL: <https://hal.archives-ouvertes.fr/hal-03493769>

Article on the Journal website: <https://doi.org/10.1016/j.mineng.2020.106704>.

◆ **Tungsten (VI) speciation in hydrothermal solutions up to 400°C as revealed by in-situ spectroscopy (2022)** by E. Carocci, L. Truche, M. Cathelineau, M.-C. Caumon, and E. F. Bazarkina; Geochimica et Cosmochimica Acta 317 306-324.

Article in HAL: <https://hal.archives-ouvertes.fr/hal-03431203v1>

Article on the Journal website: <https://doi.org/10.1016/j.gca.2021.11.004>

◆ **U/Pb Geochronology of Wolframite by LA-ICP-MS; Mineralogical Constraints, Analytical Procedures, Data Interpretation, and Comparison with ID-TIMS (2021)** by P. A. Carr, J. Mercadier, M. Harlaux, R. L. Romer, E. Moreira, H. Legros, M. Cuney, C. Marignac, J. Cauzid, L. Salsi, A. Lecomte, O. Rouer, and C. Peiffert; Chemical Geology, 120511.

Article in HAL: <https://hal.archives-ouvertes.fr/hal-03566998v1>

Article on the Journal website: <https://doi.org/10.1016/j.chemgeo.2021.120511>

◆ **Combined Omics Approaches Reveal Distinct Responses between Light and Heavy Rare Earth Elements in *Saccharomyces Cerevisiae* (2022)** by N. Grosjean, M. Le Jean, J. Armengaud, A. Schikora, M. Chalot, E. M. Gross, and D. Blaudez; Journal of Hazardous Materials 425, 127830.

Article in HAL: <https://hal.univ-lorraine.fr/RESSOURCES21/hal-03514152v1>

Article on the Journal website: <https://doi.org/10.1016/j.jhazmat.2021.127830>

- ◆ **Physico-chemical characteristics of spodumene concentrate and its thermal transformations (2021)** by Fosu, A.Y., Kanari, N., Bartier, D., Hodge, H., Vaughan, J., Chagnes, A; *Materials* 14, 23, 7423.  
Article in HAL: <https://hal.archives-ouvertes.fr/hal-03465518/>  
Article on the Journal website: <https://doi.org/10.3390/ma14237423>
  
- ◆ **A new method for recovering rare earth elements from the hyperaccumulating fern *Dicranopteris linearis* from China (2021)** by B. Jally, B. Laubie, Z. Chour, L. Muhr, R. Qiu, J. L. Morel, Y. Tang, and M.-O. Simonnot; *Minerals Engineering* 166, 106879.  
Article in HAL: <https://hal.archives-ouvertes.fr/hal-03190009v1>  
Article on the Journal website: <https://doi.org/10.1016/j.mineng.2021.106879>
  
- ◆ **Free Eu (III) Determination by Donnan Membrane Technique with Electrochemical Detection: Implementation and Evaluation (2021)** by N. Janot, J. E. Groenenberg, A. Otero-Fariña, and J. P. Pinheiro; *Aquatic Geochemistry* 27, 127-40.  
Article in HAL: <https://hal.univ-lorraine.fr/hal-03145175v1>  
Article on the Journal website: <https://doi.org/10.1007/s10498-021-09392-4>
  
- ◆ **Cytotoxicity and Genotoxicity of Lanthanides for *Vicia Faba* L. Are Mediated by Their Chemical Speciation in Different Exposure Media (2021)** by A. Romero-Freire, V. González, J.E. Groenenberg, H. Qiu, M. Auffan, S. Cotelle, and L. Giamberini; *Science of The Total Environment* 790, 148223.  
Article in HAL: <https://hal.archives-ouvertes.fr/hal-03271404v1>  
Article on the Journal website: <https://doi.org/10.1016/j.scitotenv.2021.148223>
  
- ◆ **Gold mining in French Guiana: A multi-criteria classification of mining projects for risk assessment at the territorial scale (2021)** by O. Scammacca, Y. Gunzburger, and R. Mehdizadeh; *The Extractive Industries and Society* 8, 1, 32-43.  
Article in HAL: <https://hal.archives-ouvertes.fr/hal-02946557v1>  
Article on the Journal website: <https://doi.org/10.1016/j.exis.2020.06.020>
  
- ◆ **Biogeochemical cycling of nickel and nutrients in a natural high-density stand of the hyperaccumulator *Phyllanthus rufuschaneyi* in Sabah, Malaysia (2022)** by R. Tisserand, P. N. Nkrumah, A. van der Ent, S. Sumail, B. Zeller, and G. Echevarria; *Chemoecology* 32, 15-29.  
Article in HAL: <https://hal.archives-ouvertes.fr/hal-03385804v1>  
Article on the Journal website: <https://doi.org/10.1007/s00049-021-00363-3>
  
- ◆ **Effect of Sb on Precipitation of Biogenic Minerals during the Reduction of Sb-Bearing Ferrihydrites (2011)** by A. Zegeye, C. Carteret, M. Mallet, D. Billet, T. Ferté, C. S. Chang, T. Hauet, M. Abdelmoula; *Geochimica et Cosmochimica Acta* 309, 96-111.  
Article in HAL: <https://hal.archives-ouvertes.fr/hal-03329112v1>  
Article on the Journal website: <https://doi.org/10.1016/j.gca.2021.06.021>

# Articles published in 2021

## ➤ 56 publications, with 34 mentioning LabEx RESSOURCES21 (in bold)

- Abu-Fatima, M.; Marignac, C.; Cathelineau, M.; Boiron, M. -C. (2021) Metallogeny of a Pan-African oceanic arc: VHMS and gold deposits in the Ariab-Arbaat belt, Haya terrane, Red Sea Hills (Sudan) *GONDWANA RESEARCH*, 1342-937X 1878-0571; OCT 2021, 98 , 76-106, 10.1016/j.gr.2021.06.001
- Aharchaou, I., Maul, A. , Pons, M-N, Pauly, D., Poirot, H, Flayac, J., Rodius, F., Rousselle, P., Beuret, M., Battaglia, E., Vignati D.A.L. (2021) Effects and bioaccumulation of Cr(III)\, Cr(VI) and their mixture in the freshwater mussel *Corbicula fluminea*, hal-03405490.
- Ballouard, C., Elburg, MA, Harlov, D., Tappe, S., Knoper, M., Eglinger, A. et Andreoli M (2021) Late-Orogenic Juvenile Magmatism of the Mesoproterozoic Namaqua Metamorphic Province, South Africa, and Relationships to Granulite-Facies REE-Th and Iron Oxide Mineralizations ». *Journal of Petrology* 62, n° 8 (23 septembre 2021): egab059. <https://doi.org/10.1093/petrology/egab059>.
- Barré, G., Thomassot, E., Michels, R., Cartigny, P., Strzeczynski, P., Truche L. (2021) Multiple Sulfur Isotopes Signature of Thermochemical Sulfate Reduction (TSR): Insights from Alpine Triassic Evaporites ». *Earth and Planetary Science Letters* 576 , 117231. <https://doi.org/10.1016/j.epsl.2021.117231>.
- Bhoja, S.K., Tripathy, SK, Murthy, YR, Ghosh, T.K., Kumar, C.R., et Chakraborty D. (2021) . Influence of Mineralogy on the Dry Magnetic Separation of Ferruginous Manganese Ore—A Comparative Study . *Minerals* 11, n° 2 (31 janvier 2021): 150. <https://doi.org/10.3390/min11020150>.
- Cardoso-Fernandes, J., Silva, J., Perrotta, M.M., Lima, A., Teodoro, A.C., Ribeiro, MA, Dias, F., Barrès, O., Cauzid, J., et Roda-Robles E. (2021) « Interpretation of the Reflectance Spectra of Lithium (Li) Minerals and Pegmatites: A Case Study for Mineralogical and Lithological Identification in the Fregeneda-Almendra Area ». *Remote Sensing* 13, n° 18 (15 septembre 2021): 3688. <https://doi.org/10.3390/rs13183688>.
- Carocci, E. , Truche, L., Cathelineau, M., Caumon, MC, Bazarkina E. (2021) Tungsten (VI) speciation in hydrothermal solutions up to 400°C as revealed by in-situ spectroscopy *Geochimica et Cosmochimica Acta Elsevier* 317 306-324 10.1016/j.gca.2021.11.004 hal-03431203
- Carocci, E., Marignac, C., Cathelineau, M., Truche, L., Poujol, M., Boiron MC, et Pinto F. (2021) . « Incipient Wolframite Deposition at Panasqueira (Portugal): W-Rich Rutile and Tourmaline Compositions as Proxies for the Early Fluid Composition ». *Economic Geology* 116, n° 1 (1 janvier 2021): 123-46. <https://doi.org/10.5382/econgeo.4783>.
- Carr, P. A., Mercadier, J., Harlaux, M., Romer, R.L., Moreira, E., Legros, H., Cuney M. (2021) U/Pb Geochronology of Wolframite by LA-ICP-MS; Mineralogical Constraints, Analytical Procedures, Data Interpretation, and Comparison with ID-TIMS . *Chemical Geology*, septembre 2021, 120511. <https://doi.org/10.1016/j.chemgeo.2021.120511>.
- Combes, V, Eglinger, A., Andre-Mayer, AS, Teitler, Y., Heuret, A., Gibert, P., et Béziat D. (2021) Polyphase Gold Mineralisation at the Yaou Deposit, French Guiana . *Geological Society, London, Special Publications*, 16 avril 2021, SP516-2020-29. <https://doi.org/10.1144/SP516-2020-29>.
- Dugamin, E.J.M., Richard, A., Cathelineau, M. et al. (2021) Groundwater in sedimentary basins as potential lithium resource: a global prospective study. *Sci Rep* 11, 21091. <https://doi.org/10.1038/s41598-021-99912-7>
- Ent, A. van der, Nkrumah, P.N., Aarts, M.G., Baker A.J., Degryse, F., Wawryk, C., Kirby J.K. (2021) Isotopic Signatures Reveal Zinc Cycling in the Natural Habitat of Hyperaccumulator *Dichapetalum Gelonioides* Subspecies from Malaysian Borneo, *BMC Plant Biology* 21, n° 1 (décembre 2021): 437. <https://doi.org/10.1186/s12870-021-03190-4>.

- Essarraj, S., Boiron, MC, Cathelineau, M., Peiffert C. (2021) Evaporitic Brines and Copper-Sulphide Ore Genesis at Jbel Haïmer (Central Jebilet, Morocco), *Ore Geology Reviews* 129 (février 2021): 103920. <https://doi.org/10.1016/j.oregeorev.2020.103920>.
- Fosu, A.Y., Kanari, N., Bartier, D., Hodge, H., Vaughan, J., Chagnes, A. (2021) Physico-Chemical Characteristics of Spodumene Concentrate and Its Thermal Transformations, *MATERIALS* 1996-1944, DEC2021,14, 23, 7423, 10.3390/ma14237423
- Foucaud, Y., Lainé, J., Filippov, L., Barrès, O., Kim, W., Filippova, I., Pastore, M., Lebègue, S., Badawi, M. (2021) Adsorption Mechanisms of Fatty Acids on Fluorite Unraveled by Infrared Spectroscopy and First-Principles Calculations, *Journal of Colloid and Interface Science* 583 , 692-703. <https://doi.org/10.1016/j.jcis.2020.09.062>.
- France, L., Brouillet, F., Lang S. (2021) Early Carbonatite Magmatism at Oldoinyo Lengai Volcano (Tanzania): Carbonatite–Silicate Melt Immiscibility in Lengai I Melt Inclusions . *Comptes Rendus Géoscience* 353, n° S2 (8 décembre 2021): 1-16. <https://doi.org/10.5802/crgeos.99>.
- Geneyton, A., Filippov, L.O. ,Heinig, T., Buaron, N. , Menad N.-E. (2021) Towards the Efficient Flotation of Monazite from Silicate-Rich Tailings with Fatty Acids Collectors Using a Lanthanum Salt as a Selective Phosphate Activator, *Minerals Engineering* 160 106704. <https://doi.org/10.1016/j.mineng.2020.106704>.
- Geneyton, A., Foucaud, Y., Filippov, L.O. , Menad, N.-E., Renard, A. , Badawi M. (2020) Synergistic Adsorption of Lanthanum Ions and Fatty Acids for Efficient Rare-Earth Phosphate Recovery: Surface Analysis and Ab Initio Molecular Dynamics Studies ». *Applied Surface Science* 526 (octobre 2020): 146725. <https://doi.org/10.1016/j.apsusc.2020.146725>.
- Gigon, J., Mercadier, J., Annesley, I.R., Richard, A., Wygralak, A.S., Skirrow, R.G., Mernagh, T.P. , Ion Probe Team Nancy (2021) Uranium Mobility and Deposition over 1.3 Ga in the Westmoreland Area (McArthur Basin, Australia) ». *Mineralium Deposita* 56, n° 7 ,1321-44. <https://doi.org/10.1007/s00126-020-01031-2>.
- Gmar, S. et Chagnes A. (2019) Recent Advances on Electrodialysis for the Recovery of Lithium from Primary and Secondary Resources ». *Hydrometallurgy* 189 (novembre 2019): 105124. <https://doi.org/10.1016/j.hydromet.2019.105124>.
- Grosjean, N., Le Jean, M., Armengaud, J., Schikora, A., Chalot, M., Gross, E., Blaudez D. (2021) Combined Omics Approaches Reveal Distinct Responses between Light and Heavy Rare Earth Elements in *Saccharomyces Cerevisiae* ». *Journal of Hazardous Materials*, novembre 2021, 127830. <https://doi.org/10.1016/j.jhazmat.2021.127830>.
- Harlaux, M., Marignac, C., Mercadier, J., Pujol, M., Boiron, M.C., Kouzmanov, K., Camacho A. (2021) « Multistage development of a hydrothermal W deposit during the Variscan late-orogenic evolution: the Puy-les-Vignes breccia pipe (Massif Central, France) ». Édité par E. Marcoux. *BSGF - Earth Sciences Bulletin* 192 (2021): 33. <https://doi.org/10.1051/bsgf/2021023>.
- Harlov, D., Ballouard, C., Elburg, M., Knoper, M., Wilke, F., Bin Ning W, Andreoli M.A.G. (2020) Genesis of Monazite-Rich, Orthopyroxene-Bearing Veins in the Kliphoog Area of the Concordia Granite, Springbok, Namaqualand, South Africa: Sources, Fluids, and the Mobility of Actinides and REE ». *Lithos* 376-377: 105762. <https://doi.org/10.1016/j.lithos.2020.105762>.
- Jally, B. Laubie, B., Chour Z., Muhr, L., Qiu, R., Morel J-L, Tang Y., Simonnot, M.-O. (2021) A new method for recovering rare earth elements from the hyperaccumulating fern *Dicranopteris linearis* from China  
MINERALS ENGINEERING 0892-6875/JUN 1, 202, 166, 106879, 10.1016/j.mineng.2021.106879
- Janot, N., Groenenberg, J., Otero-Fariña, A., Pinheiro J. P. (2021) Free Eu(III) Determination by Donnan Membrane Technique with Electrochemical Detection: Implementation and Evaluation, *Aquatic Geochemistry* 27, n° 2 (juin 2021): 127-40. <https://doi.org/10.1007/s10498-021-09392-4>.
- Kanari, N., Menad, N. E., Filippov, L., Shallari, S., Allain, E., Patisson, F. , Yvon J. (2021) Some Aspects of the Thermochemical Route for the Valorization of Plastic Wastes, Part I: Reduction of Iron Oxides by

Polyvinyl Chloride (PVC), *Materials* 14, n° 15 (24 juillet 2021): 4129.  
<https://doi.org/10.3390/ma14154129>.

Kokh, M., Luais, B., Truche, L., Boiron, M.-C., Peiffert, C., Schumacher C. (2021) Quantitative Measurement of Rare Earth Elements in Brines: Isolation from the Charged Matrix Versus Direct LA-ICP-MS Measurements – A Comparative Study, *Geostandards and Geoanalytical Research* 45, n° 2 (juin 2021): 341-58.  
<https://doi.org/10.1111/ggr.12376>.

Lacroix, E., Cauzid, J., Teitler, Y., Cathelineau M. (2021) Near Real-Time Management of Spectral Interferences with Portable XRF Spectrometers: Application to Sc Quantification in Nickeliferous Laterite Ores, *Geochemistry: Exploration, Environment, Analysis*, geochem2021-015.  
<https://doi.org/10.1144/geochem2021-015>.

Laubie, B., Vaughan, J., et Simonnot M.O. (2021) Processing of Hyperaccumulator Plants to Nickel Products, In *Agromining: Farming for Metals*, édité par Antony van der Ent, Alan J.M. Baker, Guillaume Echevarria, Marie-Odile Simonnot, et Jean Louis Morel, 47-61. Cham: Springer International Publishing,  
[https://doi.org/10.1007/978-3-030-58904-2\\_3](https://doi.org/10.1007/978-3-030-58904-2_3).

Laurent, B., Merlin J. (2021) Investissement, anticipation, planification : la politique temporelle des activités extractives, *Revue Gouvernance* 18, n° 2 (2021): 42. <https://doi.org/10.7202/1082501ar>.

Masurel Q., Eglinger A., Thébaud N., Allibone A., André-Mayer A.S., McFarlane H., Miller J., Jessell M., Aillères L., Vanderhaeghe O., Salvi S., Baratoux L., Perrouty S., Begg G., Fougereuse D., Hayman P., Wane O., Tshibubudze A., Parra-Avila L., Kouamélan A., Amponsah P.O. (2021) - Paleoproterozoic gold events in the southern West African craton : review and synopsis. *Mineralium Deposita*,  
<https://doi.org/10.1007/s00126-021-01052-5>.

Merlin, J., Laurent B., Gunzburger Y. (2021) Promise Engineering: Investment and Its Conflicting Anticipations in the French Mining Revival, *Economy and Society*, 1-28.  
<https://doi.org/10.1080/03085147.2021.1903772>.

Minguez, L, Gross, E., Vignati, D., Romero Freire A., Camizuli, E., Gimbert, F., Caillet, C. (2021) Profiling Metal Contamination from Ultramafic Sediments to Biota along the Albanian Shoreline of Lake Ohrid (Albania/Macedonia) ». *Journal of Environmental Management* 291, 112726.  
<https://doi.org/10.1016/j.jenvman.2021.112726>.

Navarrete Gutiérrez, D., Montserrat, A., Nti N.P., van der Ent, A., Pollard, J., Baker, A.J., Navarrete Torralba F., Pons, M.-N., Axayacatl Cuevas Sánchez J., Gómez Hernández, T., Echevarria G. (2021) The Potential of *Blepharidium Guatemalense* for Nickel Agromining in Mexico and Central America, *International Journal of Phytoremediation* 23, n° 11 (19 septembre 2021): 1157-68.  
<https://doi.org/10.1080/15226514.2021.1881039>.

Navarrete Gutiérrez, D., Montserrat, A., Pollard, J., van der Ent, A., Cathelineau, M., Pons, MN, Cuevas Sánchez, JA et Echevarria. G. (2021) *Blepharidium Guatemalense*, an Obligate Nickel Hyperaccumulator Plant from Non-Ultramafic Soils in Mexico, *Chemoecology* 31, n° 3 (juin 2021): 169-87.  
<https://doi.org/10.1007/s00049-021-00338-4>.

Nkrumah, PN, Echevarria, G., Erskine, P.D., Chaney, R.L., Sumail, S., van der Ent A. (2021) Contrasting Phosphorus (P) Accumulation in Response to Soil P Availability in 'Metal Crops' from P-impoverished Soils, *Plant and Soil* 467, n° 1-2, 155-64. <https://doi.org/10.1007/s11104-021-05075-9>.

Nkrumah, PN, Echevarria, G., Erskine, P.D., Chaney, R.L., Sumail, S., van der Ent A. (2021) Variation in the Ionome of Tropical 'Metal Crops' in Response to Soil Potassium Availability, *Plant and Soil* 465, n° 1-2, 185-95. <https://doi.org/10.1007/s11104-021-04995-w>.

Perret J., Feneyrol J., Eglinger A., André-Mayer A.S., Berthier C., Aomar, E., Bosc R. (2021) - Tectonic record and gold mineralization in the central part of the Neoproterozoic kerf suture, Gabgaba district, NE Sudan. *Journal of African Earth Sciences*, 181, 104248.

- Pollard, A. J., McCartha, G. L., Quintela-Sabaris, C., Flynn, T. A., Sobczyk, M. K., Smith, J. A. C. (2021) Intraspecific Variation in Nickel Tolerance and Hyperaccumulation among Serpentine and Limestone Populations of *Odontarrhena serpyllifolia* (Brassicaceae: Alyseae) from the Iberian Peninsula *PLANTS-BASEL* 2223-7747, 10, 4, 800, 10.3390/plants10040800
- Pokrovski G.S., Escoda C., Blanchard M., Testemale D., Hazemann J.L., Gouy S., Kokh M.A., Boiron M.C., de Parseval F., Aigouy T., Menjot L., de Parseval P., Proux O., Rovezzi M., Béziat D., Salvi S., Kouzmanov K., Bartsch T., Pöttgen R., Doert T. (2021) An arsenic-driven pump for invisible gold in hydrothermal systems. *Geochemical Perspectives Letters*, 17, 39-44.
- Qiu Z.J., Fan H.R., Goldfarb R., Tomkins A.G., Yang K.F., Li X.C., Xie L.W., Liu X. (2021) - Cobalt concentration in a sulfidic sea and mobilization during orogenesis : implications for targeting epigenetic sediment-hosted Cu-Co deposits. *Geochimica et Cosmochimica Acta*, 305, 1-18.
- Qiu Z.J., Fan H.R., Tomkins A.G., Brugger J., Etschmann B., Liu X., Xing Y., Hu Y. (2021) Insights into salty metamorphic fluid evolution from scapolite in the trans-north China orogeny : implication for ore genesis. *Geochimica et Cosmochimica Acta*, 293, 256-276.
- Romero-Freire, A., González, V. , Groenenberg, J.E. , Qiu, H., Auffan, M., Cotelle, S., Giamberini L. (2021) Cytotoxicity and Genotoxicity of Lanthanides for *Vicia Faba* L. Are Mediated by Their Chemical Speciation in Different Exposure Media, *Science of The Total Environment* 790: 148223. <https://doi.org/10.1016/j.scitotenv.2021.148223>.
- Rossi, M., Forget, M., Gunzburger, Y., Bergeron, K. M., Samper, A., Camizuli, E. (2021) Trajectories of mining territories: An integrated and interdisciplinary concept to achieve sustainability, *EXTRACTIVE INDUSTRIES AND SOCIETY-AN INTERNATIONAL JOURNAL* 2214-790X, 2214-7918, 8, 1, 7, 10.1016/j.exis.2021.01.006
- Saad, R. F., Echevarria, G., Rodríguez-Garrido, B., Kidd, P., Benizri E. (2021) A Two-Year Field Study of Nickel-Agromining Using *Odontarrhena Chalcidica* Co-Cropped with a Legume on an Ultramafic Soil: Temporal Variation in Plant Biomass, Nickel Yields and Taxonomic and Bacterial Functional Diversity, *Plant and Soil* 461, n° 1-2 (avril 2021): 471-88. <https://doi.org/10.1007/s11104-021-04834-y>.
- Scammacca, O., Gunzburger, Y., Mehdizadeh R. (2021) Gold mining in French Guiana: A multi-criteria classification of mining projects for risk assessment at the territorial scale, *EXTRACTIVE INDUSTRIES AND SOCIETY-AN INTERNATIONAL JOURNAL* 2214-790X, 2214-7918, MAR 2021, 8, 1, 3, 43, 10.1016/j.exis.2020.06.020
- Tisserand, R., Nkrumah, P.N., van der Ent, A. Sumail, Sukaibin; Zeller, B., Echevarria, G. (2021) Biogeochemical cycling of nickel and nutrients in a natural high-density stand of the hyperaccumulator *Phyllanthus rufuschaneyi* in Sabah, Malaysia, *CHEMOECOLOGY*, 0937-7409, 1423-0445, 10.1007/s00049-021-00363-3
- Tripathy, SK, Rama Murthy Y., Suresh, N., Filippov L. (2021) Carbothermic Reduction Roasting for Processing of Ferruginous Chromite Ore Using Conventional and Microwave Heating , *Advanced Powder Technology* 32, n° 7 (juillet 2021): 2234-47. <https://doi.org/10.1016/j.appt.2021.05.001>.
- Tripathy, SK, Rao, D. S., Eswaraiah, C. , Sahoo D. (2021) Applied Mineralogical Investigation on the Nature of Phosphorous in the Basic Oxygen Furnace Slag , *Transactions of the Indian Institute of Metals* 74, n° 9 (septembre 2021): 2319-34. <https://doi.org/10.1007/s12666-021-02319-1>.
- van der Ent, A., Nkrumah, P.N., Aarts, M.G., Baker, A.J.M., Degryse, F., Wawryk, C., Kirby, J.K. (2021) Isotopic signatures reveal zinc cycling in the natural habitat of hyperaccumulator *Dichapetalum gelonioides* subspecies from Malaysian Borneo, *BMC PLANT BIOLOGY*, 1471-2229, 21, 1, 43710.1186/s12870-021-03190-4.
- Vasilopoulos M., Molnár F., O'Brien H., Lahaye Y., Lefèbvre M., Richard A., André-Mayer A.S., Ranta J.P., Talikka M. (2021) - Geochemical signatures of mineralizing events in the Juomasuo Au-Co deposit, Kuusamo belt, northeastern Finland. *Mineralium Deposita*, <https://doi.org/10.1007/s00126-020-01039-8>.

- Vignerresse, J-L., Ballouard, C., Liu, X.; Richard, A. (2021) Toward a global conceptual model for metal enrichment in felsic, mafic-ultramafic, and alkaline-carbonatitic magmas, *ORE GEOLOGY REVIEWS*, 0169-1368, 1872-7360, 129 103925, 10.1016/j.oregeorev.2020.103925
- Voudouris P., Melfos V., Mavrogonatos C., Photiades A., Moraiti E., Rieck B., Kolitsch U., Tarantola A., Scheffer C., Morin D., Vanderhaeghe O., Spry P.G., Ross J., Soukis K., Vaxevanopoulos M., Pekov I.V., Chukanov N.V., Magganas A., Kati M., Katerinopoulos A., Zaimis S. (2021) The lavrion mines : a unique site of geological and mineralogical heritage. *Minerals*, 11, 76.
- Xuan, W., Braga, A de Sousa; Korbelt, C., Chagnes, A. (2021) New insights in the leaching kinetics of cathodic materials in acidic chloride media for lithium-ion battery recycling. *HYDROMETALLURGY*, 0304-386X, 1879-1158, 204, 105705 10.1016/j.hydromet.2021.105705
- Zegeye, A., Carteret, C., Mallet, M., Billet, D., Ferté, T., Chang, C.S., Hauet, T., Abdelmoula M. (2021) Effect of Sb on Precipitation of Biogenic Minerals during the Reduction of Sb-Bearing Ferrihydrites ». *Geochimica et Cosmochimica Acta* 309 , 96-111. <https://doi.org/10.1016/j.gca.2021.06.021>.

# Articles published in 2020

➤ **82 publications, with 46 mentioning LabEx RESSOURCES21 (in bold)**

- Ahoulou, A. W. A., Tinet, A. -J., Oltéan, C., & Golfier, F. (2020). Experimental insights into the interplay between buoyancy, convection and dissolution reaction. *Journal of Geophysical Research: Solid Earth*. <https://hal.univ-lorraine.fr/RESSOURCES21/hal-02981568v1>. <https://doi.org/10.1029/2020JB020854>
- Alvarez J., Cuney M. (2020) - Uranium Raw Material for the Nuclear Fuel Cycle : Exploration, Mining, Production, Supply and Demand, Economics and Environmental Issues (URAM-2018). Proceedings Series - International Atomic Energy Agency, IAEAAL 20-01376.
- Anzoom, S.J.; Tripathy, S.K.; Sahu, L.; Bhattacharya, S.; Mukherjee, A. (2020). « Influence of Impeller Speed and Cell Volume on Coal Flotation Performance in a Self-Aerating Flotation Machine ». *Advanced Powder Technology* 31, n° 9 (septembre 2020): 4053-63. <https://doi.org/10.1016/j.appt.2020.08.008>.**
- Ballini, M. C. Chautard, J. Nos, V. Phrommavanh, C. Beaucaire, C. Beaucaire , C. Besancon, A. Boizard , M. Cathelineau , C. Peiffert , T. Vercouter , E. Vors , M. Descostes 2020 A multi-scalar study of the long-term reactivity of uranium mill tailings from Bellezanne site (France). *Journal of Environmental Radioactivity*, 218, 106223. [10.1016/j.jenvrad.2020.106223](https://doi.org/10.1016/j.jenvrad.2020.106223).
- Barré G., Strzeczynski P., Michels R., Guillot S., Cartigny P., Thomassot E., Lorgeoux C., Assayag N., Truche L. (2020). Tectono-metamorphic evolution of an evaporitic décollement as recorded by mineral and fluid geochemistry: The “Nappe des Gypses” (Western Alps) case study. *Lithos*, 358-359:105419. DOI: <https://doi.org/10.1016/j.lithos.2020.105419>. Réf. HAL: hal-02935010**
- Baudouin, C., France, L., Boulanger, M., Dalou, C., & Devidal, J.-L. (2020). Trace element partitioning between clinopyroxene and alkaline magmas: parametrization and role of M1 site on HREE enrichment in clinopyroxenes. *Contributions to Mineralogy and Petrology*, 175(5.42). <https://hal.univ-lorraine.fr/CRPG-UL/hal-02629068v1>. <https://doi.org/10.1007/s00410-020-01680-6>**
- Bonnetti C., Liu X., Cuney M., Mercadier J., Riegler T., Yu C. (2020) - Evolution of the uranium mineralisation in the Zoujiasan deposit, Xiangshan ore field: Implications for the genesis of volcanic-related hydrothermal U deposits in South China. *Ore Geology Reviews*, 122, 103514.
- Boulesteix T., Solé J., Pi T., Cathelineau M. (2020). Reappraisal of the GL-O Reference Material for K-Ar Dating: New Insight from Microanalysis, Single-Grain and Milligram Ar Measurements. *Geostandards and Geoanalytical Research*. DOI: <https://doi.org/10.1111/ggr.12306>. Réf. HAL: hal-02477670**
- Bousquet B., Syvilay D., Fabre C. (2020) - Les pistolets LIBS : applications au patrimoine et à la géologie. *Photoniques*, 103, 42-45.
- Boyabe, Marguerite, Daouda Dawai, Rigobert Tchameni, et Periclex Martial Fosso Tchunte (2020) . « Petrography and Mineralogy of the Quartz and Quartz-Feldspar Sulphide Veins in the Pan-African Syenitic Massif of Guider (North Cameroon) ». *Open Journal of Geology* 10, n° 03 (2020): 235-59. <https://doi.org/10.4236/ojg.2020.103013>.**
- Cardoso-Fernandes J., Silva J., Lima A., Teodoro A.D., Perrotta M., Cauzid J., Roda-Robles E., Ribeiro M.A. (2020) - Reflectance spectroscopy to validate remote sensing data/algorithms for satellite-based lithium (Li) exploration (Central East Portugal). *Earth Resources and Environmental Remote Sensing/GIS Applications XI*, 11534.
- Cardoso-Fernandes J., Teodoro A.C., Lima A., Mielke C., Körting F., Roda-Robles E., Cauzid J. (2020) - Multi-scale approach using remote sensing techniques for lithium pegmatite exploration : first results. *International Geoscience and Remote Sensing Symposium*, <https://doi.org/10.1109/igarrss39084.2020.9323705>.

- Carpentier C., Vennin E., Rouchy J.-M., Cornée J.-J., Melinte-Dobrinescu M., Hibsich C., Olivier N., Caruso A., Bartier D. (2020). Ages and stratigraphical architecture of late Miocene deposits in the Lorca Basin (Betics, SE Spain): New insights for the salinity crisis in marginal basins. *Sedimentary Geology*, 405:105700. DOI: <https://doi.org/10.1016/j.sedgeo.2020.105700>. Réf. HAL: hal-02877166
- Casola, V., France, L., Galy, A., Bouden, N., & Villeneuve, J. (2020). No evidence for carbon enrichment in the mantle source of carbonatites in eastern Africa. *Geology*, 48(10), 971–975. <https://hal.univ-lorraine.fr/CRPG-UL/hal-02950427v1>. <https://doi.org/10.1130/G47629.1>
- Cathelineau M., Samper A. (2020) - Metals of a changing world : better understanding the metals life-cycles through a holistic approach. *Aspects in Mining & Mineral Science*, 5, 5, 662-668.
- Cathelineau, M., Boiron M.-C., Marignac C., Dour M., Dejean M., Carocci E. (2020) High pressure and temperatures during the early stages of tungsten deposition at Panasqueira revealed by fluid inclusions in topaz. *Ore Geol. Rev.*, 103741, <https://doi.org/10.1016/j.oregeorev.2020.103741>
- Chagnes, A. (2020). Simulation of Solvent Extraction Flowsheets by a Global Model Combining Physicochemical and Engineering Approaches—Application to Cobalt(II) Extraction by D2EHPA. *Solvent Extraction and Ion Exchange*, 38(1), 3–13. <https://hal.univ-lorraine.fr/hal-02424027>. <https://doi.org/10.1080/07366299.2019.1691135>
- Chagnes A. (2020) Recent Insights on Lithium-Ion Batteries Recycling. *Aspects in Mining & Mineral Science*, 4(5). AMMS.000598. 2020., DOI: 10.31031/AMMS.2020.04.000598
- Chagnes, A. (2020) Advances in Hydrometallurgy. <https://doi.org/10.3390/books978-3-03928-940-0>
- Chernozhkin S. M., Mercadier J., Reisberg L., Luais B., Zimmermann C., Morlot C., Salsi L., Lecomte A., Rouer, O., Brouand M., Doney A., Ledru P. (2020) - Evaluation of rammelsbergite (NiAs<sub>2</sub>) as a novel mineral for <sup>187</sup>Re-<sup>187</sup>Os dating and implications for unconformity-related U deposits. *Geochimica et Cosmochimica Acta*, 280, 85-101
- Chour, Z., Laubie, B., Morel, J. L., Tang, Y.-T., Simonnot, M.-O., & Muhr, L. (2020). Basis for a new process for producing REE oxides from *Dicranopteris linearis*. *Journal of Environmental Chemical Engineering*, 8(4), 103961. <https://hal.univ-lorraine.fr/RESSOURCES21/hal-02884698v1>. <https://doi.org/10.1016/j.jece.2020.103961>
- Cluzel D., Boulvais P., Iseppi M., Lahondère D., Lesimple S., Maurizot P., Paquette J.-L., Tarantola A., Ulrich M. (2020). Slab-derived origin of tremolite-antigorite veins in a supra-subduction ophiolite: the Peridotite Nappe (New Caledonia) as a case study. *International Journal of Earth Sciences*, 109(1):171-196. DOI: <https://doi.org/10.1007/s00531-019-01796-6>. Réf. HAL: insu-02369790
- Corzo Remigio, A., Chaney, R. L., Baker, A. J. M., Edraki, M., Erskine, P. D., Echevarria, G., & van der Ent, A. (2020). Phytoextraction of high value elements and contaminants from mining and mineral wastes: opportunities and limitations. *Plant and Soil*, 449(1–2), 11–37. <https://hal.univ-lorraine.fr/hal-03252580>. <https://doi.org/10.1007/s11104-020-04487-3>
- Decrée, S., Cawthorn, G., Deloule, E., Mercadier, J., Frimmel, H. et Baele J-M, (2020). « Unravelling the Processes Controlling Apatite Formation in the Phalaborwa Complex (South Africa) Based on Combined Cathodoluminescence, LA-ICPMS and in-Situ O and Sr Isotope Analyses ». *Contributions to Mineralogy and Petrology* 175, n° 4 (avril 2020). <https://doi.org/10.1007/s00410-020-1671-6>.
- Decrée, S., Savolainen, M., Mercadier, J., Debaille, V., Höhn, S., Frimmel, H. et Baele. (2020) JM (2020) « Geochemical and Spectroscopic Investigation of Apatite in the Siilinjärvi Carbonatite Complex: Keys to Understanding Apatite Forming Processes and Assessing Potential for Rare Earth Elements ». *Applied Geochemistry* 123 (décembre 2020): 104778. <https://doi.org/10.1016/j.apgeochem.2020.104778>.
- Eglinger A., André-Mayer A.S., Combes V., Teitler Y., Heuret A. (2020) - Les gisements d'or de la Guyane française. *Géologues* n° 206.

- El Korh A., Boiron M.-C., Cathelineau M., Deloule E., Luais B. 2020 Tracing metallic pre-concentrations in the Limousin ophiolite-derived rocks and Variscan granites (French Massif Central). *Lithos*, 356–357, 105345, doi.org/10.1016/j.lithos.2019.105345
- El Korh A., Deloule E., Luais B., Boiron M.-C., Bastian L., Vigier N. (2020). Lithium behaviour and isotope fractionation during fluid-rock interactions in Variscan oceanic suture zones: Limousin ophiolite and Ile de Groix high-pressure terrane (France). *Journal of Petrology*, 60(10):1963-1990. DOI: <https://doi.org/10.1093/petrology/egz060>. Réf. HAL: hal-02410636
- El Korh, A., Boiron, M.-C., & Cividini, D. (2020). A multi-isotope study (Fe, Ge, O) of hydrothermal alteration in the Limousin ophiolite (French Massif Central). *Lithos*, 378, 105876. <https://hal.univ-lorraine.fr/hal-03135104>. <https://doi.org/10.1016/j.lithos.2020.105876>
- Essarraj S., Boiron M.C., Cathelineau M., Peiffert C. (2020) - Evaporitic brines and copper-sulphide ore genesis at Jbel Haïmer (Central Jebilet, Morocco). *Ore Geology Reviews*, 129, 103920.
- Fabre C. (2020) - Advances in Laser-Induced Breakdown Spectroscopy analysis for geology : A critical review. *Spectrochimica Acta Part B*, 166, 105799.
- Fabre C., Bousquet B. (2020) - De chemcam à supercam : l'apport de la LIBS pour le spatial. *Photoniques*, 103, <https://doi.org/10.1051/photon/202010338>.
- Farrokhpay, S., Filippova, I., Filippov, L., Picarra, A., Rulyov, N., et Fornasiero, D. (2020) « Flotation of Fine Particles in the Presence of Combined Microbubbles and Conventional Bubbles ». *Minerals Engineering* 155 (août 2020): 106439. <https://doi.org/10.1016/j.mineng.2020.106439>.
- Fosu, A. Y., Kanari, N., Vaughan, J., & Chagnes, A. (2020). Literature Review and Thermodynamic Modelling of Roasting Processes for Lithium Extraction from Spodumene. *Metals*, 10(10), 1312. <https://hal.univ-lorraine.fr/GEORESSOURCES-UL/hal-02953994v1>. <https://doi.org/10.3390/met10101312>
- Foucaud, Yann, Lev Filippov, Inna Filippova, et Michael Badawi. (2020) « The Challenge of Tungsten Skarn Processing by Froth Flotation: A Review ». *Frontiers in Chemistry* 8.230 (16 avril 2020). <https://doi.org/10.3389/fchem.2020.00230>.
- Gauriau J., Harlaux M., André-Mayer A.-S., Eglinger A., Richard A., Fontaine A., Lefebvre M., Béziat D., Villeneuve J., Lemarchand D. (2020). Chemical and boron isotope composition of tourmaline from the Kiaka orogenic gold deposit (Burkina Faso, West African Craton) as a proxy for ore-forming processes. *Mineralium Deposita*. DOI: <https://doi.org/10.1007/s00126-020-01002-7>. Réf. HAL: hal-02958894
- Gei, V., Isnard, S., Erskine, P. D., Echevarria, G., Fogliani, B., Jaffré, T., & van der Ent, A. (2020). A systematic assessment of the occurrence of trace element hyperaccumulation in the flora of New Caledonia. *Botanical Journal of the Linnean Society*, 194(1), 1–22. <https://hal.inrae.fr/hal-02907973>. <https://doi.org/10.1093/botlinnean/boaa029>
- Geneyton, A., Y. Foucaud, L.O. Filippov, N.-E. Menad, A. Renard, et M. Badawi. « Synergistic Adsorption of Lanthanum Ions and Fatty Acids for Efficient Rare-Earth Phosphate Recovery: Surface Analysis and Ab Initio Molecular Dynamics Studies ». *Applied Surface Science* 526 (octobre 2020): 146725. <https://doi.org/10.1016/j.apsusc.2020.146725>.
- Gmar, S., Mutelet, F., & Chagnes, A. (2020). Effect of the Addition of Amine in Organophosphorus Compounds on Molecular Structuration of Ionic Liquids—Application to Solvent Extraction. *Molecules*, 25(11), 2584. <https://hal.univ-lorraine.fr/GEORESSOURCES-UL/hal-02922253v1>. <https://doi.org/10.3390/molecules25112584>
- Grare A., Benedicto A., Mercadier J., Lacombe O., Trave A., Guilcher M., Richard A., Ledru P., Blain M., Robbins J., Lach P. (2020) - Structural controls and metallogenic model of polyphase uranium mineralization in the Kiggavik area (Nunavut, Canada). *Mineralium Deposita*, <https://doi.org/10.1007/s00126-020-00957-x>
- Grosjean, N., Blaudez, D., Chalot, M., Gross, E. M., & Le Jean, M. (2020). Identification of new hardy ferns that preferentially accumulate light rare earth elements: a conserved trait within fern species.

*Environmental Chemistry*, 17(2), 191. <https://hal.univ-lorraine.fr/LIEC-UL/hal-02523528v1>.  
<https://doi.org/10.1071/EN19182>

- Groulier, P.-A., Turlin, F., André-Mayer, A. S., Ohnenstetter, D., Crépon, A., Boulvais, P., Poujol, M., Rollion-Bard, C., Zeh, A., Moukhsil, A., Solgadi, F., & El Basbas, A. (2020). Silicate-carbonate liquid immiscibility: insights from the Crevier alkaline intrusion (Quebec). *Journal of Petrology*, 61(3), ega033. <https://hal.univ-lorraine.fr/GEORESSOURCES-UL/insu-02495712v1>.  
<https://doi.org/10.1093/petrology/egaa033>
- Harlov, D., Ballouard C., Elburg M., Knoper M., Wilke F., Wen Bin Ning, et Marco A.G. Andreoli. « Genesis of Monazite-Rich, Orthopyroxene-Bearing Veins in the Kliphoog Area of the Concordia Granite, Springbok, Namaqualand, South Africa: Sources, Fluids, and the Mobility of Actinides and REE ». *Lithos* 376-377 (décembre 2020): 105762. <https://doi.org/10.1016/j.lithos.2020.105762>.
- Hu, R., Beguiristain, T., De Junet, A., & Leyval, C. (2020a). No significant transfer of the rare earth element samarium from spiked soil to alfalfa by Funneliformis mosseae. *Mycorrhiza*, 30(6), 761–771. <https://hal.univ-lorraine.fr/hal-03015379>. <https://doi.org/10.1007/s00572-020-00991-7>
- Hu, R., Beguiristain, T., De Junet, A., & Leyval, C. (2020b). Bioavailability and transfer of elevated Sm concentration to alfalfa in spiked soils. *Environmental Science and Pollution Research*, 27(35), 44333–44341. <https://hal.univ-lorraine.fr/LIEC-UL/hal-02961811v1>. <https://doi.org/10.1007/s11356-020-09223-z>
- Huang Y., Tarantola A., Lu W., Caumon M.-C., He S., Zhuang X., Yan D., Pironon J., Wang W. (2020). CH<sub>4</sub> accumulation characteristics and relationship with deep CO<sub>2</sub> fluid in Lishui sag, East China Sea Basin. *Applied Geochemistry*, 115:104563. DOI: <https://doi.org/10.1016/j.apgeochem.2020.104563>. Réf. HAL: hal-02507530
- Kanari, N., Allain, E., Filippov, L., Shallari, S., Diot, F., & Patisson, F. (2020). Reactivity of Low-Grade Chromite Concentrates towards Chlorinating Atmospheres. *Materials*, 13(20), 4470. <https://hal.univ-lorraine.fr/hal-02964069>. <https://doi.org/10.3390/ma13204470>
- Kanari, N., Allain, E., Shallari, S., Diot, F., Diliberto, S., Patisson, F., & Yvon, J. (2020). Thermochemical Route for Extraction and Recycling of Critical, Strategic and High-Value Elements from By-Products and End-of-Life Materials, Part II: Processing in Presence of Halogenated Atmosphere. *Materials*, 13(18), 4203. <https://hal.univ-lorraine.fr/hal-02964053>. <https://doi.org/10.3390/ma13184203>
- Kumar Sahu, S., Kargar Razi, M., Beuscher, M., & Chagnes, A. (2020). Recovery of Metal Values from Ni-Cd Cake Waste Residue of an Iranian Zinc Plant by Hydrometallurgical Route. *Metals*, 10(5), 655. <https://hal.univ-lorraine.fr/GEORESSOURCES-UL/hal-02922251v1>.  
<https://doi.org/10.3390/met10050655>
- Le V.-H., Caumon M.-C., Tarantola A., Randi A., Robert P., Mullis J. (2020). Calibration data for simultaneous determination of P-V-X properties of binary and ternary CO<sub>2</sub> - CH<sub>4</sub> - N<sub>2</sub> gas mixtures by Raman spectroscopy over 5–600 bar: Application to natural fluid inclusions. *Chemical Geology*, :119783. DOI: <https://doi.org/10.1016/j.chemgeo.2020.119783>. Réf. HAL: hal-02904254
- Lecomte A., Michels R., Cathelineau M., Morlot C., Brouand M., Flotte N. (2020). Uranium deposits of Franceville basin (Gabon): Role of organic matter and oil cracking on uranium mineralization. *Ore Geology Reviews*, 123:103579. DOI: <https://doi.org/10.1016/j.oregeorev.2020.103579>. Réf. HAL: hal-02861042
- Legros H., Harlaux M., Mercadier J., Rolf L., Romer R.L., Poujol M., Camacho A., Marignac C., Cuney M., Wang R.C., Charles N., Lespinasse M.Y. (2020) - The world-class nanling metallogenic belt (Jiangxi, China) : W and Sn deposition at 160 Ma followed by 30 m.y. of hydrothermal metal redistribution. *Ore Geology Reviews*, 117, 103302.
- Legros H., Harlaux M., Mercadier J., Romer R., Poujol M., Camacho A., Marignac C., Cuney M., Wang R.-C., Charles N., Lespinasse M.-Y. (2020). The world-class Nanling metallogenic belt (Jiangxi, China): W and Sn

deposition at 160 Ma followed by 30 m.y. of hydrothermal metal redistribution. *Ore Geology Reviews*, 117:103302. DOI: <https://doi.org/10.1016/j.oregeorev.2019.103302>. Réf. HAL: insu-02428580

Liu, W.-S., van der Ent, A., Erskine, P. D., Morel, J. L., Echevarria, G., Spiers, K. M., Montargès-Pelletier, E., Qiu, R.-L., & Tang, Y.-T. (2020). Spatially Resolved Localization of Lanthanum and Cerium in the Rare Earth Element Hyperaccumulator Fern *Dicranopteris linearis* from China. *Environmental Science & Technology*, 54(4), 2287–2294. <https://hal.univ-lorraine.fr/LSE-UL/hal-02615658v1>. <https://doi.org/10.1021/acs.est.9b05728>

Lopez, S., Ent, A., Sumail, S., Sugau, J. B., Buang, M. M., Amin, Z., Echevarria, G., Morel, J. L., & Benizri, E. (2020). Bacterial community diversity in the rhizosphere of nickel hyperaccumulator plant species from Borneo Island (Malaysia). *Environmental Microbiology*, 22(4), 1649–1665. <https://hal.univ-lorraine.fr/LSE-UL/hal-01990169v1>. <https://doi.org/10.1111/1462-2920.14970>

Mamane Mamadou, M., Cathelineau, M., Deloule, E., Schmitt, R., & Brouand, M. (2020) Cenozoic oxidation episodes in West Africa at the origin of the in situ supergene mineral redistribution of the primary uranium orebodies (Imouraren deposit, Tim Mersoï Basin, Northern Niger) *Mineralium Deposita* vol. 55, pp. 1333–1352

Marignac, C., Cuney, M., Cathelineau, M., Lecomte, A., Carocci, E., Pinto, F., 2020. The Panasqueira rare metal granite suites and their involvement in the genesis of the world-class Panasqueira W-Sn-Cu vein deposit: a petrographic, mineralogical and geochemical study. *Minerals*, MDPI, 2020, 10 (6), pp.562. <10.3390/min10060562>. (hal-03135116)

Mavrogenatos C., Voudouris P., Zaccarini F., Klemme S., Berndt J., Tarantola A., Melfos V., Spry P. (2020). Multi-Stage Introduction of Precious and Critical Metals in Pyrite: A Case Study from the Konos Hill and Pagoni Rachi Porphyry/Epithermal Prospects, NE Greece. *Minerals*, 10(9):784. DOI: <https://doi.org/10.3390/min10090784>. Réf. HAL: hal-02932339

Melfos V., Voudouris P., Melfou M., Sánchez M., Papadopoulou L., Filippidis A., Spry P., Schaarschmidt A., Klemm R., Haase K., Tarantola A., Mavrogenatos C. (2020). Mineralogical Constraints on the Potassic and Sodic-Calcic Hydrothermal Alteration and Vein-Type Mineralization of the Maronia Porphyry Cu-Mo ± Re ± Au Deposit in NE Greece. *Minerals*, 10(2):182. DOI: <https://doi.org/10.3390/min10020182>. Réf. HAL: hal-02932182

Nardecchia A., Fabre C., Cauzid J., Pelascini F., Motto-Ros V., Duponchel L. (2020). Detection of minor compounds in complex mineral samples from millions of spectra: A new data analysis strategy in LIBS imaging. *Analytica Chimica Acta*, 1114:66-73. DOI: <https://doi.org/10.1016/j.aca.2020.04.005>. Réf. HAL: hal-02616981

Padyar F., Rahgoshay M., Tarantola A., Caumon M.-C., Pourmoafi S. M. (2020). High f(H<sub>2</sub>)–f(S<sub>2</sub>) Conditions Associated with Sphalerite in Latala Epithermal Base and Precious Metal Deposit, Central Iran: Implications for the Composition and Genesis Conditions of Sphalerite. *Journal of Earth Science*, 31(3):523-535. DOI: <https://doi.org/10.1007/s12583-019-1023-6>. Réf. HAL: hal-02932200

Perret J., Eglinger A., André-Mayer A.-S., Aillères L., Feneyrol J., Hartshorne C., Abanyin E., Bosc R. (2020). Subvertical, linear and progressive deformation related to gold mineralization at the Galat Sufar South deposit, Nubian Shield, NE Sudan. *Journal of Structural Geology*, 135:104032. DOI: <https://doi.org/10.1016/j.jsg.2020.104032>. Réf. HAL: hal-02525188

Pignatelli, I., Giuliani, G., Morlot, C., Cathelineau M. (2020) Flower-Shaped Trapiche Ruby from Mong Hsu, Myanmar: A Revised Growth Mechanism. *Journal of Gemmology* 37 (4)

Quintela-Sabarís, C., Faucon, M.-P., Repin, R., Sugau, J. B., Nilus, R., Echevarria, G., & Leguédois, S. (2020). Plant Functional Traits on Tropical Ultramafic Habitats Affected by Fire and Mining: Insights for Reclamation. *Diversity*, 12(6), 248. <https://hal.archives-ouvertes.fr/hal-03146780>. <https://doi.org/10.3390/d12060248>

- Rallakis D., Michels R., Brouand M., Parize O., Cathelineau M. (2020). Dolomite cements in Cenomanian continental sand deposits: Time evolution and significance (Zoovch Ovoo U-deposit, East Gobi Basin, Mongolia). *Sedimentary Geology*, :105688. DOI: <https://doi.org/10.1016/j.sedgeo.2020.105688>. Réf. HAL: hal-02776023
- Scammacca, O., Gunzburger, Y., & Mehdizadeh, R. (2020). Gold mining in French Guiana: A multi-criteria classification of mining projects for risk assessment at the territorial scale. *The Extractive Industries and Society*. <https://hal.univ-lorraine.fr/GEORESSOURCES-UL/hal-02946557v1>. <https://doi.org/10.1016/j.exis.2020.06.020>
- Skirrow, R. G., Cross, A. J., Magee, C. W., Lecomte, A. and Mercadier, J. (2020). Identification of a new ca. 1660 Ma Au-Cu-Bi metallogenic event at Tennant Creek. Australian Government, Geoscience Australia, <http://dx.doi.org/10.11636/133170>
- Técher, D., Grosjean, N., Sohm, B., Blaudez, D., & Le Jean, M. (2020). Not merely noxious? Time-dependent hormesis and differential toxic effects systematically induced by rare earth elements in *Escherichia coli*. *Environmental Science and Pollution Research*, 27, 5640–5649. <https://hal.univ-lorraine.fr/LIEC-UL/hal-02523496v1>. <https://doi.org/10.1007/s11356-019-07002-z>
- Tripathy, S. K., Dasu, J., Murthy, Y. R., Kapure, G., Pal, A. R., & Filippov, L. O. (2020). Utilisation perspective on water quenched and air-cooled blast furnace slags. *Journal of Cleaner Production*, 262, 121354. <https://doi.org/10.1016/j.jclepro.2020.121354>
- Tripathy, S. K., Mohanty, I., & Filippov, L. O. (2020). Application of Artificial Neural Networks to Predict Dry Magnetic Separation of Low-Grade Hematite Fines. *Transactions of the Indian Institute of Metals*, 73(7), 1797–1807. <https://doi.org/10.1007/s12666-020-01985-x>
- Tripathy, SK, Jayalaxmi Dasu, Y. Rama Murthy, Gajanan Kapure, Atanu Ranajan Pal, et Lev O Filippov (2020) . « Utilisation Perspective on Water Quenched and Air-Cooled Blast Furnace Slags ». *Journal of Cleaner Production* 262 (juillet 2020): 121354. <https://doi.org/10.1016/j.jclepro.2020.121354>.
- Turuani M., Choulet F., Eglinger A., Goncalves P., Machault J., Mercadier J., Seydoux-Guillaume A.-M., Reynaud S., Baron F., Beaufort D., Batonneau Y., Gouy S., Mesbah A., Szenknect S., Dacheux N., Chapon V., Pagel M. (2020). Geochemical fingerprints of brannerite (UTi<sub>2</sub>O<sub>6</sub>): an integrated study. *Mineralogical Magazine*, :1-22. DOI: <https://doi.org/10.1180/mgm.2020.7>. Réf. HAL: hal-02499642
- Ulrich M., Munoz M., Boulvais P., Cathelineau M., Cluzel D., Guillot S., Picard C. (2020). Serpentinization of New Caledonia peridotites: from depth to (sub-)surface. *Contributions to Mineralogy and Petrology*, 75:91. DOI: <https://doi.org/10.1007/s00410-020-01713-0>. Réf. HAL: insu-02890835
- van der Ent, A., de Jonge, M. D., Spiers, K. M., Brueckner, D., Montargès-Pelletier, E., Echevarria, G., Wan, X.-M., Lei, M., Mak, R., Lovett, J. H., & Harris, H. H. (2020). Confocal Volumetric  $\mu$ XRF and Fluorescence Computed  $\mu$ -Tomography Reveals Arsenic Three-Dimensional Distribution within Intact *Pteris vittata* Fronds. *Environmental Science & Technology*, 54(2), 745–757. <https://hal.univ-lorraine.fr/LSE-UL/hal-02401572v1>. <https://doi.org/10.1021/acs.est.9b03878>
- van der Ent, A., Echevarria, G., Nkrumah, P. N., & Erskine, P. D. (2020). Frequency distribution of foliar nickel is bimodal in the ultramafic flora of Kinabalu Park (Sabah, Malaysia). *Annals of Botany*, 126(6), 1017–1027. <https://hal.univ-lorraine.fr/hal-03252508>. <https://doi.org/10.1093/aob/mcaa119>
- van der Ent, A., de Jonge, M. D., Mak, R., Mesjasz-Przybyłowicz, J., Przybyłowicz, W. J., Barnabas, A. D. & Harris, H.H. (2020). X-ray fluorescence elemental mapping of roots, stems and leaves of the nickel hyperaccumulators *Rinorea cf. bengalensis* and *Rinorea cf. javanica* (Violaceae) from Sabah (Malaysia), Borneo. *Plant and Soil* vol; 448, pp. 15–36 (2020)
- van der Ent, A., Vinya, R., Erskine, P. D., Malaisse, F., Przybyłowicz, W.J., Barnabas, A.D., Harris, H.H., Mesjasz-Przybyłowicz, J. (2020). Elemental distribution and chemical speciation of copper and cobalt in three metallophytes from the copper–cobalt belt in Northern Zambia. *Metallomics*, Volume 12, Issue 5, Pages 682–701, <https://doi.org/10.1039/c9mt00263d>

- Vanderhaeghe O., André-Mayer A.-S., Mbaguedje D., Eglinger A., Ohnenstetter M., Isseini M., Cuney M., Poujol M., Van Lichtervelde M. (2020). Uranium mineralization associated with late magmatic ductile to brittle deformation and Na–Ca metasomatism of the Pan-African A-type Zabili syntectonic pluton (Mayo-Kebbi massif, SW Chad). *Mineralium Deposita*. DOI: <https://doi.org/10.1007/s00126-020-00999-1>. Réf. HAL: insu-02916105
- Vrábel J., Képeš E., Duponchel L., Motto-Ros V., Fabre C., Connemann S., Schreckenber F., Prasse P., Riebe D., Junjuri R., Gundawar M. K., Tan X., Pořízka P., Kaiser J. (2020). Classification of challenging Laser-Induced Breakdown Spectroscopy soil sample data - EMSLIBS contest. *Spectrochimica Acta Part B: Atomic Spectroscopy*, 169:105872. DOI: <https://doi.org/10.1016/j.sab.2020.105872>. Réf. HAL: hal-02869477
- Wehrmann, M., Toussaint, M., Pfannstiel, J., Billard, P., & Klebensberger, J. (2020). The Cellular Response to Lanthanum Is Substrate Specific and Reveals a Novel Route for Glycerol Metabolism in *Pseudomonas putida* KT2440. *MBio*, 11(2), e00516-20. <https://hal.univ-lorraine.fr/LIEC-UL/hal-02556896v1>. <https://doi.org/10.1128/mBio.00516-20>**
- Yu C.-D., Wang K.-X., Liu X.D., Cuney M., Pan J.Y., Wang G., Zhang L., Zhang J. (2020) - Uranium Mineralogical and Chemical Features of the Na-Metasomatic Type Uranium Deposit in the Longshoushan Metallogenic Belt, Northwestern China. *Minerals*, 10, 335.
- Zaheri-Abdehvand N., Tarantola A., Rasa I., Hassanpour S., Peiffert C. (2020). Metal content and P-T evolution of CO<sub>2</sub>-bearing ore-forming fluids of the Haftcheshmeh Cu-Mo porphyry deposit, NW Iran. *Journal of Asian Earth Sciences*, 190:104166. DOI: <https://doi.org/10.1016/j.jseaes.2019.104166>. Réf. HAL: hal-02932190