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Publications

PUBLICATIONS

- **Bioavailability of chromium, nickel, iron and manganese in relation to their speciation in coastal sediments downstream of ultramafic catchments: A case study in New Caledonia.** *Chemosphere*
Merrot, P., Juillot, F., Flipo, L., Tharaud, M., Viollier, E., Noël, V., Le Pape, P., Fernandez, J., Moreton, B., Morin, G.
2022: 134643
- **Reply to the Comment on "FeS colloids - formation and mobilization pathways in natural waters" by S. Peiffer, D0EN00967A** *ENVIRONMENTAL SCIENCE-NANO*
Noël, V., Kumar, N., Boye, K., Lezama-Pacheco, J. S., Brown, G. E., Bargara, J. R.
2021; 8 (6): 1817-1821
- **Simulated Aquifer Heterogeneity Leads to Enhanced Attenuation and Multiple Retention Processes of Zinc.** *Environmental science & technology*
Engel, M., Boye, K., Noël, V., Babey, T., Bargara, J. R., Fendorf, S.
2021
- **FeS colloids - formation and mobilization pathways in natural waters** *ENVIRONMENTAL SCIENCE-NANO*
Noël, V., Kumar, N., Boye, K., Barragan, L., Lezama-Pacheco, J. S., Chu, R., Tolic, N., Brown, G. E., Bargara, J. R.
2020; 7 (7): 2102–16
- **Sulfur Loading and Speciation Control the Hydrophobicity, Electron Transfer, Reactivity, and Selectivity of Sulfidized Nanoscale Zerovalent Iron.** *Advanced materials (Deerfield Beach, Fla.)*
Xu, J., Avellan, A., Li, H., Liu, X., Noël, V., Lou, Z., Wang, Y., Kaegi, R., Henkelman, G., Lowry, G. V.
2020: e1906910
- **Chemical Speciation and Stability of Uranium in Unconventional Shales: Impact of Hydraulic Fracture Fluid.** *Environmental science & technology*
Jew, A. D., Besançon, C. J., Roycroft, S. J., Noël, V. S., Bargara, J. R., Brown, G. E.
2020
- **Organic compounds alter the preference and rates of heavy metal adsorption on ferrihydrite.** *The Science of the total environment*
Engel, M. n., Lezama Pacheco, J. S., Noël, V. n., Boye, K. n., Fendorf, S. n.
2020; 750: 141485
- **Redox Heterogeneities Promote Thioarsenate Formation and Release into Groundwater from Low Arsenic Sediments.** *Environmental science & technology*
Kumar, N. n., Noël, V. n., Planer-Friedrich, B. n., Besold, J. n., Lezama-Pacheco, J. n., Bargara, J. R., Brown, G. E., Fendorf, S. n., Boye, K. n.
2020
- **Nickel and iron partitioning between clay minerals, Fe-oxides and Fe-sulfides in lagoon sediments from New Caledonia.** *The Science of the total environment*
Merrot, P., Juillot, F., Noël, V., Lefebvre, P., Brest, J., Menguy, N., Guigner, J., Blondeau, M., Viollier, E., Fernandez, J., Moreton, B., Bargara, J. R., Morin, et al
2019; 689: 1212–27
- **Influence of redox interfaces on metal(loid) contaminant mobility in shallow alluvial groundwater aquifers**
Boye, K., Kumar, N., Noël, V., Bargara, J., Fendorf, S.
AMER CHEMICAL SOC.2019
- **Colloid formation driven by redox processes: Impact on groundwater quality in shallow alluvial aquifers**
Noël, V., Kumar, N., Barragan, L., Boye, K., Bargara, J.

AMER CHEMICAL SOC.2019

- **Isotopic Fingerprint of Uranium Accumulation and Redox Cycling in Floodplains of the Upper Colorado River Basin** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
Lefebvre, P., Noël, V., Lau, K. V., Jemison, N. E., Weaver, K. L., Williams, K. H., Bargar, J. R., Maher, K.
2019; 53 (7): 3399–3409
- **Hydrological-geochemical controls over uranium mobility in unsaturated zone sediments**
Bargar, J., Roycroft, S., Boye, K., Noël, V., Johnson, R., Perzan, Z.
AMER CHEMICAL SOC.2019
- **Isotopic Fingerprint of Uranium Accumulation and Redox Cycling in Floodplains of the Upper Colorado River Basin.** *Environmental science & technology*
Lefebvre, P., Noël, V., Lau, K. V., Jemison, N. E., Weaver, K. L., Williams, K. H., Bargar, J. R., Maher, K.
2019
- **Uranium storage mechanisms in wet-dry redox cycled sediments.** *Water research*
Noël, V., Boye, K., Kukkadapu, R. K., Li, Q., Bargar, J. R.
2019; 152: 251–63
- **Antimonite Binding to Natural Organic Matter: Spectroscopic Evidence from a Mine Water Impacted Peatland.** *Environmental science & technology*
Besold, J. n., Eberle, A. n., Noël, V. n., Kujala, K. n., Kumar, N. n., Scheinost, A. C., Pacheco, J. L., Fendorf, S. n., Planer-Friedrich, B. n.
2019
- **Sulfidation mechanisms of Fe(III)-(oxyhydr)oxide nanoparticles: a spectroscopic study** *ENVIRONMENTAL SCIENCE-NANO*
Kumar, N., Pacheco, J., Noël, V., Dublet, G., Brown, G. E.
2018; 5 (4): 1012–26
- **Vertical transport of uranium in the unsaturated zone: A likely plume persistence mechanism**
Roycroft, S., Noël, V., Boye, K., Johnson, R., Dam, W., Fendorf, S., Bargar, J.
AMER CHEMICAL SOC.2018
- **Vertical changes of the Co and Mn speciation along a lateritic regolith developed on peridotites (New Caledonia)** *GEOCHIMICA ET COSMOCHIMICA ACTA*
Dublet, G., Juillot, F., Brest, J., Noël, V., Fritsch, E., Proux, O., Olivi, L., Ploquin, F., Morin, G.
2017; 217: 1–15
- **Redox Controls over the Stability of U(IV) in Floodplains of the Upper Colorado River Basin** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
Noël, V., Boye, K., Pacheco, J., Bone, S. E., Janot, N., Cardarelli, E., Williams, K. H., Bargar, J. R.
2017; 51 (19): 10954–64
- **Oxidation of Ni-Rich Mangrove Sediments after Isolation from the Sea (Dumbea Bay, New Caledonia): Fe and Ni Behavior and Environmental Implications** *ACS EARTH AND SPACE CHEMISTRY*
Noël, V., Juillot, F., Morin, G., Marchand, C., Ona-Nguema, G., Viollier, E., Prevot, F., Dublet, G., Maillot, F., Delbes, L., Marakovic, G., Bargar, J. R., Brown, et al
2017; 1 (8): 455–64
- **Thermodynamically controlled preservation of organic carbon in floodplains** *NATURE GEOSCIENCE*
Boye, K., Noël, V., Tfaily, M. M., Bone, S. E., Williams, K. H., Bargar, J. R., Fendorf, S.
2017; 10 (6): 415–+
- **Long-term sequestration of nickel in mackinawite formed by *Desulfovibrio capillatus* upon Fe(III)-citrate reduction in the presence of thiosulfate** *APPLIED GEOCHEMISTRY*
Ikogou, M., Ona-Nguema, G., Juillot, F., Le Pape, P., Menguy, N., Richeux, N., Guigner, J., Noël, V., Brest, J., Baptiste, B., Morin, G.
2017; 80: 143–54
- **Spectroscopic investigation of the mechanism and kinetics of the sulfidation of Fe(III)-(oxyhydr)oxide nanoparticles**
Kumar, N., Noël, V., Pacheco, J., Maher, K., Brown, G.
AMER CHEMICAL SOC.2017
- **Molecular controls over uranium mobility in complex redox-active sediment systems**
Bargar, J., Noël, V., Bone, S., Janot, N., Roycroft, S., Boye, K.

AMER CHEMICAL SOC.2017

- **Factors affecting the sorption of uranyl at mineral-aqueous solution interfaces**
Brown, G., Dublet, G., Noël, V., Fendorf, S., Bargar, J., Maher, K.
AMER CHEMICAL SOC.2017
- **Understanding controls on redox processes in floodplain sediments of the Upper Colorado River Basin.** *The Science of the total environment*
Noël, V., Boye, K., Kukkadapu, R. K., Bone, S., Lezama Pacheco, J. S., Cardarelli, E., Janot, N., Fendorf, S., Williams, K. H., Bargar, J. R.
2017
- **Nickel accelerates pyrite nucleation at ambient temperature** *GEOCHEMICAL PERSPECTIVES LETTERS*
Morin, G., Noël, V., Menguy, N., Brest, J., Baptiste, B., Tharaud, M., Ona-Nguema, G., Ikogou, M., Viollier, E., Juillot, F.
2017; 5: 6–11
- **Regional importance of organic-rich sediments to uranium mobility in the upper Colorado River Basin**
Noël, V., Boye, K., Bargar, J., Lefebvre, P., Maher, K., Bone, S., Lezama, J., Cardarelli, E., Dam, W., Johnson, R.
AMER CHEMICAL SOC.2016
- **Impact of redox conditions on interfacial uranium chemistry in complex natural sediments**
Bargar, J., Bone, S., Lezama-Pacheco, J., Alessi, D., Cerrato, J., Veeramani, H., Noël, V., Suvorova, E., Bernier-Latmani, R., Giammar, D., Long, P., Williams, K.
AMER CHEMICAL SOC.2016
- **Physico-Chemical Heterogeneity of Organic-Rich Sediments in the Rifle Aquifer, CO: Impact on Uranium Biogeochemistry.** *Environmental science & technology*
Janot, N., Lezama Pacheco, J. S., Pham, D. Q., O'Brien, T. M., Hausladen, D., Noël, V., Lallier, F., Maher, K., Fendorf, S., Williams, K. H., Long, P. E., Bargar, J. R.
2016; 50 (1): 46-53
- **Persistent Secondary Contaminant Sources at a Former Uranium Mill Site, Riverton, Wyoming, USA**
Johnson, R. H., Dam, W. L., Campbell, S., Noël, V., Bone, S. E., Bargar, J. R., Dayvault, J., Drebenstedt, C., Paul, M.
TU BERGAKADEMIE FREIBERG, INST MINING & SPECIAL CIVIL ENG.2016: 398–404
- **Use of Ferrihydrite-Coated Pozzolana and Biogenic Green Rust to Purify Waste Water Containing Phosphate and Nitrate** *Current Inorganic Chemistry*
Ruby, C., Naille, S., Ona-Nguema, G., Morin, G., Mallet, M., Guerbois, D., Barthélémy, K., Etique, M., Zegeye, A., Zhang, Y., Boumaïza, H., Al-Jaberi, M., Renard, et al
2016
- **Ni cycling in mangrove sediments from New Caledonia** *GEOCHIMICA ET COSMOCHIMICA ACTA*
Noël, V., Morin, G., Juillot, F., Marchand, C., Brest, J., Bargar, J. R., Munoz, M., Marakovic, G., Ardo, S., Brown, G. E.
2015; 169: 82-98
- **EXAFS analysis of iron cycling in mangrove sediments downstream a lateritized ultramafic watershed (Vavouto Bay, New Caledonia)** *GEOCHIMICA ET COSMOCHIMICA ACTA*
Noël, V., Marchand, C., Juillot, F., Ona-Nguema, G., Viollier, E., Marakovic, G., Olivi, L., Delbes, L., Gelebart, F., Morin, G.
2014; 136: 211–28
- **Biomining of iron-phosphates in the water column of Lake Pavin (Massif Central, France)** *GEOCHIMICA ET COSMOCHIMICA ACTA*
Cosmidis, J., Benzerara, K., Morin, G., Busigny, V., Lebeau, O., Jezequel, D., Noël, V., Dublet, G., Othmane, G.
2014; 126: 78–96
- **XAS evidence for Ni sequestration by siderite in a lateritic Ni-deposit from New Caledonia** *AMERICAN MINERALOGIST*
Dublet, G., Juillot, F., Morin, G., Fritsch, E., Noël, V., Brest, J., Brown, G. E.
2014; 99 (1): 225-234