

# Ruben Kretzschmar

## List of Publications by Year in descending order

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210  
papers

16,436  
citations

10650

74  
h-index

21843

118  
g-index

216  
all docs

216  
docs citations

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times ranked

13740  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Biogeochemical Redox Processes and their Impact on Contaminant Dynamics. <i>Environmental Science &amp; Technology</i> , 2010, 44, 15-23.  | 4.6 | 1,037     |
| 2  | Mobile Subsurface Colloids and Their Role in Contaminant Transport. <i>Advances in Agronomy</i> , 1999, 66, 121-193.   | 2.4 | 531       |
| 3  | Quantitative antimony speciation in shooting-range soils by EXAFS spectroscopy. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 3299-3312.  | 1.6 | 282       |
| 4  | Experimental determination of colloid deposition rates and collision efficiencies in natural porous media. <i>Water Resources Research</i> , 1997, 33, 1129-1137.  | 1.7 | 257       |
| 5  | Mercury Deposition and Re-emission Pathways in Boreal Forest Soils Investigated with Hg Isotope Signatures. <i>Environmental Science &amp; Technology</i> , 2015, 49, 7188-7196.   | 4.6 | 242       |
| 6  | Changes in Zinc Speciation in Field Soil after Contamination with Zinc Oxide. <i>Environmental Science &amp; Technology</i> , 2005, 39, 6616-6623.   | 4.6 | 235       |
| 7  | Iron Isotope Fractionation during Proton-Promoted, Ligand-Controlled, and Reductive Dissolution of Goethite. <i>Environmental Science &amp; Technology</i> , 2006, 40, 3787-3793.  | 4.6 | 235       |
| 8  | Spectroscopic Evidence for Ternary Complex Formation between Arsenate and Ferric Iron Complexes of Humic Substances. <i>Environmental Science &amp; Technology</i> , 2011, 45, 9550-9557.                                  | 4.6 | 234       |
| 9  | Transport of Humic-Coated Iron Oxide Colloids in a Sandy Soil: Influence of Ca <sup>2+</sup> and Trace Metals. <i>Environmental Science &amp; Technology</i> , 1997, 31, 3497-3504.  | 4.6 | 233       |
| 10 | Equilibrium Mercury Isotope Fractionation between Dissolved Hg(II) Species and Thiol-Bound Hg. <i>Environmental Science &amp; Technology</i> , 2010, 44, 4191-4197.  | 4.6 | 230       |
| 11 | Soil Biogeochemical Processes within the Critical Zone. <i>Elements</i> , 2007, 3, 321-326.  | 0.5 | 224       |
| 12 | Redox-Controlled Changes in Cadmium Solubility and Solid-Phase Speciation in a Paddy Soil As Affected by Reducible Sulfate and Copper. <i>Environmental Science &amp; Technology</i> , 2013, 47, 12775-12783.              | 4.6 | 222       |
| 13 | Transport of in Situ Mobilized Colloidal Particles in Packed Soil Columns. <i>Environmental Science &amp; Technology</i> , 1998, 32, 3562-3569.  | 4.6 | 219       |
| 14 | Combining Selective Sequential Extractions, X-ray Absorption Spectroscopy, and Principal Component Analysis for Quantitative Zinc Speciation in Soil. <i>Environmental Science &amp; Technology</i> , 2002, 36, 5021-5028. | 4.6 | 215       |
| 15 | Absolute Aggregation Rate Constants of Hematite Particles in Aqueous Suspensions: A Comparison of Two Different Surface Morphologies. <i>Journal of Colloid and Interface Science</i> , 1997, 196, 241-253.                | 5.0 | 201       |
| 16 | Arsenic sequestration by organic sulphur in peat. <i>Nature Geoscience</i> , 2012, 5, 66-73.   | 5.4 | 201       |
| 17 | Dissolution mechanisms of goethite in the presence of siderophores and organic acids. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 5635-5650.  | 1.6 | 184       |
| 18 | Influence of pH and Humic Acid on Coagulation Kinetics of Kaolinite: A Dynamic Light Scattering Study. <i>Journal of Colloid and Interface Science</i> , 1998, 202, 95-103.  | 5.0 | 183       |

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|----|---|-----|-----------|
| 19 | Temperature Dependence and Coupling of Iron and Arsenic Reduction and Release during Flooding of a Contaminated Soil. <i>Environmental Science &amp; Technology</i> , 2010, 44, 116-122.                        | 4.6 | 182       |
| 20 | Metal Retention and Transport on Colloidal Particles in the Environment. <i>Elements</i> , 2005, 1, 205-210.  | 0.5 | 180       |
| 21 | Spatial Distribution and Temporal Variability of Arsenic in Irrigated Rice Fields in Bangladesh. 2. Paddy Soil. <i>Environmental Science &amp; Technology</i> , 2007, 41, 5967-5972.                            | 4.6 | 173       |
| 22 | Contaminant mobilization by metallic copper and metal sulphide colloids in flooded soil. <i>Nature Geoscience</i> , 2009, 2, 267-271.   | 5.4 | 167       |
| 23 | Synthetic coprecipitates of exopolysaccharides and ferrihydrite. Part I: Characterization. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 1111-1127.  | 1.6 | 165       |
| 24 | Effects of Adsorbed Humic Acid on Surface Charge and Flocculation of Kaolinite. <i>Soil Science Society of America Journal</i> , 1997, 61, 101-108.   | 1.2 | 163       |
| 25 | Relating Ion Binding by Fulvic and Humic Acids to Chemical Composition and Molecular Size. 2. Metal Binding. <i>Environmental Science &amp; Technology</i> , 2001, 35, 2512-2517.                               | 4.6 | 158       |
| 26 | Chemical and Biological Gradients along the Damma Glacier Soil Chronosequence, Switzerland. <i>Vadose Zone Journal</i> , 2011, 10, 867-883.   | 1.3 | 158       |
| 27 | Multi-metal contaminant dynamics in temporarily flooded soil under sulfate limitation. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 5513-5527.  | 1.6 | 149       |
| 28 | Chemical Heterogeneity of Organic Soil Colloids Investigated by Scanning Transmission X-ray Microscopy and C-1s NEXAFS Microspectroscopy. <i>Environmental Science &amp; Technology</i> , 2005, 39, 9094-9100.  | 4.6 | 147       |
| 29 | Distribution and speciation of arsenic around roots in a contaminated riparian floodplain soil: Micro-XRF element mapping and EXAFS spectroscopy. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 5804-5820. | 1.6 | 145       |
| 30 | Control of arsenic mobilization in paddy soils by manganese and iron oxides. <i>Environmental Pollution</i> , 2017, 231, 37-47.   | 3.7 | 145       |
| 31 | Solution Speciation Controls Mercury Isotope Fractionation of Hg(II) Sorption to Goethite. <i>Environmental Science &amp; Technology</i> , 2012, 46, 6654-6662.   | 4.6 | 143       |
| 32 | Combining spectroscopic and isotopic techniques gives a dynamic view of phosphorus cycling in soil. <i>Nature Communications</i> , 2018, 9, 3226.   | 5.8 | 141       |
| 33 | Impact of Organic Matter on Iron(II)-Catalyzed Mineral Transformations in Ferrihydrite-Organic Matter Coprecipitates. <i>Environmental Science &amp; Technology</i> , 2018, 52, 12316-12326.                    | 4.6 | 139       |
| 34 | Relating Ion Binding by Fulvic and Humic Acids to Chemical Composition and Molecular Size. 1. Proton Binding. <i>Environmental Science &amp; Technology</i> , 2001, 35, 2505-2511.                              | 4.6 | 135       |
| 35 | Spatial Distribution and Temporal Variability of Arsenic in Irrigated Rice Fields in Bangladesh. 1. Irrigation Water. <i>Environmental Science &amp; Technology</i> , 2007, 41, 5960-5966.                      | 4.6 | 132       |
| 36 | Arsenic release from paddy soils during monsoon-flooding. <i>Nature Geoscience</i> , 2010, 3, 53-59.  | 5.4 | 123       |

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|----|--|-----|-----------|
| 37 | Interaction of copper and fulvic acid at the hematite-water interface. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 3435-3442.   | 1.6 | 120       |
| 38 | Iron isotope fractionation in oxic soils by mineral weathering and podzolization. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 5821-5833.  | 1.6 | 118       |
| 39 | Influence of Natural Organic Matter on Colloid Transport Through Saproлите. <i>Water Resources Research</i> , 1995, 31, 435-445.   | 1.7 | 117       |
| 40 | Competitive sorption of carbonate and arsenic to hematite: Combined ATR-FTIR and batch experiments. <i>Journal of Colloid and Interface Science</i> , 2012, 377, 313-321.  | 5.0 | 116       |
| 41 | Transport of Iron Oxide Colloids in Packed Quartz Sand Media: Monolayer and Multilayer Deposition. <i>Journal of Colloid and Interface Science</i> , 2000, 231, 32-41.   | 5.0 | 115       |
| 42 | Competitive sorption of copper and lead at the oxide-water interface: Implications for surface site density. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 2929-2938.   | 1.6 | 108       |
| 43 | Solid solution between Al-ettringite and Fe-ettringite ( $\text{Ca}_6[\text{Al}_{1-x}\text{Fe}_x(\text{OH})_6]_2(\text{SO}_4)_3 \cdot 26\text{H}_2\text{O}$ ). <i>Cement and Concrete Research</i> , 2009, 39, 482-489.                  | 4.6 | 107       |
| 44 | ATR-FTIR Spectroscopy Study of the Influence of pH and Contact Time on the Adhesion of <i>Shewanella putrefaciens</i> Bacterial Cells to the Surface of Hematite. <i>Environmental Science &amp; Technology</i> , 2012, 46, 12848-12855. | 4.6 | 107       |
| 45 | Long- and short-term effects of crop residues on aluminum toxicity, phosphorus availability and growth of pearl millet in an acid sandy soil. <i>Plant and Soil</i> , 1991, 136, 215-223.  | 1.8 | 104       |
| 46 | Chemical heterogeneity of humic substances: characterization of size fractions obtained by hollow-fibre ultrafiltration. <i>European Journal of Soil Science</i> , 2000, 51, 617-625.  | 1.8 | 104       |
| 47 | Influence of citric acid on the hydration of Portland cement. <i>Cement and Concrete Research</i> , 2009, 39, 275-282.   | 4.6 | 104       |
| 48 | Geochemical Aspects of Phytosiderophore-Promoted Iron Acquisition by Plants. <i>Advances in Agronomy</i> , 2006, 91, 1-46.   | 2.4 | 103       |
| 49 | Solubility of Fe-ettringite ( $\text{Ca}_6[\text{Fe}(\text{OH})_6]_2(\text{SO}_4)_3 \cdot 26\text{H}_2\text{O}$ ). <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 1-18.  | 1.6 | 101       |
| 50 | Title is missing!. <i>Journal of Plant Nutrition and Soil Science</i> , 2003, 166, 84-92.  | 1.1 | 99        |
| 51 | Goethite Dissolution in the Presence of Phytosiderophores: Rates, Mechanisms, and the Synergistic Effect of Oxalate. <i>Plant and Soil</i> , 2005, 276, 115-132.   | 1.8 | 97        |
| 52 | C-1s NEXAFS Spectroscopy Reveals Chemical Fractionation of Humic Acid by Cation-Induced Coagulation. <i>Environmental Science &amp; Technology</i> , 2007, 41, 1915-1920.  | 4.6 | 97        |
| 53 | Reduction and Reoxidation of Humic Acid: Influence on Spectroscopic Properties and Proton Binding. <i>Environmental Science &amp; Technology</i> , 2010, 44, 5787-5792.  | 4.6 | 95        |
| 54 | Formation of Zn-rich phyllosilicate, Zn-layered double hydroxide and hydrozincite in contaminated calcareous soils. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 5037-5054.  | 1.6 | 94        |

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|----|--|-----|-----------|
| 55 | In situ ATR-FTIR spectroscopic analysis of the co-adsorption of orthophosphate and Cd(II) onto hematite. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 117, 53-64.  | 1.6 | 94        |
| 56 | Hydrological control of stream water chemistry in a glacial catchment (Damma Glacier, Switzerland). <i>Chemical Geology</i> , 2011, 285, 215-230.  | 1.4 | 92        |
| 57 | Impacts of <i>Shewanella putrefaciens</i> Strain CN-32 Cells and Extracellular Polymeric Substances on the Sorption of As(V) and As(III) on Fe(III)-(Hydr)oxides. <i>Environmental Science &amp; Technology</i> , 2011, 45, 2804-2810.         | 4.6 | 91        |
| 58 | Spatial Distribution and Speciation of Lead around Corroding Bullets in a Shooting Range Soil Studied by Micro-X-ray Fluorescence and Absorption Spectroscopy. <i>Environmental Science &amp; Technology</i> , 2005, 39, 4808-4815.            | 4.6 | 90        |
| 59 | Iron isotope fractionation during proton- and ligand-promoted dissolution of primary phyllosilicates. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 3112-3128.  | 1.6 | 90        |
| 60 | Reaction-Based Model Describing Competitive Sorption and Transport of Cd, Zn, and Ni in an Acidic Soil. <i>Environmental Science &amp; Technology</i> , 2001, 35, 1651-1657.   | 4.6 | 89        |
| 61 | Detrital and pedogenic magnetic mineral phases in the loess/palaeosol sequence at Lingtai (Central China). <i>Journal of Environmental and Planetary Science</i> , 2007, 11, 107-114.  | 0.7 | 89        |
| 62 | Soil properties controlling Zn speciation and fractionation in contaminated soils. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 5256-5272.   | 1.6 | 88        |
| 63 | Calcium isotopes in a proglacial weathering environment: Damma glacier, Switzerland. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 106-118.   | 1.6 | 88        |
| 64 | Competitive sorption of protons and metal cations onto kaolinite: experiments and modeling. <i>Journal of Colloid and Interface Science</i> , 2005, 282, 270-282.  | 5.0 | 87        |
| 65 | Assessment of Long-Term Performance and Chromate Reduction Mechanisms in a Field Scale Permeable Reactive Barrier. <i>Environmental Science &amp; Technology</i> , 2009, 43, 6786-6792.  | 4.6 | 87        |
| 66 | Bisulfide Reaction with Natural Organic Matter Enhances Arsenite Sorption: Insights from X-ray Absorption Spectroscopy. <i>Environmental Science &amp; Technology</i> , 2012, 46, 11788-11797.   | 4.6 | 87        |
| 67 | Effect of Humic and Fulvic Acid Concentrations and Ionic Strength on Copper and Lead Binding. <i>Environmental Science &amp; Technology</i> , 2005, 39, 5319-5326.   | 4.6 | 86        |
| 68 | Flocculation of Kaolinitic Soil Clays: Effects of Humic Substances and Iron Oxides. <i>Soil Science Society of America Journal</i> , 1993, 57, 1277-1283.  | 1.2 | 83        |
| 69 | Arsenic in Soil and Irrigation Water Affects Arsenic Uptake by Rice: Complementary Insights from Field and Pot Studies. <i>Environmental Science &amp; Technology</i> , 2010, 44, 8842-8848.   | 4.6 | 80        |
| 70 | Arsenite Binding to Natural Organic Matter: Spectroscopic Evidence for Ligand Exchange and Ternary Complex Formation. <i>Environmental Science &amp; Technology</i> , 2013, 47, 12165-12173.   | 4.6 | 80        |
| 71 | Formation and Dissolution of Single and Mixed Zn and Ni Precipitates in Soil: Evidence from Column Experiments and Extended X-ray Absorption Fine Structure Spectroscopy. <i>Environmental Science &amp; Technology</i> , 2005, 39, 5311-5318. | 4.6 | 79        |
| 72 | Iron Isotope Fractionation during Pedogenesis in Redoximorphic Soils. <i>Soil Science Society of America Journal</i> , 2007, 71, 1840-1850.  | 1.2 | 79        |

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|----|---|-----|-----------|
| 73 | Effect of citrate on the local Fe coordination in ferrihydrite, arsenate binding, and ternary arsenate complex formation. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 5574-5592.   | 1.6 | 79        |
| 74 | Heavy Metal Release from Contaminated Soils. <i>Journal of Environmental Quality</i> , 2003, 32, 865-875.   | 1.0 | 79        |
| 75 | Photoreductive Dissolution of Iron(III) (Hydr)oxides in the Absence and Presence of Organic Ligands: Experimental Studies and Kinetic Modeling. <i>Environmental Science &amp; Technology</i> , 2009, 43, 1864-1870.                | 4.6 | 76        |
| 76 | Biogeochemical processes and arsenic enrichment around rice roots in paddy soil: results from micro-focused X-ray spectroscopy. <i>European Journal of Soil Science</i> , 2011, 62, 305-317.  | 1.8 | 76        |
| 77 | Mercury Isotope Signatures in Contaminated Sediments as a Tracer for Local Industrial Pollution Sources. <i>Environmental Science &amp; Technology</i> , 2015, 49, 177-185.   | 4.6 | 75        |
| 78 | Redox transformation, solid phase speciation and solution dynamics of copper during soil reduction and reoxidation as affected by sulfate availability. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 123, 385-402.                | 1.6 | 73        |
| 79 | Iron Isotope Fractionation during Fe Uptake and Translocation in Alpine Plants. <i>Environmental Science &amp; Technology</i> , 2010, 44, 6144-6150.  | 4.6 | 72        |
| 80 | Polymerization of Silicate on Hematite Surfaces and Its Influence on Arsenic Sorption. <i>Environmental Science &amp; Technology</i> , 2012, 46, 13235-13243.   | 4.6 | 71        |
| 81 | Temperature-dependent formation of metallic copper and metal sulfide nanoparticles during flooding of a contaminated soil. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 103, 316-332.   | 1.6 | 71        |
| 82 | Characterization of dissolved organic matter in anoxic rock extracts and in situ pore water of the Opalinus Clay. <i>Applied Geochemistry</i> , 2007, 22, 2926-2939.  | 1.4 | 70        |
| 83 | Arsenic Dynamics in Porewater of an Intermittently Irrigated Paddy Field in Bangladesh. <i>Environmental Science &amp; Technology</i> , 2011, 45, 971-976.  | 4.6 | 70        |
| 84 | Arsenic Accumulation in a Paddy Field in Bangladesh: Seasonal Dynamics and Trends over a Three-Year Monitoring Period. <i>Environmental Science &amp; Technology</i> , 2010, 44, 2925-2931.   | 4.6 | 69        |
| 85 | Mercury Isotope Signatures as Tracers for Hg Cycling at the New Idria Hg Mine. <i>Environmental Science &amp; Technology</i> , 2013, 47, 6137-6145.   | 4.6 | 69        |
| 86 | Spatial Distribution and Speciation of Arsenic in Peat Studied with Microfocused X-ray Fluorescence Spectrometry and X-ray Absorption Spectroscopy. <i>Environmental Science &amp; Technology</i> , 2013, 47, 9706-9714.            | 4.6 | 69        |
| 87 | Impact of Birnessite on Arsenic and Iron Speciation during Microbial Reduction of Arsenic-Bearing Ferrihydrite. <i>Environmental Science &amp; Technology</i> , 2014, 48, 11320-11329.  | 4.6 | 69        |
| 88 | Iron(II)-Catalyzed Iron Atom Exchange and Mineralogical Changes in Iron-rich Organic Freshwater Flocs: An Iron Isotope Tracer Study. <i>Environmental Science &amp; Technology</i> , 2017, 51, 6897-6907.                           | 4.6 | 69        |
| 89 | Ferrihydrite Growth and Transformation in the Presence of Ferrous Iron and Model Organic Ligands. <i>Environmental Science &amp; Technology</i> , 2019, 53, 13636-13647.  | 4.6 | 68        |
| 90 | Influence of Arsenate Adsorption to Ferrihydrite, Goethite, and Boehmite on the Kinetics of Arsenate Reduction by <i>Shewanella putrefaciens</i> strain CN-32. <i>Environmental Science &amp; Technology</i> , 2011, 45, 7701-7709. | 4.6 | 67        |

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|-----|--|-----|-----------|
| 91  | Source tracing of natural organic matter bound mercury in boreal forest runoff with mercury stable isotopes. <i>Environmental Sciences: Processes and Impacts</i> , 2017, 19, 1235-1248.                             | 1.7 | 67        |
| 92  | Sorption of Cu and Pb to kaolinite-fulvic acid colloids: Assessment of sorbent interactions. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 1675-1686.   | 1.6 | 66        |
| 93  | Sequential Extraction Method for Speciation of Arsenate and Arsenite in Mineral Soils. <i>Analytical Chemistry</i> , 2010, 82, 5534-5540.  | 3.2 | 66        |
| 94  | Reduction and Reoxidation of Humic Acid: Influence on Speciation of Cadmium and Silver. <i>Environmental Science &amp; Technology</i> , 2012, 46, 8808-8816.   | 4.6 | 66        |
| 95  | Copper Redox Transformation and Complexation by Reduced and Oxidized Soil Humic Acid. 1. X-ray Absorption Spectroscopy Study. <i>Environmental Science &amp; Technology</i> , 2013, 47, 10903-10911.                 | 4.6 | 66        |
| 96  | Characterization of the pores in hydrous ferric oxide aggregates formed by freezing and thawing. <i>Journal of Colloid and Interface Science</i> , 2004, 271, 163-173.   | 5.0 | 65        |
| 97  | Bacterial Siderophores Promote Dissolution of UO <sub>2</sub> under Reducing Conditions. <i>Environmental Science &amp; Technology</i> , 2005, 39, 5709-5715.  | 4.6 | 65        |
| 98  | Biotite alteration to halloysite and kaolinite in soil-saprolite profiles developed from mica schist and granite gneiss. <i>Geoderma</i> , 1997, 75, 155-170.  | 2.3 | 64        |
| 99  | Isolation and characterization of dissolved organic matter from the Callovo-Oxfordian formation. <i>Applied Geochemistry</i> , 2007, 22, 1537-1548.  | 1.4 | 63        |
| 100 | Iron speciation and isotope fractionation during silicate weathering and soil formation in an alpine glacier forefield chronosequence. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 5559-5573.                 | 1.6 | 62        |
| 101 | Microbial sulfate reduction decreases arsenic mobilization in flooded paddy soils with high potential for microbial Fe reduction. <i>Environmental Pollution</i> , 2019, 251, 952-960.                               | 3.7 | 61        |
| 102 | Time-Dependent Changes of Zinc Speciation in Four Soils Contaminated with Zincite or Sphalerite. <i>Environmental Science &amp; Technology</i> , 2011, 45, 255-261.  | 4.6 | 60        |
| 103 | Electrochemical Analysis of Changes in Iron Oxide Reducibility during Abiotic Ferrihydrite Transformation into Goethite and Magnetite. <i>Environmental Science &amp; Technology</i> , 2019, 53, 3568-3578.          | 4.6 | 60        |
| 104 | The Voltaic Effect as a Novel Mechanism Controlling the Remobilization of Cadmium in Paddy Soils during Drainage. <i>Environmental Science &amp; Technology</i> , 2021, 55, 1750-1758.                               | 4.6 | 59        |
| 105 | Aggregation-dependent electron transfer via redox-active biochar particles stimulate microbial ferrihydrite reduction. <i>Science of the Total Environment</i> , 2020, 703, 135515.                                  | 3.9 | 57        |
| 106 | Mercury Isotope Fractionation during Precipitation of Metacinnabar ( <sup>200</sup> HgS) and Montroydite (HgO). <i>Environmental Science &amp; Technology</i> , 2015, 49, 4325-4334.                                 | 4.6 | 55        |
| 107 | Tetra- and Hexavalent Uranium Forms Bidentate-Mononuclear Complexes with Particulate Organic Matter in a Naturally Uranium-Enriched Peatland. <i>Environmental Science &amp; Technology</i> , 2016, 50, 10465-10475. | 4.6 | 55        |
| 108 | The within-field spatial variation in rice grain Cd concentration is determined by soil redox status and pH during grain filling. <i>Environmental Pollution</i> , 2020, 261, 114151.                                | 3.7 | 55        |



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|-----|--|-----|-----------|
| 109 | Iron and Arsenic Speciation and Distribution in Organic Flocs from Streambeds of an Arsenic-Enriched Peatland. <i>Environmental Science &amp; Technology</i> , 2014, 48, 13218-13228.                              | 4.6 | 52        |
| 110 | Decreases in Iron Oxide Reducibility during Microbial Reductive Dissolution and Transformation of Ferrihydrite. <i>Environmental Science &amp; Technology</i> , 2019, 53, 8736-8746.                               | 4.6 | 52        |
| 111 | Slow Formation and Dissolution of Zn Precipitates in Soil: A Combined Column-Transport and XAFS Study. <i>Environmental Science &amp; Technology</i> , 2002, 36, 3749-3754.  | 4.6 | 51        |
| 112 | Aggregation Kinetics of Kaolinite~Fulvic Acid Colloids as Affected by the Sorption of Cu and Pb. <i>Environmental Science &amp; Technology</i> , 2005, 39, 807-813.  | 4.6 | 50        |
| 113 | Weathering, soil formation and initial ecosystem evolution on a glacier forefield: a case study from the Damma Glacier, Switzerland. <i>Mineralogical Magazine</i> , 2008, 72, 19-22.                              | 0.6 | 50        |
| 114 | Chemical composition of aquatic dissolved organic matter in five boreal forest catchments sampled in spring and fall seasons. <i>Biogeochemistry</i> , 2006, 80, 263-275.  | 1.7 | 49        |
| 115 | Photolysis of Citrate on the Surface of Lepidocrocite: An in situ Attenuated Total Reflection Infrared Spectroscopy Study. <i>Journal of Physical Chemistry C</i> , 2007, 111, 10560-10569.                        | 1.5 | 48        |
| 116 | Kinetics of Hg(II) Exchange between Organic Ligands, Goethite, and Natural Organic Matter Studied with an Enriched Stable Isotope Approach. <i>Environmental Science &amp; Technology</i> , 2014, 48, 13207-13217. | 4.6 | 48        |
| 117 | Sulfidization of Organic Freshwater Flocs from a Minerotrophic Peatland: Speciation Changes of Iron, Sulfur, and Arsenic. <i>Environmental Science &amp; Technology</i> , 2016, 50, 3607-3616.                     | 4.6 | 47        |
| 118 | Zinc Fractionation in Contaminated Soils by Sequential and Single Extractions: Influence of Soil Properties and Zinc Content. <i>Journal of Environmental Quality</i> , 2008, 37, 1190-1200.                       | 1.0 | 46        |
| 119 | Solid Phase Speciation and Solubility of Vanadium in Highly Weathered Soils. <i>Environmental Science &amp; Technology</i> , 2017, 51, 8254-8262.  | 4.6 | 46        |
| 120 | Characterization of zinc in contaminated soils: complementary insights from isotopic exchange, batch extractions and XAFS spectroscopy. <i>European Journal of Soil Science</i> , 2011, 62, 318-330.               | 1.8 | 45        |
| 121 | ATR-FTIR spectroscopic study of the adsorption of desferrioxamine B and aerobactin to the surface of lepidocrocite ( $\text{Fe}^{3+}$ -FeOOH). <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 4661-4672.       | 1.6 | 44        |
| 122 | Calcium isotope fractionation in alpine plants. <i>Biogeochemistry</i> , 2013, 112, 373-388.   | 1.7 | 44        |
| 123 | Arsenic Species Formed from Arsenopyrite Weathering along a Contamination Gradient in Circumneutral River Floodplain Soils. <i>Environmental Science &amp; Technology</i> , 2014, 48, 208-217.                     | 4.6 | 44        |
| 124 | Modelling sorption and mobility of cadmium and zinc in soils with scaled exchange coefficients. <i>European Journal of Soil Science</i> , 2003, 54, 387-400.   | 1.8 | 41        |
| 125 | Vertical Distribution and Speciation of Trace Metals in Weathering Flotation Residues of a Zinc/Lead Sulfide Mine. <i>Journal of Environmental Quality</i> , 2007, 36, 61-69.                                      | 1.0 | 41        |
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