Caroline L Peacock

List of Publications by Year
in descending order

67 papers	4,017 citations	101543 36 h-index	118850 62 g-index
69 all docs	69 docs citations	69 times ranked	4069 citing authors

#	Article	IF	Citations
1	Zn stable isotope fractionation during adsorption onto todorokite: A molecular perspective from X-ray absorption spectroscopy and density functional theory. Geochimica Et Cosmochimica Acta, 2022, 327, 116-136.	3.9	12
2	Mineralogical control on methylotrophic methanogenesis and implications for cryptic methane cycling in marine surface sediment. Nature Communications, 2022, 13, 2722.	12.8	8
3	Effect and fate of Ni during aging and thermal-induced phyllomanganate-to-tectomanganate transformation. Geochimica Et Cosmochimica Acta, 2022, 333, 200-215.	3.9	2
4	The role and fate of organic carbon during aging of ferrihydrite. Geochimica Et Cosmochimica Acta, 2022, 335, 339-355.	3.9	20
5	Characteristics and mechanisms of Pb(II) sorption onto Fe-rich waste water treatment residue (WTR): A potential sustainable Pb immobilisation technology for soils. Journal of Hazardous Materials, 2021, 402, 123433.	12.4	14
6	Metagenomic and <scp>¹⁴C</scp> tracing evidence for autotrophic microbial <scp>CO₂</scp> fixation in paddy soils. Environmental Microbiology, 2021, 23, 924-933.	3.8	13
7	Selective retention of extracellular polymeric substances induced by adsorption to and coprecipitation with ferrihydrite. Geochimica Et Cosmochimica Acta, 2021, 299, 15-34.	3.9	27
8	Combining local knowledge and soil science for integrated soil health assessments in conservation agriculture systems. Journal of Environmental Management, 2021, 286, 112192.	7.8	24
9	Technical note: Uncovering the influence of methodological variations on the extractability of iron-bound organic carbon. Biogeosciences, 2021, 18, 3409-3419.	3.3	10
10	Cadmium Isotope Fractionation during Adsorption and Substitution with Iron (Oxyhydr)oxides. Environmental Science & Technology, 2021, 55, 11601-11611.	10.0	58
11	Carboxyl-richness controls organic carbon preservation during coprecipitation with iron (oxyhydr)oxides in the natural environment. Communications Earth & Environment, 2021, 2, .	6.8	39
12	Outer Membrane c -Type Cytochromes OmcA and MtrC Play Distinct Roles in Enhancing the Attachment of Shewanella oneidensis MR-1 Cells to Goethite. Applied and Environmental Microbiology, 2020, 86, .	3.1	36
13	Investigating the Effectiveness of Phosphonate Additives in Hindering the Calcium Sulfate Dihydrate Scale Formation. Industrial & Engineering Chemistry Research, 2020, 59, 14970-14980.	3.7	11
14	Experimental evaluation of the extractability of iron bound organic carbon in sediments as a function of carboxyl content. Chemical Geology, 2020, 556, 119853.	3.3	17
15	Natural organic matter decreases uptake of W(VI), and reduces W(VI) to W(V), during adsorption to ferrihydrite. Chemical Geology, 2020, 540, 119567.	3.3	31
16	Adsorption of Cr(VI) on Al-substituted hematites and its reduction and retention in the presence of Fe2+ under conditions similar to subsurface soil environments. Journal of Hazardous Materials, 2020, 390, 122014.	12.4	43
17	Soil Functions: Connecting Earth's Critical Zone. Annual Review of Earth and Planetary Sciences, 2019, 47, 333-359.	11.0	78
18	Extraction of extracellular polymeric substances (EPS) from red soils (Ultisols). Soil Biology and Biochemistry, 2019, 135, 283-285.	8.8	28

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19	Investigating Ocean Deoxygenation During the PETM Through the Cr Isotopic Signature of Foraminifera. Paleoceanography and Paleoclimatology, 2019, 34, 917-929.	2.9	14
20	Arsenite and arsenate binding to ferrihydrite organo-mineral coprecipitate: Implications for arsenic mobility and fate in natural environments. Chemosphere, 2019, 224, 103-110.	8.2	113
21	Phosphorus cycling in Lake Cadagno, Switzerland: A low sulfate euxinic ocean analogue. Geochimica Et Cosmochimica Acta, 2019, 251, 116-135.	3.9	51
22	Effectiveness of Green Additives vs Poly(acrylic acid) in Inhibiting Calcium Sulfate Dihydrate Crystallization. Industrial & Engineering Chemistry Research, 2019, 58, 1561-1569.	3.7	35
23	Transformation of Co-containing birnessite to todorokite: Effect of Co on the transformation and implications for Co mobility. Geochimica Et Cosmochimica Acta, 2019, 246, 21-40.	3.9	38
24	A universal adsorption behaviour for Cu uptake by iron (hydr)oxide organo-mineral composites. Chemical Geology, 2018, 479, 22-35.	3.3	39
25	In situ arsenic oxidation and sorption by a Fe-Mn binary oxide waste in soil. Journal of Hazardous Materials, 2018, 342, 724-731.	12.4	70
26	Competitive binding of Cd, Ni and Cu on goethite organoâ€“mineral composites made with soil bacteria. Environmental Pollution, 2018, 243, 444-452.	7.5	27
27	Binding of Cd by ferrihydrite organo-mineral composites: Implications for Cd mobility and fate in natural and contaminated environments. Chemosphere, 2018, 207, 404-412.	8.2	113
28	EPS adsorption to goethite: Molecular level adsorption mechanisms using 2D correlation spectroscopy. Chemical Geology, 2018, 494, 127-135.	3.3	30
29	Formation of Silica-Lysozyme Composites Through Co-Precipitation and Adsorption. Frontiers in Materials, 2018, 5, .	2.4	11
30	A universal uptake mechanism for cobalt(II) on soil constituents: Ferrihydrite, kaolinite, humic acid, and organo-mineral composites. Geochimica Et Cosmochimica Acta, 2018, 238, 270-291.	3.9	26
31	Towards a better understanding of the aggregation mechanisms of iron (hydr)oxide nanoparticles interacting with extracellular polymeric substances: Role of pH and electrolyte solution. Science of the Total Environment, 2018, 645, 372-379.	8.0	22
32	Understanding amorphous silica scaling under well-constrained conditions inside geothermal pipelines. Geothermics, 2018, 76, 231-241.	3.4	31
33	Mechanism of Enhanced Strontium Uptake into Calcite via an Amorphous Calcium Carbonate Crystallization Pathway. Crystal Growth and Design, 2017, 17, 1214-1223.	3.0	69
34	The Effects of Inorganic Additives on the Nucleation and Growth Kinetics of Calcium Sulfate Dihydrate Crystals. Crystal Growth and Design, 2017, 17, 582-589.	3.0	60
35	Cd(II) Sorption on Montmorillonite-Humic acid-Bacteria Composites. Scientific Reports, 2016, 6, 19499.	3.3	49
36	Release of Ni from birnessite during transformation of birnessite to todorokite: Implications for Ni cycling in marine sediments. Geochimica Et Cosmochimica Acta, 2016, 189, 158-183.	3.9	54

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37	EXAFS Study of Sr sorption to Illite, Goethite, Chlorite, and Mixed Sediment under Hyperalkaline Conditions. Langmuir, 2016, 32, 2937-2946.	3.5	48
38	Effect of solution composition on the recrystallization of kaolinite to feldspathoids in hyperalkaline conditions: limitations of pertechnetate incorporation by ion competition effects. Mineralogical Magazine, 2015, 79, 1379-1388.	1.4	4
39	Impact of the Diamond Light Source on research in Earth and environmental sciences: current work and future perspectives. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20130151.	3.4	9
40	Biogenic precipitation of manganese oxides and enrichment of heavy metals at acidic soil pH. Chemical Geology, 2015, 402, 6-17.	3.3	72
41	Towards a mechanistic understanding of carbon stabilization in manganese oxides. Nature Communications, 2015, 6, 7628.	12.8	102
42	Limited Zn and Ni mobility during simulated iron formation diagenesis. Chemical Geology, 2015, 402, 30-39.	3.3	24
43	Caesium incorporation and retention in illite interlayers. Applied Clay Science, 2015, 108, 128-134.	5.2	155
44	The Archean Nickel Famine Revisited. Astrobiology, 2015, 15, 804-815.	3.0	55
45	Mobilisation of arsenic from bauxite residue (red mud) affected soils: Effect of pH and redox conditions. Applied Geochemistry, 2014, 51, 268-277.	3.0	50
46	Ionic strength and pH dependent multi-site sorption of Cs onto a micaceous aquifer sediment. Applied Geochemistry, 2014, 40, 32-42.	3.0	76
47	Solid-phase phosphorus speciation in Saharan BodÃ©lÃ© Depression dusts and source sediments. Chemical Geology, 2014, 384, 16-26.	3.3	37
48	Selenium Speciation in Framboidal and Euhedral Pyrites in Shales. Environmental Science & Technology, 2014, 48, 8972-8979.	10.0	15
49	Nucleation and growth of todorokite from birnessite: Implications for trace-metal cycling in marine sediments. Geochimica Et Cosmochimica Acta, 2014, 144, 109-125.	3.9	98
50	Carboxylic acids: effective inhibitors for calcium sulfate precipitation?. Mineralogical Magazine, 2014, 78, 1465-1472.	1.4	55
51	Microstructural and chemical variation in silica-rich precipitates at the HellisheiÃ°i geothermal power plant. Mineralogical Magazine, 2014, 78, 1381-1389.	1.4	18
52	Modelling Cu(II) adsorption to ferrihydrite and ferrihydriteâ€“bacteria composites: Deviation from additive adsorption in the composite sorption system. Geochimica Et Cosmochimica Acta, 2013, 104, 148-164.	3.9	80
53	Towards an understanding of thallium isotope fractionation during adsorption to manganese oxides. Geochimica Et Cosmochimica Acta, 2013, 117, 252-265.	3.9	95
54	Behavior of Aluminum, Arsenic, and Vanadium during the Neutralization of Red Mud Leachate by HCl, Gypsum, or Seawater. Environmental Science & Technology, 2013, 47, 6527-6535.	10.0	115

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55	Oxidative scavenging of thallium by birnessite: Explanation for thallium enrichment and stable isotope fractionation in marine ferromanganese precipitates. Geochimica Et Cosmochimica Acta, 2012, 84, 297-313.	3.9	160
56	Adsorption of Cu(II) to ferrihydrite and ferrihydriteâ€"bacteria composites: Importance of the carboxyl group for Cu mobility in natural environments. Geochimica Et Cosmochimica Acta, 2012, 92, 203-219.	3.9	100
57	Speciation of Arsenic, Chromium, and Vanadium in Red Mud Samples from the Ajka Spill Site, Hungary. Environmental Science & Technology, 2012, 46, 3085-3092.	10.0	138
58	Adsorption of Cu(II) to Bacillus subtilis: A pH-dependent EXAFS and thermodynamic modelling study. Geochimica Et Cosmochimica Acta, 2011, 75, 6705-6719.	3.9	44
59	Surface complexation of Cu on birnessite (Î´-MnO2): Controls on Cu in the deep ocean. Geochimica Et Cosmochimica Acta, 2010, 74, 6721-6730.	3.9	91
60	Physiochemical controls on the crystal-chemistry of Ni in birnessite: Genetic implications for ferromanganese precipitates. Geochimica Et Cosmochimica Acta, 2009, 73, 3568-3578.	3.9	85
61	Surface complexation of U(VI) on goethite (Î±-FeOOH). Geochimica Et Cosmochimica Acta, 2008, 72, 298-310.	3.9	186
62	Sorption of Ni by birnessite: Equilibrium controls on Ni in seawater. Chemical Geology, 2007, 238, 94-106.	3.3	165
63	Crystal-chemistry of Ni in marine ferromanganese crusts and nodules. American Mineralogist, 2007, 92, 1087-1092.	1.9	91
64	Geochemical proxies for biogeochemical cycling and ocean anoxia. , 2007, , 121-172.		0
65	Surface complexation model for multisite adsorption of copper(II) onto kaolinite. Geochimica Et Cosmochimica Acta, 2005, 69, 3733-3745.	3.9	81
66	Vanadium(V) adsorption onto goethite (Î±-FeOOH) at pH 1.5 to 12: a surface complexation model based on ab initio molecular geometries and EXAFS spectroscopy. Geochimica Et Cosmochimica Acta, 2004, 68, 1723-1733.	3.9	240
67	Copper(II) sorption onto goethite, hematite and lepidocrocite: a surface complexation model based on ab initio molecular geometries and EXAFS spectroscopy. Geochimica Et Cosmochimica Acta, 2004, 68, 2623-2637.	3.9	194