Baohua Gu

List of Publications by Year
in descending order

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242 papers	18,595 citations	12597 71 h-index	16791 127 g-index
251 all docs	251 docs citations	251 times ranked	20571 citing authors

#	Article	IF	Citations
1	Evidence for methanobactin â€œTheftâ€•and novel chalkophore production in methanotrophs: impact on methanotrophic-mediated methylmercury degradation. ISME Journal, 2022, 16, 211-220.	4.4	18
2	Competitive exchange between divalent metal ions [Cu(II), Zn(II), Ca(II)] and Hg(II) bound to thiols and natural organic matter. Journal of Hazardous Materials, 2022, 424, 127388.	6.5	2
3	Demethylationâ”€The Other Side of the Mercury Methylation Coin: A Critical Review. ACS Environmental Au, 2022, 2, 77-97.	3.3	57
4	Unravelling biogeochemical drivers of methylmercury production in an Arctic fen soil and a bog soil. Environmental Pollution, 2022, 299, 118878.	3.7	8
5	Isotopic discrimination of natural and anthropogenic perchlorate sources in groundwater in a semi-arid region of northeastern Oregon (USA). Applied Geochemistry, 2022, 139, 105232.	1.4	2
6	Mercury Reduction, Uptake, and Species Transformation by Freshwater Alga Chlorella vulgaris under Sunlit and Dark Conditions. Environmental Science & Technology, 2022, 56, 4961-4969.	4.6	17
7	Contrary effects of phytoplankton Chlorella vulgaris and its exudates on mercury methylation by iron- and sulfate-reducing bacteria. Journal of Hazardous Materials, 2022, 433, 128835.	6.5	11
8	Important Roles of Thiols in Methylmercury Uptake and Translocation by Rice Plants. Environmental Science & Technology, 2022, 56, 6765-6773.	4.6	10
9	Quantifying pH buffering capacity in acidic, organic-rich Arctic soils: Measurable proxies and implications for soil carbon degradation. Geoderma, 2022, 424, 116003.	2.3	7
10	Isotope exchange between mercuric [Hg(II)] chloride and Hg(II) bound to minerals and thiolate ligands: Implications for enriched isotope tracer studies. Geochimica Et Cosmochimica Acta, 2021, 292, 468-481.	1.6	17
11	Long-term warming in a Mediterranean-type grassland affects soil bacterial functional potential but not bacterial taxonomic composition. Npj Biofilms and Microbiomes, 2021, 7, 17.	2.9	12
12	Complete Genome Sequences of Two Gammaproteobacterial Methanotrophs Isolated from a Mercury-Contaminated Stream. Microbiology Resource Announcements, 2021, 10, .	0.3	1
13	Mechanistic Investigation of Dimethylmercury Formation Mediated by a Sulfide Mineral Surface. Journal of Physical Chemistry A, 2021, 125, 5397-5405.	1.1	3
14	Origin of the isotopic composition of natural perchlorate: Experimental results for the impact of reaction pathway and initial ClOx reactant. Geochimica Et Cosmochimica Acta, 2021, 311, 292-315.	1.6	6
15	Spectroscopic and computational investigations of organometallic complexation of group 12 transition metals by methanobactins from Methylocystis sp. SB2. Journal of Inorganic Biochemistry, 2021, 223, 111496.	1.5	2
16	Cometabolic biotransformation of 1,4-dioxane in mixtures with hexavalent chromium using attached and planktonic bacteria. Science of the Total Environment, 2020, 706, 135734.	3.9	17
17	Molecular Dynamics Simulation of the Structures, Dynamics, and Aggregation of Dissolved Organic Matter. Environmental Science & Technology, 2020, 54, 13527-13537.	4.6	36
18	Rates and Dynamics of Mercury Isotope Exchange between Dissolved Elemental Hg(0) and Hg(II) Bound to Organic and Inorganic Ligands. Environmental Science & Technology, 2020, 54, 15534-15545.	4.6	17

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19	Anaerobic respiration pathways and response to increased substrate availability of Arctic wetland soils. Environmental Sciences: Processes and Impacts, 2020, 22, 2070-2083.	1.7	6
20	Microbial Communities Associated with Methylmercury Degradation in Paddy Soils. Environmental Science & Technology, 2020, 54, 7952-7960.	4.6	40
21	Influences of Hillslope Biogeochemistry on Anaerobic Soil Organic Matter Decomposition in a Tundra Watershed. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005512.	1.3	4
22	Mercury methylation potential in a sand dune on Lake Michigan's eastern shoreline. Science of the Total Environment, 2020, 729, 138879.	3.9	3
23	Synergistic Effects of a Chalkophore, Methanobactin, on Microbial Methylation of Mercury. Applied and Environmental Microbiology, 2020, 86, .	1.4	12
24	Temporal, Spatial, and Temperature Controls on Organic Carbon Mineralization and Methanogenesis in Arctic High-Centered Polygon Soils. Frontiers in Microbiology, 2020, 11, 616518.	1.5	3
25	Stepwise Reduction Approach Reveals Mercury Competitive Binding and Exchange Reactions within Natural Organic Matter and Mixed Organic Ligands. Environmental Science & Technology, 2019, 53, 10685-10694.	4.6	35
26	Temperature sensitivity of mineral-enzyme interactions on the hydrolysis of cellobiose and indican by Î²-glucosidase. Science of the Total Environment, 2019, 686, 1194-1201.	3.9	20
27	Mercury Sorption and Desorption on Organo-Mineral Particulates as a Source for Microbial Methylation. Environmental Science & Technology, 2019, 53, 2426-2433.	4.6	52
28	Mercury Adsorption on Minerals and Its Effect on Microbial Methylation. ACS Earth and Space Chemistry, 2019, 3, 1338-1345.	1.2	18
29	Mercury Uptake by Desulfovibrio desulfuricans ND132: Passive or Active?. Environmental Science & Technology, 2019, 53, 6264-6272.	4.6	33
30	Increased Methylmercury Accumulation in Rice after Straw Amendment. Environmental Science & Technology, 2019, 53, 6144-6153.	4.6	45
31	Modeling anaerobic soil organic carbon decomposition in Arctic polygon tundra: insights into soil geochemical influences on carbon mineralization. Biogeosciences, 2019, 16, 663-680.	1.3	21
32	The Application and Potential Artifacts of Zeeman Cold Vapor Atomic Absorption Spectrometry in Mercury Stable Isotope Analysis. Environmental Science and Technology Letters, 2019, 6, 165-170.	3.9	21
33	Mechanistic Modeling of Microtopographic Impacts on CO₂ and CH₄ Fluxes in an Alaskan Tundra Ecosystem Using the CLMâ€Microbe Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 4288-4304.	1.3	22
34	Stimulation of anaerobic organic matter decomposition by subsurface organic N addition in tundra soils. Soil Biology and Biochemistry, 2019, 130, 195-204.	4.2	13
35	Mercury Stable Isotope Fractionation during Abiotic Dark Oxidation in the Presence of Thiols and Natural Organic Matter. Environmental Science & Technology, 2019, 53, 1853-1862.	4.6	77
36	Hg isotopes reveal in-stream processing and legacy inputs in East Fork Poplar Creek, Oak Ridge, Tennessee, USA. Environmental Sciences: Processes and Impacts, 2018, 20, 686-707.	1.7	30

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37	Microbial community structure with trends in methylation gene diversity and abundance in mercury-contaminated rice paddy soils in Guizhou, China. Environmental Sciences: Processes and Impacts, 2018, 20, 673-685.	1.7	36
38	Characterization of iron oxide nanoparticle films at the airâ€“water interface in Arctic tundra waters. Science of the Total Environment, 2018, 633, 1460-1468.	3.9	8
39	Influence of Structural Defects on Biomineralized ZnS Nanoparticle Dissolution: An in-Situ Electron Microscopy Study. Environmental Science & Technology, 2018, 52, 1139-1149.	4.6	42
40	Molecular Insights into Arctic Soil Organic Matter Degradation under Warming. Environmental Science & Technology, 2018, 52, 4555-4564.	4.6	74
41	Impacts of temperature and soil characteristics on methane production and oxidation in Arctic tundra. Biogeosciences, 2018, 15, 6621-6635.	1.3	33
42	Unraveling Microbial Communities Associated with Methylmercury Production in Paddy Soils. Environmental Science & Technology, 2018, 52, 13110-13118.	4.6	106
43	Co-contaminant effects on 1,4-dioxane biodegradation in packed soil column flow-through systems. Environmental Pollution, 2018, 243, 573-581.	3.7	29
44	Nanomolar Copper Enhances Mercury Methylation by Desulfovibrio desulfuricans ND132. Environmental Science and Technology Letters, 2018, 5, 372-376.	3.9	24
45	Quantitative Proteomic Analysis of Biological Processes and Responses of the Bacterium Desulfovibrio desulfuricans ND132 upon Deletion of Its Mercury Methylation Genes. Proteomics, 2018, 18, e1700479.	1.3	22
46	Stable isotopic composition of perchlorate and nitrate accumulated in plants: Hydroponic experiments and field data. Science of the Total Environment, 2017, 595, 556-566.	3.9	14
47	Methylmercury uptake and degradation by methanotrophs. Science Advances, 2017, 3, e1700041.	4.7	78
48	Influence of iron redox cycling on organo-mineral associations in Arctic tundra soil. Geochimica Et Cosmochimica Acta, 2017, 207, 210-231.	1.6	94
49	Identification of Mercury and Dissolved Organic Matter Complexes Using Ultrahigh Resolution Mass Spectrometry. Environmental Science and Technology Letters, 2017, 4, 59-65.	3.9	43
50	Traceâ€level perchlorate analysis of impacted groundwater by elevated gold ellipse dimer nanoantenna surfaceâ€enhanced Raman scattering. Journal of Raman Spectroscopy, 2017, 48, 518-524.	1.2	15
51	Contrasting Effects of Dissolved Organic Matter on Mercury Methylation by Geobacter sulfurreducens PCA and Desulfovibrio desulfuricans ND132. Environmental Science & Technology, 2017, 51, 10468-10475.	4.6	74
52	Photochemical reactions between mercury (Hg) and dissolved organic matter decrease Hg bioavailability and methylation. Environmental Pollution, 2017, 220, 1359-1365.	3.7	53
53	Stable isotope analyses of oxygen (¹⁸O:¹⁷O:¹⁶O) and chlorine (³⁷Cl:³⁵Cl) in perchlorate: reference materials, calibrations, methods, and interferences. Rapid Communications in Mass Spectrometry, 2017, 31, 85-110.	0.7	13
54	Variations of Soil Microbial Community Structures Beneath Broadleaved Forest Trees in Temperate and Subtropical Climate Zones. Frontiers in Microbiology, 2017, 8, 200.	1.5	9

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55	The Biogeographic Pattern of Microbial Functional Genes along an Altitudinal Gradient of the Tibetan Pasture. Frontiers in Microbiology, 2017, 8, 976.	1.5	22
56	Microbial Community and Functional Gene Changes in Arctic Tundra Soils in a Microcosm Warming Experiment. Frontiers in Microbiology, 2017, 8, 1741.	1.5	26
57	Biogeochemical modeling of CO₂ and CH₄ production in anoxic Arctic soil microcosms. Biogeosciences, 2016, 13, 5021-5041.	1.3	27
58	Global Proteome Response to Deletion of Genes Related to Mercury Methylation and Dissimilatory Metal Reduction Reveals Changes in Respiratory Metabolism inGeobacter sulfurreducensPCA. Journal of Proteome Research, 2016, 15, 3540-3549.	1.8	28
59	Anaerobic Mercury Methylation and Demethylation by Geobacter bemidjiensis Bem. Environmental Science & Technology, 2016, 50, 4366-4373.	4.6	121
60	Response to Comment on â€œAnaerobic Mercury Methylation and Demethylation by Geobacter Bemidjiensis Bemâ€• Environmental Science & Technology, 2016, 50, 9800-9801.	4.6	2
61	Evaluating the role of re-adsorption of dissolved Hg2+ during cinnabar dissolution using isotope tracer technique. Journal of Hazardous Materials, 2016, 317, 466-475.	6.5	15
62	Effects of Cellular Sorption on Mercury Bioavailability and Methylmercury Production by Desulfovibrio desulfuricans ND132. Environmental Science & Technology, 2016, 50, 13335-13341.	4.6	78
63	Free-standing gold elliptical nanoantenna with tunable wavelength in near-infrared region for enhanced Raman spectroscopy. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	7
64	Pb, Cu, and Zn distributions at humic acid-coated metal-oxide surfaces. Geochimica Et Cosmochimica Acta, 2016, 188, 407-423.	1.6	31
65	Warming increases methylmercury production in an Arctic soil. Environmental Pollution, 2016, 214, 504-509.	3.7	60
66	Differential Regulation of the Two Ferrochelatase Paralogues in Shewanella loihica PV-4 in Response to Environmental Stresses. Applied and Environmental Microbiology, 2016, 82, 5077-5088.	1.4	5
67	Effects of warming on the degradation and production of low-molecular-weight labile organic carbon in an Arctic tundra soil. Soil Biology and Biochemistry, 2016, 95, 202-211.	4.2	57
68	Mercury-Pollution Induction of Intracellular Lipid Accumulation and Lysosomal Compartment Amplification in the Benthic Foraminifer Ammonia parkinsoniana. PLoS ONE, 2016, 11, e0162401.	1.1	17
69	Pathways of anaerobic organic matter decomposition in tundra soils from Barrow, Alaska. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 2345-2359.	1.3	41
70	Geochemical drivers of organic matter decomposition in arctic tundra soils. Biogeochemistry, 2015, 126, 397-414.	1.7	53
71	Microtopographic and depth controls on active layer chemistry in Arctic polygonal ground. Geophysical Research Letters, 2015, 42, 1808-1817.	1.5	44
72	Stoichiometry and temperature sensitivity of methanogenesis and <scp>CO</scp>₂ production from saturated polygonal tundra in Barrow, Alaska. Global Change Biology, 2015, 21, 722-737.	4.2	68

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73	New surface radiolabeling schemes of super paramagnetic iron oxide nanoparticles (SPIONs) for biodistribution studies. Nanoscale, 2015, 7, 6545-6555.	2.8	22
74	Surface interactions and degradation of a fluoroquinolone antibiotic in the dark in aqueous TiO2 suspensions. Science of the Total Environment, 2015, 532, 398-403.	3.9	29
75	Optical Control of Fluorescence through Plasmonic Eigenmode Extinction. Scientific Reports, 2015, 5, 9911.	1.6	5
76	Cysteine Inhibits Mercury Methylation by Geobacter sulfurreducens PCA Mutant Î”omcBESTZ. Environmental Science and Technology Letters, 2015, 2, 144-148.	3.9	36
77	Synthesis of rare earth doped TiO₂nanorods as photocatalysts for lignin degradation. Nanoscale, 2015, 7, 16695-16703.	2.8	63
78	Thiol-Facilitated Cell Export and Desorption of Methylmercury by Anaerobic Bacteria. Environmental Science and Technology Letters, 2015, 2, 292-296.	3.9	31
79	Indexing Permafrost Soil Organic Matter Degradation Using High-Resolution Mass Spectrometry. PLoS ONE, 2015, 10, e0130557.	1.1	78
80	Improved Yield of High Molecular Weight DNA Coincides with Increased Microbial Diversity Access from Iron Oxide Cemented Sub-Surface Clay Environments. PLoS ONE, 2014, 9, e102826.	1.1	25
81	X-ray fluorescence mapping of mercury on suspended mineral particles and diatoms in a contaminated freshwater system. Biogeosciences, 2014, 11, 5259-5267.	1.3	26
82	Coupled Mercuryâ€“Cell Sorption, Reduction, and Oxidation on Methylmercury Production by Geobacter sulfurreducens PCA. Environmental Science & Technology, 2014, 48, 11969-11976.	4.6	60
83	Photochemical Oxidation of Dissolved Elemental Mercury by Carbonate Radicals in Water. Environmental Science and Technology Letters, 2014, 1, 499-503.	3.9	48
84	Determination of thiol functional groups on bacteria and natural organic matter in environmental systems. Talanta, 2014, 119, 240-247.	2.9	45
85	Identification of Multiple Mercury Sources to Stream Sediments near Oak Ridge, TN, USA. Environmental Science & Technology, 2014, 48, 3666-3674.	4.6	43
86	Unexpected Effects of Gene Deletion on Interactions of Mercury with the Methylation-Deficient Mutant Î”hgcAB. Environmental Science and Technology Letters, 2014, 1, 271-276.	3.9	22
87	Why Dissolved Organic Matter Enhances Photodegradation of Methylmercury. Environmental Science and Technology Letters, 2014, 1, 426-431.	3.9	82
88	Oxidation and methylation of dissolved elemental mercury by anaerobic bacteria. Nature Geoscience, 2013, 6, 751-754.	5.4	155
89	Why Mercury Prefers Soft Ligands. Journal of Physical Chemistry Letters, 2013, 4, 2317-2322.	2.1	54
90	Volume labeling with Alexa Fluor dyes and surface functionalization of highly sensitive fluorescent silica (SiO2) nanoparticles. Nanoscale, 2013, 5, 10369.	2.8	20

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91	Oxidation of Dissolved Elemental Mercury by Thiol Compounds under Anoxic Conditions. Environmental Science & Technology, 2013, 47, 12827-12834.	4.6	67
92	Cluster-Continuum Calculations of Hydration Free Energies of Anions and Group 12 Divalent Cations. Journal of Chemical Theory and Computation, 2013, 9, 555-569.	2.3	44
93	Photochemical transformation of the insensitive munitions compound 2,4-dinitroanisole. Science of the Total Environment, 2013, 443, 692-699.	3.9	49
94	Prediction of Aluminum, Uranium, and Co-Contaminants Precipitation and Adsorption during Titration of Acidic Sediments. Environmental Science & Technology, 2013, 47, 5787-5793.	4.6	18
95	Mercury Reduction and Cell-Surface Adsorption by Geobacter sulfurreducens PCA. Environmental Science & Technology, 2013, 47, 10922-10930.	4.6	78
96	Mercury Reduction and Oxidation by Reduced Natural Organic Matter in Anoxic Environments. Environmental Science & Technology, 2012, 46, 292-299.	4.6	155
97	Time-Dependent Density Functional Theory Assessment of UV Absorption of Benzoic Acid Derivatives. Journal of Physical Chemistry A, 2012, 116, 11870-11879.	1.1	55
98	Perchlorate Production by Photodecomposition of Aqueous Chlorine Solutions. Environmental Science & Technology, 2012, 46, 11635-11643.	4.6	48
99	Cytotoxicity Induced by Engineered Silver Nanocrystallites Is Dependent on Surface Coatings and Cell Types. Langmuir, 2012, 28, 2727-2735.	1.6	222
100	A Combined Physicalâ€“Chemical Polymerization Process for Fabrication of Nanoparticleâ€“Hydrogel Sensing Materials. Macromolecules, 2012, 45, 8382-8386.	2.2	24
101	Competitive ligand exchange reveals time dependant changes in the reactivity of Hgâ€“dissolved organic matter complexes. Environmental Chemistry, 2012, 9, 495.	0.7	26
102	Mercury photolytic transformation affected by low-molecular-weight natural organics in water. Science of the Total Environment, 2012, 416, 429-435.	3.9	30
103	Colloidal synthesis of BaF2 nanoparticles and their application as fillers in polymer nanocomposites. Applied Physics A: Materials Science and Processing, 2012, 106, 661-667.	1.1	11
104	Isotopic Tracing of Perchlorate in the Environment. Advances in Isotope Geochemistry, 2012, , 437-452.	1.4	13
105	An integrated portable Raman sensor with nanofabricated gold bowtie array substrates for energetics detection. Analyst, The, 2011, 136, 1697.	1.7	25
106	High Tunability of the Surface-Enhanced Raman Scattering Response with a Metalâ^'Multiferroic Composite. Nano Letters, 2011, 11, 1265-1269.	4.5	22
107	Interactions of Tc(IV) with Humic Substances. Environmental Science & Technology, 2011, 45, 2718-2724.	4.6	36
108	Dissolution of Technetium(IV) Oxide by Natural and Synthetic Organic Ligands under both Reducing and Oxidizing Conditions. Environmental Science & Technology, 2011, 45, 4771-4777.	4.6	44

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109	Mercury and Other Heavy Metals Influence Bacterial Community Structure in Contaminated Tennessee Streams. Applied and Environmental Microbiology, 2011, 77, 302-311.	1.4	137
110	Dissolution of Uranium-Bearing Minerals and Mobilization of Uranium by Organic Ligands in a Biologically Reduced Sediment. Environmental Science & Technology, 2011, 45, 2994-2999.	4.6	57
111	Binding Constants of Mercury and Dissolved Organic Matter Determined by a Modified Ion Exchange Technique. Environmental Science & Technology, 2011, 45, 3576-3583.	4.6	75
112	Resonance modes, cavity field enhancements, and long-range collective photonic effects in periodic bowtie nanostructures. Optics Express, 2011, 19, 19660.	1.7	16
113	Mercury reduction and complexation by natural organic matter in anoxic environments. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1479-1483.	3.3	277
114	Estimating Reaction Rate Coefficients Within a Travel-Time Modeling Framework. Ground Water, 2011, 49, 209-218.	0.7	6
115	Comparing Cr, and N only doping with (Cr, N)-codoping for enhancing visible light reactivity of TiO2. Applied Catalysis B: Environmental, 2011, 110, 148-153.	10.8	37
116	Active transport, substrate specificity, and methylation of Hg(II) in anaerobic bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8714-8719.	3.3	245
117	Monodispersed biocompatible silver sulfide nanoparticles: Facile extracellular biosynthesis using the Î³-proteobacterium, Shewanella oneidensis. Acta Biomaterialia, 2011, 7, 4253-4258.	4.1	138
118	Effect of carboxylic and thiol ligands (oxalate, cysteine) on the kinetics of desorption of Hg(II) from kaolinite. Water, Air, and Soil Pollution, 2011, 215, 573-584.	1.1	17
119	Biofabrication of discrete spherical gold nanoparticles using the metal-reducing bacterium Shewanella oneidensis. Acta Biomaterialia, 2011, 7, 2148-2152.	4.1	247
120	Modeling uranium transport in acidic contaminated groundwater with base addition. Journal of Hazardous Materials, 2011, 190, 863-868.	6.5	11
121	Dynamics of Microbial Community Composition and Function duringIn SituBioremediation of a Uranium-Contaminated Aquifer. Applied and Environmental Microbiology, 2011, 77, 5063-5063.	1.4	4
122	Dynamics of Microbial Community Composition and Function during In Situ Bioremediation of a Uranium-Contaminated Aquifer. Applied and Environmental Microbiology, 2011, 77, 3860-3869.	1.4	51
123	Roles of dissolved organic matter in the speciation of mercury and methylmercury in a contaminated ecosystem in Oak Ridge, Tennessee. Environmental Chemistry, 2010, 7, 94.	0.7	100
124	Can microbially-generated hydrogen sulfide account for the rates of U(VI) reduction by a sulfate-reducing bacterium?. Biodegradation, 2010, 21, 81-95.	1.5	25
125	Estimating kinetic mass transfer by resting-period measurements in flow-interruption tracer tests. Journal of Contaminant Hydrology, 2010, 117, 37-45.	1.6	4
126	Detection and analysis of cyclotrimethylenetrinitramine (RDX) in environmental samples by surfaceâ€enhanced Raman spectroscopy. Journal of Raman Spectroscopy, 2010, 41, 1131-1136.	1.2	65

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127	Prediction of uranium and technetium sorption during titration of contaminated acidic groundwater. Journal of Hazardous Materials, 2010, 178, 42-48.	6.5	9
128	Responses of microbial community functional structures to pilot-scale uranium in situ bioremediation. ISME Journal, 2010, 4, 1060-1070.	4.4	98
129	Significant Association between Sulfate-Reducing Bacteria and Uranium-Reducing Microbial Communities as Revealed by a Combined Massively Parallel Sequencing-Indicator Species Approach. Applied and Environmental Microbiology, 2010, 76, 6778-6786.	1.4	102
130	Complexation of Tc(IV) with acetate at varying ionic strengths. Radiochimica Acta, 2010, 98, 583-587.	0.5	24
131	Ab initio study on noncompensated CrO codoping of GaN for enhanced solar energy conversion. Journal of Chemical Physics, 2010, 132, 104501.	1.2	38
132	Crystallite Sizes and Lattice Parameters of Nano-Biomagnetite Particles. Journal of Nanoscience and Nanotechnology, 2010, 10, 8298-8306.	0.9	21
133	Free-Standing Optical Gold Bowtie Nanoantenna with Variable Gap Size for Enhanced Raman Spectroscopy. Nano Letters, 2010, 10, 4952-4955.	4.5	480
134	Isotopic Composition and Origin of Indigenous Natural Perchlorate and Co-Occurring Nitrate in the Southwestern United States. Environmental Science & Technology, 2010, 44, 4869-4876.	4.6	110
135	Effects of Engineered Cerium Oxide Nanoparticles on Bacterial Growth and Viability. Applied and Environmental Microbiology, 2010, 76, 7981-7989.	1.4	323
136	Silver Nanocrystallites: Biofabrication using Shewanella oneidensis, and an Evaluation of Their Comparative Toxicity on Gram-negative and Gram-positive Bacteria. Environmental Science & Technology, 2010, 44, 5210-5215.	4.6	299
137	A surfactant and template-free route for synthesizing ceria nanocrystals with tunable morphologies. Journal of Materials Chemistry, 2010, 20, 7776.	6.7	49
138	Synthesis and characterization of anodized titanium-oxide nanotube arrays. Journal of Materials Science, 2009, 44, 2820-2827.	1.7	30
139	Toxicity of amorphous silica nanoparticles in mouse keratinocytes. Journal of Nanoparticle Research, 2009, 11, 15-24.	0.8	179
140	GeoChipâ€based analysis of functional microbial communities during the reoxidation of a bioreduced uraniumâ€contaminated aquifer. Environmental Microbiology, 2009, 11, 2611-2626.	1.8	95
141	Fabrication and characterization of brookite-rich, visible light-active TiO2 films for water splitting. Applied Catalysis B: Environmental, 2009, 93, 90-95.	10.8	54
142	Chlorine-36 as a Tracer of Perchlorate Origin. Environmental Science & Technology, 2009, 43, 6934-6938.	4.6	52
143	Dissolution and Mobilization of Uranium in a Reduced Sediment by Natural Humic Substances under Anaerobic Conditions. Environmental Science & Technology, 2009, 43, 152-156.	4.6	69
144	Sorption mechanisms of cephapirin, a veterinary antibiotic, onto quartz and feldspar minerals as detected by Raman spectroscopy. Environmental Pollution, 2009, 157, 1849-1856.	3.7	32

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145	Perchlorate Detection at Nanomolar Concentrations by Surface-Enhanced Raman Scattering. Applied Spectroscopy, 2009, 63, 98-102.	1.2	58
146	Kinetic Controls on the Complexation between Mercury and Dissolved Organic Matter in a Contaminated Environment. Environmental Science & Technology, 2009, 43, 8548-8553.	4.6	112
147	Ag@SiO2 Coreâ^'Shell Nanoparticles for Probing Spatial Distribution of Electromagnetic Field Enhancement via Surface-Enhanced Raman Scattering. ACS Nano, 2009, 3, 3493-3496.	7.3	119
148	Phase-Dependent Photocatalytic Ability of TiO₂: A First-Principles Study. Journal of Chemical Theory and Computation, 2009, 5, 3074-3078.	2.3	68
149	Band Gap Narrowing of Titanium Oxide Semiconductors by Noncompensated Anion-Cation Codoping for Enhanced Visible-Light Photoactivity. Physical Review Letters, 2009, 103, 226401.	2.9	347
150	Sequestering Uranium and Technetium through Co-Precipitation with Aluminum in a Contaminated Acidic Environment. Environmental Science & Technology, 2009, 43, 7516-7522.	4.6	85
151	Fractionation of stable isotopes in perchlorate and nitrate during in situ biodegradation in a sandy aquifer. Environmental Chemistry, 2009, 6, 44.	0.7	34
152	Atacama Perchlorate as an Agricultural Contaminant in Groundwater: Isotopic and Chronologic Evidence from Long Island, New York. Environmental Science & Technology, 2009, 43, 5619-5625.	4.6	72
153	Application of Neutron Reflectivity for Studies of Biomolecular Structures and Functions at Interfaces. Neutron Scattering Applications and Techniques, 2009, , 463-489.	0.2	0
154	Structure and Morphology Evolution of Hematite (Î±-Fe₂O₃) Nanoparticles in Forced Hydrolysis of Ferric Chloride. Journal of Physical Chemistry C, 2008, 112, 9203-9208.	1.5	83
155	Uranium removal from contaminated groundwater by synthetic resins. Water Research, 2008, 42, 260-268.	5.3	62
156	Thin films of uniform hematite nanoparticles: control of surface hydrophobicity and self-assembly. Journal of Materials Chemistry, 2008, 18, 5770.	6.7	18
157	Hydrogen-Bonded Helices for Anion Binding and Separation. Crystal Growth and Design, 2008, 8, 1909-1915.	1.4	50
158	Geochemical Modeling of Reactions and Partitioning of Trace Metals and Radionuclides during Titration of Contaminated Acidic Sediments. Environmental Science & Technology, 2008, 42, 8007-8013.	4.6	9
159	Microbial Communities in Contaminated Sediments, Associated with Bioremediation of Uranium to Submicromolar Levels. Applied and Environmental Microbiology, 2008, 74, 3718-3729.	1.4	154
160	Determination of Technetium and Its Speciation by Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2007, 79, 2341-2345.	3.2	31
161	In Situ Bioreduction of Uranium (VI) to Submicromolar Levels and Reoxidation by Dissolved Oxygen. Environmental Science & Technology, 2007, 41, 5716-5723.	4.6	182
162	Treatment of Perchlorate-Contaminated Groundwater Using Highly Selective, Regenerable Ion-Exchange Technologies. Environmental Science & Technology, 2007, 41, 6277-6282.	4.6	119

#	Article	IF	Citations
163	Hydraulic performance analysis of a multiple injectionâ€“extraction well system. Journal of Hydrology, 2007, 336, 294-302.	2.3	28
164	Controlled Fabrication of Nanopillar Arrays as Active Substrates for Surface-Enhanced Raman Spectroscopy. Langmuir, 2007, 23, 5757-5760.	1.6	98
165	Single-molecule detection of thionine on aggregated gold nanoparticles by surface enhanced Raman scattering. Journal of Raman Spectroscopy, 2007, 38, 568-573.	1.2	49
166	Surface-enhanced Raman spectroscopy for uranium detection and analysis in environmental samples. Analytica Chimica Acta, 2007, 605, 80-86.	2.6	112
167	Effect of anionic surfactants on synthesis and self-assembly of silica colloidal nanoparticles. Journal of Colloid and Interface Science, 2007, 313, 169-173.	5.0	31
168	GeoChip: a comprehensive microarray for investigating biogeochemical, ecological and environmental processes. ISME Journal, 2007, 1, 67-77.	4.4	554
169	Influence of bicarbonate, sulfate, and electron donors on biological reduction of uranium and microbial community composition. Applied Microbiology and Biotechnology, 2007, 77, 713-721.	1.7	54
170	One-dimensional arrays of nanoshell dimers for single molecule spectroscopy via surface-enhanced raman scattering. Journal of Chemical Physics, 2006, 125, 081102.	1.2	36
171	The Chemistry of Perchlorate in the Environment. , 2006, , 17-47.		34
172	Pilot-Scale in Situ Bioremediation of Uranium in a Highly Contaminated Aquifer. 1. Conditioning of a Treatment Zone. Environmental Science & Technology, 2006, 40, 3978-3985.	4.6	160
173	Detection of Alkaline Phosphatase Using Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2006, 78, 3379-3384.	3.2	241
174	Development of goldâ€“silica composite nanoparticle substrates for perchlorate detection by surface-enhanced Raman spectroscopy. Analytica Chimica Acta, 2006, 567, 121-126.	2.6	68
175	Surface-enhanced Raman scattering for perchlorate detection using cystamine-modified gold nanoparticles. Analytica Chimica Acta, 2006, 567, 114-120.	2.6	84
176	Recent Advances in Ion Exchange for Perchlorate Treatment, Recovery and Destruction. , 2006, , 209-251.		6
177	Stable Isotopic Composition of Chlorine and Oxygen in Synthetic and Natural Perchlorate. , 2006, , 93-109.		19
178	Pilot-Scale in Situ Bioremedation of Uranium in a Highly Contaminated Aquifer. 2. Reduction of U(VI) and Geochemical Control of U(VI) Bioavailability. Environmental Science & Technology, 2006, 40, 3986-3995.	4.6	242
179	Advanced Thermal Characterization of Fractionated Natural Organic Matter. Journal of Environmental Quality, 2005, 34, 842-853.	1.0	18
180	Uranium (VI) Reduction by Denitrifying Biomass. Bioremediation Journal, 2005, 9, 49-61.	1.0	23

#	Article	IF	Citations
181	Natural Humics Impact Uranium Bioreduction and Oxidation. Environmental Science & Technology, 2005, 39, 5268-5275.	4.6	130
182	Perchlorate Isotope Forensics. Analytical Chemistry, 2005, 77, 7838-7842.	3.2	109
183	Sorption and Desorption of Perchlorate and U(VI) by Strong-Base Anion-Exchange Resins. Environmental Science & Technology, 2005, 39, 901-907.	4.6	104
184	New Surface-Enhanced Raman Spectroscopy Substrates via Self-Assembly of Silver Nanoparticles for Perchlorate Detection in Water. Applied Spectroscopy, 2005, 59, 1509-1515.	1.2	32
185	Competitive complexation of metal ions with humic substances. Chemosphere, 2005, 58, 1327-1337.	4.2	109
186	Effect of Surfactants on the Formation, Morphology, and Surface Property of Synthesized SiO2Nanoparticles. Journal of Dispersion Science and Technology, 2005, 25, 593-601.	1.3	29
187	Extraction of Oxidized and Reduced Forms of Uranium from Contaminated Soils:Â Effects of Carbonate Concentration and pH. Environmental Science & Technology, 2005, 39, 4435-4440.	4.6	185
188	Self-Assembly of Two- and Three-Dimensional Particle Arrays by Manipulating the Hydrophobicity of Silica Nanospheres. Journal of Physical Chemistry B, 2005, 109, 22175-22180.	1.2	50
189	Bioreduction of Uranium in a Contaminated Soil Column. Environmental Science & Technology, 2005, 39, 4841-4847.	4.6	133
190	Evaluation of geochemical processes affecting groundwater chemistry based on mass balance approach: A case study in Namwon, Korea. Geochemical Journal, 2005, 39, 357-369.	0.5	41
191	Kinetics of soil ozonation: an experimental and numerical investigation. Journal of Contaminant Hydrology, 2004, 72, 227-243.	1.6	25
192	Natural Perchlorate Has a Unique Oxygen Isotope Signature. Environmental Science & Technology, 2004, 38, 5073-5077.	4.6	151
193	Reply to Comment on â€œComplete Degradation of Perchlorate in Ferric Chloride and Hydrochloric Acid under Controlled Temperature and Pressureâ€• Environmental Science & Technology, 2004, 38, 1919-1920.	4.6	0
194	Adsorption and Structural Arrangement of Cetyltrimethylammonium Cations at the Silica Nanoparticleâ^'Water Interface. Journal of Physical Chemistry B, 2004, 108, 17477-17483.	1.2	88
195	Kinetics of soil ozonation: an experimental and numerical investigation*1. Journal of Contaminant Hydrology, 2004, 72, 227-227.	1.6	1
196	Raman Spectroscopic Detection for Perchlorate at Low Concentrations. Applied Spectroscopy, 2004, 58, 741-744.	1.2	58
197	Synthesis of Rutile (Î±-TiO2) Nanocrystals with Controlled Size and Shape by Low-Temperature Hydrolysis:â€‰ Effects of Solvent Composition. Journal of Physical Chemistry B, 2004, 108, 14789-14792.	1.2	155
198	Sorption and Binary Exchange of Nitrate, Sulfate, and Uranium on an Anion-Exchange Resin. Environmental Science & Technology, 2004, 38, 3184-3188.	4.6	140

#	Article	IF	Citations
199	The roles of natural organic matter in chemical and microbial reduction of ferric iron. Science of the Total Environment, 2003, 307, 167-178.	3.9	188
200	Treatment of perchlorate-contaminated groundwater using highly selective, regenerable ion-exchange technology: A pilot-scale demonstration. Federal Facilities Environmental Journal, 2003, 14, 75-94.	0.2	9
201	Fabrication of Two- and Three-Dimensional Silica Nanocolloidal Particle Arrays. Journal of Physical Chemistry B, 2003, 107, 3400-3404.	1.2	183
202	Complete Degradation of Perchlorate in Ferric Chloride and Hydrochloric Acid under Controlled Temperature and Pressure. Environmental Science & Technology, 2003, 37, 2291-2295.	4.6	80
203	Geochemical reactions and dynamics during titration of a contaminated groundwater with high uranium, aluminum, and calcium. Geochimica Et Cosmochimica Acta, 2003, 67, 2749-2761.	1.6	49
204	Enhanced microbial reduction of Cr(VI) and U(VI) by different natural organic matter fractions. Geochimica Et Cosmochimica Acta, 2003, 67, 3575-3582.	1.6	180
205	Fluorescence spectroscopic studies of natural organic matter fractions. Chemosphere, 2003, 50, 639-647.	4.2	344
206	Fabrication of Near-Infrared Photonic Crystals Using Highly-Monodispersed Submicrometer SiO2Spheres. Journal of Physical Chemistry B, 2003, 107, 12113-12117.	1.2	70
207	Impact of Sample Preparation on Mineralogical Analysis of Zeroâ€Valent Iron Reactive Barrier Materials. Journal of Environmental Quality, 2003, 32, 1299-1305.	1.0	38
208	Mineralogical Characteristics and Transformations during Longâ€Term Operation of a Zerovalent Iron Reactive Barrier. Journal of Environmental Quality, 2003, 32, 2033-2045.	1.0	97
209	Biogeochemical, Mineralogical, and Hydrological Characteristics of an Iron Reactive Barrier Used for Treatment of Uranium and Nitrate. , 2003, , 305-342.		8
210	Spectroscopic characterization of the structural and functional properties of natural organic matter fractions. Chemosphere, 2002, 48, 59-68.	4.2	585
211	Treatment of Perchlorate-Contaminated Groundwater Using Highly Selective, Regenerable Ion-Exchange Technology: A Pilot-Scale Demonstration. , 2002, 12, 51-68.		31
212	The effect of solvent concentration on the use of palladized-iron for the step-wise dechlorination of polychlorinated biphenyls in soil extracts. Waste Management, 2002, 22, 343-349.	3.7	49
213	Microbiological characteristics in a zero-valent iron reactive barrier. Environmental Monitoring and Assessment, 2002, 77, 293-309.	1.3	92
214	Regeneration of Perchlorate (ClO4-)-Loaded Anion Exchange Resins by a Novel Tetrachloroferrate (FeCl4-) Displacement Technique. Environmental Science & Technology, 2001, 35, 3363-3368.	4.6	124
215	Survey of bottled waters for perchlorate by electrospray ionization mass spectrometry (ESI-MS) and ion chromatography (IC). Journal of the Science of Food and Agriculture, 2000, 80, 1798-1804.	1.7	36
216	Field application of palladized iron for the dechlorination of trichloroethene. Waste Management, 2000, 20, 687-694.	3.7	64

#	Article	IF	Citations
217	Development of Novel Bifunctional Anion-Exchange Resins with Improved Selectivity for Pertechnetate Sorption from Contaminated Groundwater. Environmental Science & Technology, 2000, 34, 1075-1080.	4.6	125
218	The Design of Selective Resins for the Removal of Pertechnetate and Perchlorate from Groundwater. , 2000, , 155-164.		12
219	Geochemical and microbial reactions affecting the long-term performance of in situ â€˜iron barriersâ€™. Journal of Environmental Management, 2000, 4, 273-286.	1.7	114
220	Ligand-induced dissolution and release of ferrihydrite colloids. Geochimica Et Cosmochimica Acta, 2000, 64, 2027-2037.	1.6	58
221	Comment on â€œPerchlorate Identification in Fertilizersâ€•and the Subsequent Addition/Correction. Environmental Science & Technology, 2000, 34, 4452-4453.	4.6	38
222	Performance Evaluation of a Zerovalent Iron Reactive Barrier:Â Mineralogical Characteristics. Environmental Science & Technology, 2000, 34, 4169-4176.	4.6	233
223	Efficient Treatment of Perchlorate (ClO4 â˜)-Contaminated Groundwater with Bifunctional Anion Exchange Resins. , 2000, , 165-176.		24
224	Biogeochemical Dynamics in Zero-Valent Iron Columns:Â Implications for Permeable Reactive Barriers. Environmental Science & Technology, 1999, 33, 2170-2177.	4.6	250
225	Reductive Precipitation of Uranium(VI) by Zero-Valent Iron. Environmental Science & Technology, 1998, 32, 3366-3373.	4.6	311
226	Dehalogenation of Chlorinated Organic Compounds by Strong Alkalis. Journal of Environmental Engineering, ASCE, 1997, 123, 982-987.	0.7	3
227	Field Tracer Tests on the Mobility of Natural Organic Matter in a Sandy Aquifer. Water Resources Research, 1996, 32, 1223-1238.	1.7	69
228	Competitive adsorption, displacement, and transport of organic matter on iron oxide: I. Competitive adsorption. Geochimica Et Cosmochimica Acta, 1996, 60, 1943-1950.	1.6	137
229	Competitive adsorption, displacement, and transport of organic matter on iron oxide: II. Displacement and transport. Geochimica Et Cosmochimica Acta, 1996, 60, 2977-2992.	1.6	88
230	Efficient separation and recovery of technetium-99 from contaminated groundwater. Separation and Purification Technology, 1996, 6, 123-132.	0.7	63
231	Removal of technetium-99 from contaminated groundwater with sorbents and reductive materials. Separation and Purification Technology, 1996, 6, 111-122.	0.7	84
232	Using 14C-Labeled Radiochemicals Can Cause Experimental Error in Studies of the Behavior of Volatile Organic Compounds. Environmental Science & Technology, 1995, 29, 1210-1214.	4.6	6
233	Adsorption and desorption of different organic matter fractions on iron oxide. Geochimica Et Cosmochimica Acta, 1995, 59, 219-229.	1.6	608
234	Adsorption and desorption of natural organic matter on iron oxide: mechanisms and models. Environmental Science & Technology, 1994, 28, 38-46.	4.6	1,269

#	Article	IF	Citations
235	Dispersion and Aggregation of Soils as Influenced by Organic and Inorganic Polymers and Inorganic Polymers. Soil Science Society of America Journal, 1993, 57, 709-716.	1.2	56
236	Kinetics of iron(II) oxygenation at low partial pressure of oxygen in the presence of natural organic matter. Environmental Science & Technology, 1993, 27, 1864-1870.	4.6	108
237	The Microstructure of Dilute Clay and Humic Acid Suspensions Revealed by Freeze-Fracture Electron Microscopy: A Reply. Clays and Clay Minerals, 1993, 41, 114-116.	0.6	7
238	Observations on the effect of a soil polysaccharide fraction on boron adsorption by clay minerals. Canadian Journal of Soil Science, 1992, 72, 623-626.	0.5	9
239	The Interaction of Polysaccharides with Silver Hill Illite. Clays and Clay Minerals, 1992, 40, 151-156.	0.6	32
240	The Microstructure of Dilute Clay and Humic Acid Suspensions Revealed by Freeze-Fracture Electron Microscopy. Clays and Clay Minerals, 1992, 40, 246-250.	0.6	18
241	Adsorption of Hydroxy-Al Polycations and Destabilization of Illite and Montmorillonite Suspensions. Clays and Clay Minerals, 1990, 38, 493-500.	0.6	18
242	STUDIES ON THE ADSORPTION OF BORON ON HUMIC ACIDS. Canadian Journal of Soil Science, 1990, 70, 305-311.	0.5	61