Baohua Gu

List of Publications by Year
in descending order

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	Adsorption and desorption of natural organic matter on iron oxide: mechanisms and models. Environmental Science & Technology, 1994, 28, 38-46.	4.6	1,269
2	Adsorption and desorption of different organic matter fractions on iron oxide. Geochimica Et Cosmochimica Acta, 1995, 59, 219-229.	1.6	608
3	Spectroscopic characterization of the structural and functional properties of natural organic matter fractions. Chemosphere, 2002, 48, 59-68.	4.2	585
4	GeoChip: a comprehensive microarray for investigating biogeochemical, ecological and environmental processes. ISME Journal, 2007, 1, 67-77.	4.4	554
5	Free-Standing Optical Gold Bowtie Nanoantenna with Variable Gap Size for Enhanced Raman Spectroscopy. Nano Letters, 2010, 10, 4952-4955.	4.5	480
6	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
7	Fluorescence spectroscopic studies of natural organic matter fractions. Chemosphere, 2003, 50, 639-647.	4.2	344
8	Effects of Engineered Cerium Oxide Nanoparticles on Bacterial Growth and Viability. Applied and Environmental Microbiology, 2010, 76, 7981-7989.	1.4	323
9	Reductive Precipitation of Uranium(VI) by Zero-Valent Iron. Environmental Science & Technology, 1998, 32, 3366-3373.	4.6	311
10	Silver Nanocrystallites: Biofabrication using <i>Shewanella oneidensis,</i> and an Evaluation of Their Comparative Toxicity on Gram-negative and Gram-positive Bacteria. Environmental Science & Technology, 2010, 44, 5210-5215.	4.6	299
11	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
12	Biogeochemical Dynamics in Zero-Valent Iron Columns:Â Implications for Permeable Reactive Barriers. Environmental Science & Technology, 1999, 33, 2170-2177.	4.6	250
13	Biofabrication of discrete spherical gold nanoparticles using the metal-reducing bacterium Shewanella oneidensis. Acta Biomaterialia, 2011, 7, 2148-2152.	4.1	247
14	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
15	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
16	Detection of Alkaline Phosphatase Using Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2006, 78, 3379-3384.	3.2	241
17	Performance Evaluation of a Zerovalent Iron Reactive Barrier:Â Mineralogical Characteristics. Environmental Science & Technology, 2000, 34, 4169-4176.	4.6	233
18	Cytotoxicity Induced by Engineered Silver Nanocrystallites Is Dependent on Surface Coatings and Cell Types. Langmuir, 2012, 28, 2727-2735.	1.6	222

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19	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
20	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
21	Fabrication of Two- and Three-Dimensional Silica Nanocolloidal Particle Arrays. Journal of Physical Chemistry B, 2003, 107, 3400-3404.	1.2	183
22	In Situ Bioreduction of Uranium (VI) to Submicromolar Levels and Reoxidation by Dissolved Oxygen. Environmental Science & Technology, 2007, 41, 5716-5723.	4.6	182
23	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
24	Toxicity of amorphous silica nanoparticles in mouse keratinocytes. Journal of Nanoparticle Research, 2009, 11, 15-24.	0.8	179
25	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
26	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
27	Mercury Reduction and Oxidation by Reduced Natural Organic Matter in Anoxic Environments. Environmental Science & Technology, 2012, 46, 292-299.	4.6	155
28	Oxidation and methylation of dissolved elemental mercury by anaerobic bacteria. Nature Geoscience, 2013, 6, 751-754.	5.4	155
29	Microbial Communities in Contaminated Sediments, Associated with Bioremediation of Uranium to Submicromolar Levels. Applied and Environmental Microbiology, 2008, 74, 3718-3729.	1.4	154
30	Natural Perchlorate Has a Unique Oxygen Isotope Signature. Environmental Science & Technology, 2004, 38, 5073-5077.	4.6	151
31	Sorption and Binary Exchange of Nitrate, Sulfate, and Uranium on an Anion-Exchange Resin. Environmental Science & Technology, 2004, 38, 3184-3188.	4.6	140
32	Monodispersed biocompatible silver sulfide nanoparticles: Facile extracellular biosynthesis using the Î³-proteobacterium, Shewanella oneidensis. Acta Biomaterialia, 2011, 7, 4253-4258.	4.1	138
33	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
34	Mercury and Other Heavy Metals Influence Bacterial Community Structure in Contaminated Tennessee Streams. Applied and Environmental Microbiology, 2011, 77, 302-311.	1.4	137
35	Bioreduction of Uranium in a Contaminated Soil Column. Environmental Science & Technology, 2005, 39, 4841-4847.	4.6	133
36	Natural Humics Impact Uranium Bioreduction and Oxidation. Environmental Science & Technology, 2005, 39, 5268-5275.	4.6	130

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37	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
38	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
39	Anaerobic Mercury Methylation and Demethylation by <i>Geobacter bemidjiensis</i> Bem. Environmental Science & Technology, 2016, 50, 4366-4373.	4.6	121
40	Treatment of Perchlorate-Contaminated Groundwater Using Highly Selective, Regenerable Ion-Exchange Technologies. Environmental Science & Technology, 2007, 41, 6277-6282.	4.6	119
41	Ag@SiO2 Coreâˆ'Shell Nanoparticles for Probing Spatial Distribution of Electromagnetic Field Enhancement via Surface-Enhanced Raman Scattering. ACS Nano, 2009, 3, 3493-3496.	7.3	119
42	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
43	Surface-enhanced Raman spectroscopy for uranium detection and analysis in environmental samples. Analytica Chimica Acta, 2007, 605, 80-86.	2.6	112
44	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
45	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
46	Perchlorate Isotope Forensics. Analytical Chemistry, 2005, 77, 7838-7842.	3.2	109
47	Competitive complexation of metal ions with humic substances. Chemosphere, 2005, 58, 1327-1337.	4.2	109
48	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
49	Unraveling Microbial Communities Associated with Methylmercury Production in Paddy Soils. Environmental Science & Technology, 2018, 52, 13110-13118.	4.6	106
50	Sorption and Desorption of Perchlorate and U(VI) by Strong-Base Anion-Exchange Resins. Environmental Science & Technology, 2005, 39, 901-907.	4.6	104
51	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
52	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
53	Controlled Fabrication of Nanopillar Arrays as Active Substrates for Surface-Enhanced Raman Spectroscopy. Langmuir, 2007, 23, 5757-5760.	1.6	98
54	Responses of microbial community functional structures to pilot-scale uranium <i>in situ</i> bioremediation. ISME Journal, 2010, 4, 1060-1070.	4.4	98

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55	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
56	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
57	Influence of iron redox cycling on organo-mineral associations in Arctic tundra soil. Geochimica Et Cosmochimica Acta, 2017, 207, 210-231.	1.6	94
58	Microbiological characteristics in a zero-valent iron reactive barrier. Environmental Monitoring and Assessment, 2002, 77, 293-309.	1.3	92
59	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
60	Adsorption and Structural Arrangement of Cetyltrimethylammonium Cations at the Silica Nanoparticleâˆ'Water Interface. Journal of Physical Chemistry B, 2004, 108, 17477-17483.	1.2	88
61	Sequestering Uranium and Technetium through Co-Precipitation with Aluminum in a Contaminated Acidic Environment. Environmental Science & Technology, 2009, 43, 7516-7522.	4.6	85
62	Removal of technetium-99 from contaminated groundwater with sorbents and reductive materials. Separation and Purification Technology, 1996, 6, 111-122.	0.7	84
63	Surface-enhanced Raman scattering for perchlorate detection using cystamine-modified gold nanoparticles. Analytica Chimica Acta, 2006, 567, 114-120.	2.6	84
64	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
65	Why Dissolved Organic Matter Enhances Photodegradation of Methylmercury. Environmental Science and Technology Letters, 2014, 1, 426-431.	3.9	82
66	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
67	Mercury Reduction and Cell-Surface Adsorption by <i>Geobacter sulfurreducens</i> PCA. Environmental Science & Technology, 2013, 47, 10922-10930.	4.6	78
68	Effects of Cellular Sorption on Mercury Bioavailability and Methylmercury Production by <i>Desulfovibrio desulfuricans</i> ND132. Environmental Science & Technology, 2016, 50, 13335-13341.	4.6	78
69	Methylmercury uptake and degradation by methanotrophs. Science Advances, 2017, 3, e1700041.	4.7	78
70	Indexing Permafrost Soil Organic Matter Degradation Using High-Resolution Mass Spectrometry. PLoS ONE, 2015, 10, e0130557.	1.1	78
71	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
72	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

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73	Contrasting Effects of Dissolved Organic Matter on Mercury Methylation by <i>Geobacter sulfurreducens</i> PCA and <i>Desulfovibrio desulfuricans</i> ND132. Environmental Science & Technology, 2017, 51, 10468-10475.	4.6	74
74	Molecular Insights into Arctic Soil Organic Matter Degradation under Warming. Environmental Science & Technology, 2018, 52, 4555-4564.	4.6	74
75	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
76	Fabrication of Near-Infrared Photonic Crystals Using Highly-Monodispersed Submicrometer SiO2Spheres. Journal of Physical Chemistry B, 2003, 107, 12113-12117.	1.2	70
77	Field Tracer Tests on the Mobility of Natural Organic Matter in a Sandy Aquifer. Water Resources Research, 1996, 32, 1223-1238.	1.7	69
78	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
79	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
80	Phase-Dependent Photocatalytic Ability of TiO₂: A First-Principles Study. Journal of Chemical Theory and Computation, 2009, 5, 3074-3078.	2.3	68
81	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
82	Oxidation of Dissolved Elemental Mercury by Thiol Compounds under Anoxic Conditions. Environmental Science & Technology, 2013, 47, 12827-12834.	4.6	67
83	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
84	Field application of palladized iron for the dechlorination of trichloroethene. Waste Management, 2000, 20, 687-694.	3.7	64
85	Efficient separation and recovery of technetium-99 from contaminated groundwater. Separation and Purification Technology, 1996, 6, 123-132.	0.7	63
86	Synthesis of rare earth doped TiO₂nanorods as photocatalysts for lignin degradation. Nanoscale, 2015, 7, 16695-16703.	2.8	63
87	Uranium removal from contaminated groundwater by synthetic resins. Water Research, 2008, 42, 260-268.	5.3	62
88	STUDIES ON THE ADSORPTION OF BORON ON HUMIC ACIDS. Canadian Journal of Soil Science, 1990, 70, 305-311.	0.5	61
89	Coupled Mercuryâ€"Cell Sorption, Reduction, and Oxidation on Methylmercury Production by <i>Geobacter sulfurreducens</i> PCA. Environmental Science & Technology, 2014, 48, 11969-11976.	4.6	60
90	Warming increases methylmercury production in an Arctic soil. Environmental Pollution, 2016, 214, 504-509.	3.7	60

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91	Ligand-induced dissolution and release of ferrihydrite colloids. Geochimica Et Cosmochimica Acta, 2000, 64, 2027-2037.	1.6	58
92	Raman Spectroscopic Detection for Perchlorate at Low Concentrations. Applied Spectroscopy, 2004, 58, 741-744.	1.2	58
93	Perchlorate Detection at Nanomolar Concentrations by Surface-Enhanced Raman Scattering. Applied Spectroscopy, 2009, 63, 98-102.	1.2	58
94	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
95	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
96	Demethylationâ”€The Other Side of the Mercury Methylation Coin: A Critical Review. ACS Environmental Au, 2022, 2, 77-97.	3.3	57
97	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
98	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
99	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
100	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
101	Why Mercury Prefers Soft Ligands. Journal of Physical Chemistry Letters, 2013, 4, 2317-2322.	2.1	54
102	Geochemical drivers of organic matter decomposition in arctic tundra soils. Biogeochemistry, 2015, 126, 397-414.	1.7	53
103	Photochemical reactions between mercury (Hg) and dissolved organic matter decrease Hg bioavailability and methylation. Environmental Pollution, 2017, 220, 1359-1365.	3.7	53
104	Chlorine-36 as a Tracer of Perchlorate Origin. Environmental Science & Technology, 2009, 43, 6934-6938.	4.6	52
105	Mercury Sorption and Desorption on Organo-Mineral Particulates as a Source for Microbial Methylation. Environmental Science & Technology, 2019, 53, 2426-2433.	4.6	52
106	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
107	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
108	Hydrogen-Bonded Helices for Anion Binding and Separation. Crystal Growth and Design, 2008, 8, 1909-1915.	1.4	50

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109	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
110	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
111	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
112	A surfactant and template-free route for synthesizing ceria nanocrystals with tunable morphologies. Journal of Materials Chemistry, 2010, 20, 7776.	6.7	49
113	Photochemical transformation of the insensitive munitions compound 2,4-dinitroanisole. Science of the Total Environment, 2013, 443, 692-699.	3.9	49
114	Perchlorate Production by Photodecomposition of Aqueous Chlorine Solutions. Environmental Science & Technology, 2012, 46, 11635-11643.	4.6	48
115	Photochemical Oxidation of Dissolved Elemental Mercury by Carbonate Radicals in Water. Environmental Science and Technology Letters, 2014, 1, 499-503.	3.9	48
116	Determination of thiol functional groups on bacteria and natural organic matter in environmental systems. Talanta, 2014, 119, 240-247.	2.9	45
117	Increased Methylmercury Accumulation in Rice after Straw Amendment. Environmental Science & Technology, 2019, 53, 6144-6153.	4.6	45
118	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
119	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
120	Microtopographic and depth controls on active layer chemistry in Arctic polygonal ground. Geophysical Research Letters, 2015, 42, 1808-1817.	1.5	44
121	Identification of Multiple Mercury Sources to Stream Sediments near Oak Ridge, TN, USA. Environmental Science & Technology, 2014, 48, 3666-3674.	4.6	43
122	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
123	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
124	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
125	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
126	Microbial Communities Associated with Methylmercury Degradation in Paddy Soils. Environmental Science & Technology, 2020, 54, 7952-7960.	4.6	40

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127	Comment on â€œPerchlorate Identification in Fertilizersâ€•and the Subsequent Addition/Correction. Environmental Science & Technology, 2000, 34, 4452-4453.	4.6	38
128	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
129	<i>Ab initio</i> study on noncompensated CrO codoping of GaN for enhanced solar energy conversion. Journal of Chemical Physics, 2010, 132, 104501.	1.2	38
130	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
131	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
132	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
133	Interactions of Tc(IV) with Humic Substances. Environmental Science & Technology, 2011, 45, 2718-2724.	4.6	36
134	Cysteine Inhibits Mercury Methylation by <i>Geobacter sulfurreducens</i> PCA Mutant Î”<i>omcBESTZ</i>. Environmental Science and Technology Letters, 2015, 2, 144-148.	3.9	36
135	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
136	Molecular Dynamics Simulation of the Structures, Dynamics, and Aggregation of Dissolved Organic Matter. Environmental Science & Technology, 2020, 54, 13527-13537.	4.6	36
137	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
138	The Chemistry of Perchlorate in the Environment. , 2006, , 17-47.		34
139	Fractionation of stable isotopes in perchlorate and nitrate during in situ biodegradation in a sandy aquifer. Environmental Chemistry, 2009, 6, 44.	0.7	34
140	Impacts of temperature and soil characteristics on methane production and oxidation in Arctic tundra. Biogeosciences, 2018, 15, 6621-6635.	1.3	33
141	Mercury Uptake by <i>Desulfovibrio desulfuricans</i> ND132: Passive or Active?. Environmental Science & Technology, 2019, 53, 6264-6272.	4.6	33
142	The Interaction of Polysaccharides with Silver Hill Illite. Clays and Clay Minerals, 1992, 40, 151-156.	0.6	32
143	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
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	Treatment of Perchlorate-Contaminated Groundwater Using Highly Selective, Regenerable Ion-Exchange Technology: A Pilot-Scale Demonstration. , 2002, 12, 51-68.		31
146	Determination of Technetium and Its Speciation by Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2007, 79, 2341-2345.	3.2	31
147	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
148	Thiol-Facilitated Cell Export and Desorption of Methylmercury by Anaerobic Bacteria. Environmental Science and Technology Letters, 2015, 2, 292-296.	3.9	31
149	Pb, Cu, and Zn distributions at humic acid-coated metal-oxide surfaces. Geochimica Et Cosmochimica Acta, 2016, 188, 407-423.	1.6	31
150	Synthesis and characterization of anodized titanium-oxide nanotube arrays. Journal of Materials Science, 2009, 44, 2820-2827.	1.7	30
151	Mercury photolytic transformation affected by low-molecular-weight natural organics in water. Science of the Total Environment, 2012, 416, 429-435.	3.9	30
152	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
153	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
154	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
155	Co-contaminant effects on 1,4-dioxane biodegradation in packed soil column flow-through systems. Environmental Pollution, 2018, 243, 573-581.	3.7	29
156	Hydraulic performance analysis of a multiple injectionâ€“extraction well system. Journal of Hydrology, 2007, 336, 294-302.	2.3	28
157	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
158	Biogeochemical modeling of CO₂ and CH₄ production in anoxic Arctic soil microcosms. Biogeosciences, 2016, 13, 5021-5041.	1.3	27
159	Competitive ligand exchange reveals time dependant changes in the reactivity of Hgâ€“dissolved organic matter complexes. Environmental Chemistry, 2012, 9, 495.	0.7	26
160	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
161	Microbial Community and Functional Gene Changes in Arctic Tundra Soils in a Microcosm Warming Experiment. Frontiers in Microbiology, 2017, 8, 1741.	1.5	26
162	Kinetics of soil ozonation: an experimental and numerical investigation. Journal of Contaminant Hydrology, 2004, 72, 227-243.	1.6	25

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163	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
164	An integrated portable Raman sensor with nanofabricated gold bowtie array substrates for energetics detection. Analyst, The, 2011, 136, 1697.	1.7	25
165	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
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