Xiaoguang Meng

List of Publications by Year
in descending order

116 papers	7,936 citations	57758 44 h-index	49909 87 g-index
116 all docs	116 docs citations	116 times ranked	7654 citing authors

#	Article	IF	Citations
1	Effects of silicate, sulfate, and carbonate on arsenic removal by ferric chloride. Water Research, 2000, 34, 1255-1261.	11.3	503
2	Utilization of fly ash for stabilization/solidification of heavy metal contaminated soils. Engineering Geology, 2003, 70, 377-394.	6.3	456
3	Biosorption mechanism of nine different heavy metals onto biomatrix from rice husk. Journal of Hazardous Materials, 2008, 153, 1222-1234.	12.4	455
4	Adsorption of As(V) and As(III) by nanocrystalline titanium dioxide. Water Research, 2005, 39, 2327-2337.	11.3	432
5	Adsorption Mechanism of Arsenic on Nanocrystalline Titanium Dioxide. Environmental Science & Technology, 2006, 40, 1257-1262.	10.0	425
6	Combined effects of anions on arsenic removal by iron hydroxides. Toxicology Letters, 2002, 133, 103-111.	0.8	338
7	Application of titanium dioxide in arsenic removal from water: A review. Journal of Hazardous Materials, 2012, 215-216, 1-16.	12.4	320
8	Removal of arsenic from groundwater by granular titanium dioxide adsorbent. Chemosphere, 2005, 60, 389-397.	8.2	269
9	Chemical reactions between arsenic and zero-valent iron in water. Water Research, 2005, 39, 763-770.	11.3	248
10	Carbonate Effects on Hexavalent Uranium Adsorption by Iron Oxyhydroxide. Environmental Science & Technology, 2003, 37, 3619-3624.	10.0	247
11	Treatment of arsenic in Bangladesh well water using a household co-precipitation and filtration system. Water Research, 2001, 35, 2805-2810.	11.3	241
12	Removal of arsenic from water by zero-valent iron. Journal of Hazardous Materials, 2005, 121, 61-67.	12.4	204
13	Redox Transformations of Arsenic and Iron in Water Treatment Sludge during Aging and TCLP Extraction. Environmental Science & Technology, 2001, 35, 3476-3481.	10.0	137
14	Effect of Weak Magnetic Field on Arsenate and Arsenite Removal from Water by Zerovalent Iron: An XAFS Investigation. Environmental Science & Technology, 2014, 48, 6850-6858.	10.0	132
15	Surface complexation of organic arsenic on nanocrystalline titanium oxide. Journal of Colloid and Interface Science, 2005, 290, 14-21.	9.4	119
16	La3+-modified activated alumina for fluoride removal from water. Journal of Hazardous Materials, 2014, 278, 343-349.	12.4	116
17	Perchlorate adsorption and desorption on activated carbon and anion exchange resin. Journal of Hazardous Materials, 2009, 164, 87-94.	12.4	111
18	An evaluation of arsenic release from monolithic solids using a modified semi-dynamic leaching test. Journal of Hazardous Materials, 2004, 116, 25-38.	12.4	96

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19	Immobilization Mechanisms of Arsenate in Iron Hydroxide Sludge Stabilized with Cement. Environmental Science & Technology, 2003, 37, 5050-5056.	10.0	91
20	Arsenic Leachability in Water Treatment Adsorbents. Environmental Science & Technology, 2005, 39, 5481-5487.	10.0	91
21	Chromate removal by electrospun PVA/PEI nanofibers: Adsorption, reduction, and effects of co-existing ions. Chemical Engineering Journal, 2020, 387, 124179.	12.7	88
22	Effect of component oxide interaction on the adsorption properties of mixed oxides. Environmental Science & Technology, 1993, 27, 970-975.	10.0	81
23	SERS detection of arsenic in water: A review. Journal of Environmental Sciences, 2015, 36, 152-162.	6.1	80
24	Perchlorate removal by quaternary amine modified reed. Journal of Hazardous Materials, 2011, 189, 54-61.	12.4	77
25	Mechanisms of Photocatalytical Degradation of Monomethylarsonic and Dimethylarsinic Acids Using Nanocrystalline Titanium Dioxide. Environmental Science & Technology, 2008, 42, 2349-2354.	10.0	76
26	Carbonate effects on hexavalent uranium removal from water by nanocrystalline titanium dioxide. Journal of Hazardous Materials, 2006, 136, 47-52.	12.4	69
27	Boosted photocatalytic degradation of Rhodamine B pollutants with Z-scheme CdS/AgBr-rGO nanocomposite. Applied Surface Science, 2020, 502, 144275.	6.1	68
28	Kinetics of biological perchlorate reduction and pH effect. Journal of Hazardous Materials, 2008, 153, 663-669.	12.4	65
29	Decolorization of Methyl Orange by a new clay-supported nanoscale zero-valent iron: Synergetic effect, efficiency optimization and mechanism. Journal of Environmental Sciences, 2017, 52, 8-17.	6.1	65
30	Lead leachability in stabilized/solidified soil samples evaluated with different leaching tests. Journal of Hazardous Materials, 2004, 114, 101-110.	12.4	64
31	Adsorptive filtration of lead by electrospun PVA/PAA nanofiber membranes in a fixed-bed column. Chemical Engineering Journal, 2019, 370, 1262-1273.	12.7	61
32	Remediation of organic and inorganic arsenic contaminated groundwater using a nanocrystalline TiO2-based adsorbent. Environmental Pollution, 2009, 157, 2514-2519.	7.5	59
33	Removal of depleted uranium from contaminated soils. Journal of Hazardous Materials, 2006, 136, 53-60.	12.4	58
34	Leaching behavior of Cr(III) in stabilized/solidified soil. Chemosphere, 2006, 64, 379-385.	8.2	56
35	Challenges of arsenic removal from municipal wastewater by coagulation with ferric chloride and alum. Science of the Total Environment, 2020, 725, 138351.	8.0	56
36	Surface-enhanced Raman spectroscopy of arsenate and arsenite using Ag nanofilm prepared by modified mirror reaction. Journal of Colloid and Interface Science, 2010, 347, 90-95.	9.4	54

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37	Removal of selenocyanate from water using elemental iron. Water Research, 2002, 36, 3867-3873.	11.3	53
38	Enhanced removal of arsenite from water by a mesoporous hybrid material â€“ Thiol-functionalized silica coated activated alumina. Microporous and Mesoporous Materials, 2009, 124, 1-7.	4.4	52
39	Immobilization of mercury(II) in contaminated soil with used tire rubber. Journal of Hazardous Materials, 1998, 57, 231-241.	12.4	49
40	Performance of a Household-Level Arsenic Removal System during 4-Month Deployments in Bangladesh. Environmental Science & Technology, 2004, 38, 3442-3448.	10.0	49
41	Size effects of nanocrystalline TiO2 on As(V) and As(III) adsorption and As(III) photooxidation. Journal of Hazardous Materials, 2009, 168, 747-752.	12.4	48
42	Effects of monovalent and divalent metal cations on the aggregation and suspension of Fe3O4 magnetic nanoparticles in aqueous solution. Science of the Total Environment, 2017, 586, 817-826.	8.0	46
43	Effect of Arsenic on the Formation and Adsorption Property of Ferric Hydroxide Precipitates in ZVI Treatment. Environmental Science & Technology, 2017, 51, 10100-10108.	10.0	46
44	Modeling ion adsorption on aluminum hydroxide-modified silica. Environmental Science & Technology, 1993, 27, 1924-1929.	10.0	45
45	Preparation and evaluation of thiol-functionalized activated alumina for arsenite removal from water. Journal of Hazardous Materials, 2009, 167, 1215-1221.	12.4	45
46	Fluoride removal by Al, Ti, and Fe hydroxides and coexisting ion effect. Journal of Environmental Sciences, 2017, 57, 190-195.	6.1	45
47	Mechanistic Study of Lead Adsorption on Activated Carbon. Langmuir, 2018, 34, 13565-13573.	3.5	43
48	Competing Interactions of As Adsorption and Fe(III) Polymerization during Ferric Coprecipitation Treatment. Environmental Science & Technology, 2018, 52, 7343-7350.	10.0	43
49	Evaluation of metal oxides and activated carbon for lead removal: Kinetics, isotherms, column tests, and the role of co-existing ions. Science of the Total Environment, 2019, 648, 176-183.	8.0	43
50	Lead immobilization by phosphate in the presence of iron oxides: Adsorption versus precipitation. Water Research, 2020, 179, 115853.	11.3	40
51	Lead and cadmium adsorption by electrospun PVA/PAA nanofibers: Batch, spectroscopic, and modeling study. Chemosphere, 2019, 233, 405-413.	8.2	39
52	Influence of sulfur on the mobility of arsenic and antimony during oxic-anoxic cycles: Differences and competition. Geochimica Et Cosmochimica Acta, 2020, 288, 51-67.	3.9	38
53	Detoxification of chromium (VI) in coastal water using lignocellulosic agricultural waste. Water S A, 2004, 30, 541.	0.4	36
54	Surface-Enhanced Raman Scattering Spectroscopy of Explosive 2,4-Dinitroanisole using Modified Silver Nanoparticles. Langmuir, 2011, 27, 13773-13779.	3.5	36

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55	Direct two-phase interfacial self-assembly of aligned silver nanowire films for surface enhanced Raman scattering applications. Journal of Materials Chemistry A, 2013, 1, 13496.	10.3	35
56	Bioregeneration of Spent Anion Exchange Resin for Treatment of Nitrate in Water. Environmental Science & Technology, 2014, 48, 1541-1548.	10.0	35
57	Surface modification of silver nanofilms for improved perchlorate detection by surface-enhanced Raman scattering. Journal of Colloid and Interface Science, 2012, 377, 51-57.	9.4	34
58	Adsorption and recovery of phosphate from water by amine fiber, effects of co-existing ions and column filtration. Journal of Environmental Sciences, 2020, 87, 123-132.	6.1	31
59	Surface-enhanced Raman scattering for arsenate detection on multilayer silver nanofilms. Analytica Chimica Acta, 2011, 692, 96-102.	5.4	30
60	Surface-enhanced Raman scattering analysis of perchlorate using silver nanofilms deposited on copper foils. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 366, 163-169.	4.7	29
61	Arsenic remobilization in water treatment adsorbents under reducing conditions: Part I. Incubation study. Science of the Total Environment, 2008, 389, 188-194.	8.0	28
62	Fabrication and evolution of multilayer silver nanofilms for surface-enhanced Raman scattering sensing of arsenate. Nanoscale Research Letters, 2011, 6, 263.	5.7	28
63	Modeling cadmium and sulfate adsorption by Fe(OH)3SiO2 mixed oxides. Water Research, 1996, 30, 2148-2154.	11.3	27
64	A novel NLO azothiophene-based chromophore: Synthesis, characterization, thermal stability and optical nonlinearity. Materials Letters, 2008, 62, 973-976.	2.6	27
65	Arsenic leachability and speciation in cement immobilized water treatment sludge. Chemosphere, 2005, 59, 1241-1247.	8.2	26
66	Feasibility and kinetics study on the direct bio-regeneration of perchlorate laden anion-exchange resin. Water Research, 2008, 42, 4619-4628.	11.3	26
67	Effect of phosphate releasing in activated sludge on phosphorus removal from municipal wastewater. Journal of Environmental Sciences, 2018, 67, 216-223.	6.1	26
68	DDT Vertical Migration and Formation of Accumulation Layer in Pesticide-Producing Sites. Environmental Science & Technology, 2015, 49, 9084-9091.	10.0	25
69	Degradation of 3-nitro-1,2,4-trizole-5-one (NTO) in wastewater with UV/H2O2 oxidation. Chemical Engineering Journal, 2018, 354, 481-491.	12.7	25
70	Fate of adsorbed Pb(II) on graphene oxide under variable redox potential controlled by electrochemical method. Journal of Hazardous Materials, 2019, 367, 152-159.	12.4	25
71	A Review of Redox Transformation of Arsenic in Aquatic Environments. ACS Symposium Series, 2002, , 70-83.	0.5	24
72	Bagasse-Assisted Bioremediation of Ammonia from Shrimp Farm Wastewater. Water Environment Research, 2006, 78, 938-950.	2.7	24

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73	Adsorption of Ca2+ on single layer graphene oxide. Journal of Environmental Sciences, 2017, 57, 8-14.	6.1	24
74	Selenium and arsenic removal from water using amine sorbent, competitive adsorption and regeneration. Environmental Pollution, 2021, 274, 115866.	7.5	24
75	Direct Evidence of Arsenic(III)â^'Carbonate Complexes Obtained Using Electrochemical Scanning Tunneling Microscopy. Analytical Chemistry, 2007, 79, 3615-3622.	6.5	23
76	Fixation of Heavy Metals onto Lignocellulosic Sorbent Prepared from Paddy Straw. Water Environment Research, 2008, 80, 2165-2174.	2.7	23
77	RESEARCH PAPERS : A REVIEW OF ARSENIC INTERACTIONS WITH ANIONS AND IRON HYDROXIDES. Environmental Engineering Research, 2004, 9, 184-192.	2.5	23
78	Modeling, rate-limiting step investigation, and enhancement of the direct bio-regeneration of perchlorate laden anion-exchange resin. Water Research, 2009, 43, 127-136.	11.3	22
79	Detection of 3-nitro-1,2,4-triazol-3-one (NTO) by surface-enhanced Raman spectroscopy. Vibrational Spectroscopy, 2012, 63, 390-395.	2.2	20
80	Rapid Ti(III) reduction of perchlorate in the presence of Î²-alanine: Kinetics, pH effect, complex formation, and Î²-alanine effect. Journal of Hazardous Materials, 2010, 175, 159-164.	12.4	19
81	Determination of configuration of arseniteâ€“glutathione complexes using ECSTM. Toxicology Letters, 2007, 175, 57-63.	0.8	18
82	Recent advances in SERS detection of perchlorate. Frontiers of Chemical Science and Engineering, 2017, 11, 448-464.	4.4	18
83	Lead removal from water using organic acrylic amine fiber (AAF) and inorganic-organic P-AAF, fixed bed filtration and surface-induced precipitation. Journal of Environmental Sciences, 2021, 101, 135-144.	6.1	18
84	Arsenic re-mobilization in water treatment adsorbents under reducing conditions: Part II. XAS and modeling study. Science of the Total Environment, 2008, 392, 137-144.	8.0	17
85	Characteristics and mechanism of Pb(II) adsorption/desorption on GO/r-GO under sulfide-reducing conditions. Journal of Industrial and Engineering Chemistry, 2019, 73, 233-240.	5.8	17
86	Effect of Bonding Interactions between Arsenate and Silver Nanofilm on Surface-Enhanced Raman Scattering Sensitivity. Journal of Physical Chemistry C, 2012, 116, 325-329.	3.1	16
87	Advanced Oxidation Process for DNAN Using UV/H2O2. Engineering, 2019, 5, 849-854.	6.7	16
88	Release and transport of Pb(II) adsorbed on graphene oxide under alkaline conditions in a saturated sand column. Journal of Hazardous Materials, 2019, 377, 357-364.	12.4	16
89	Phosphate recovery from anaerobic digester effluents using CaMg(OH)4. Journal of Environmental Sciences, 2016, 44, 260-268.	6.1	15
90	Phosphorus recovery from wastewater using light calcined magnesite, effects of alkalinity and organic acids. Journal of Environmental Chemical Engineering, 2019, 7, 103334.	6.7	13

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91	The critical role of oxidative debris in the adsorption and desorption of Pb(II) to graphene oxides under alkaline groundwater conditions. Science of the Total Environment, 2020, 704, 135254.	8.0	13
92	Adsorption of perfluorooctane sulfonate on carbonized poly-melamine-formaldehyde sponge. Science of the Total Environment, 2020, 727, 138626.	8.0	13
93	The critical contribution of oxidation debris on the acidic properties of graphene oxide in an aqueous solution. Journal of Hazardous Materials, 2021, 402, 123552.	12.4	13
94	The effects and mechanism of alkalinity on the phosphate recovery from anaerobic digester effluent using dolomite lime. Environmental Earth Sciences, 2015, 73, 5067-5073.	2.7	11
95	Eco-Colloidal Layer of Micro/Nanoplastics Increases Complexity and Uncertainty of Their Biotoxicity in Aquatic Environments. Environmental Science & Technology, 2022, 56, 10547-10549.	10.0	11
96	Effects of soil temperature and agitation on the removal of 1,2-dichloroethane from contaminated soil. Science of the Total Environment, 2012, 423, 185-189.	8.0	10
97	Mechanistic Study of Pb(II) Removal by TiO₂ and Effect of PO₄. Langmuir, 2020, 36, 13918-13927.	3.5	10
98	A comprehensive study of treatment of arsenic in water combining oxidation, coagulation, and filtration. Journal of Environmental Sciences, 2015, 36, 178-180.	6.1	9
99	Surface-enhanced Raman scattering of perchlorate on cationic-modified silver nanofilms â€“ Effect of inorganic anions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 136, 1593-1599.	3.9	9
100	Effects and mechanisms of water matrix on surface-enhanced Raman scattering analysis of arsenite on silver nanofilm. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 497, 117-125.	4.7	9
101	Formation of Fe(<scp>iii</scp>)â€“As(<scp>v</scp>) complexes: effect on the solubility of ferric hydroxide precipitates and molecular structural identification. Environmental Science: Nano, 2020, 7, 1388-1398.	4.3	9
102	Mechanisms of lead immobilization in treated soils. Land Contamination and Reclamation, 2006, 14, 43-56.	0.4	9
103	Oxidative degradation of nitroguanidine (NQ) by UV-C and oxidants: Hydrogen peroxide, persulfate and peroxymonosulfate. Chemosphere, 2022, 292, 133357.	8.2	8
104	Heavy metals biosorption mechanism of partially delignified products derived from mango (Mangifera) Tj ETQq0 0 0 rgBT /Overlock 10 T 32891-32904.	5.3	7
105	Raw hematite based Fe(III) bio-reduction process for humified landfill leachate treatment. Journal of Hazardous Materials, 2018, 355, 10-16.	12.4	6
106	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) reduction by granular zero-valent iron in continuous flow reactor. Environmental Science and Pollution Research, 2018, 25, 28489-28499.	5.3	6
107	Transformation characteristics of organic pollutants in Fered-Fenton process for dry-spun acrylic fiber wastewater treatment. Water Science and Technology, 2014, 70, 1976-1982.	2.5	5
108	Comment on â€œColloidal Properties and Stability of Graphene Oxide Nanomaterials in the Aquatic Environmentâ€• Environmental Science & Technology, 2014, 48, 1359-1359.	10.0	5

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109	Surface mole-ratio method to distinguish surface precipitation and adsorption on solid-liquid interface. Journal of Hazardous Materials, 2020, 397, 122781.	12.4	5
110	Spectrophotometric analyses of hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) in water. Journal of Environmental Sciences, 2015, 33, 39-44.	6.1	4
111	Mechanistic Study of Radium Adsorption onto Goethite. Journal of Physical Chemistry C, 2020, 124, 805-814.	3.1	4
112	Identifying the existence and molecular structure of the dissolved HCO3-Ca-As(V) complex in water. Science of the Total Environment, 2020, 724, 138216.	8.0	3
113	Optimization and analysis of homogenous Fenton process for the treatment of dry-spun acrylic fiber manufacturing wastewater. Desalination and Water Treatment, 0, , 1-8.	1.0	2
114	Release of Pb adsorbed on graphene oxide surfaces under conditions of Shewanella putrefaciens metabolism. Journal of Environmental Sciences, 2022, 118, 67-75.	6.1	2
115	ARSENIC LEACHABILTY IN WATER TREATMENT SLUDGE. Proceedings of the Water Environment Federation, 2003, 2003, 167-177.	0.0	1
116	Advances in Arsenic Research: Introductory Remarks. ACS Symposium Series, 2005, , 1-5.	0.5	1