Gang Chen

List of Publications by Citations

99 papers	1,899 citations	22 h-index	41 g-index
107 ext. papers	2,261 ext. citations	4.4 avg, IF	5.46 L-index

#	Paper	IF	Citations
99	Pretreatment of wastewater from triazine manufacturing by coagulation, electrolysis, and internal microelectrolysis. *Journal of Hazardous Materials*, **2007**, 146, 385-92	12.8	157
98	Predicting biochar properties and functions based on feedstock and pyrolysis temperature: A review and data syntheses. *Journal of Cleaner Production*, **2019**, 215, 890-902	10.3	130
97	Application of composted sewage sludge (CSS) as a soil amendment for turfgrass growth. *Ecological Engineering*, **2007**, 29, 96-104	3.9	100
96	Nitrogen retention of biochar derived from different feedstocks at variable pyrolysis temperatures. *Journal of Analytical and Applied Pyrolysis*, **2018**, 133, 136-146	6	93
95	Impact of flow rate, water content, and capillary forces on in situ colloid mobilization during infiltration in unsaturated sediments. *Water Resources Research*, **2008**, 44,	5.4	93
94	Microbial surface thermodynamics and applications. *Research in Microbiology*, **2003**, 154, 329-35	4	79
93	Retention of mineral colloids in unsaturated porous media as related to their surface properties. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2005**, 256, 207-216	5.1	79
92	Thermogravimetric, thermochemical, and infrared spectral characterization of feedstocks and biochar derived at different pyrolysis temperatures. *Waste Management*, **2018**, 78, 198-207	8.6	76
91	Soil microbial activities and carbon and nitrogen fixation. *Research in Microbiology*, **2003**, 154, 393-8	4	62
90	Impact of surface thermodynamics on bacterial transport. *Environmental Microbiology*, **2001**, 3, 237-45	5.2	62
89	Colloid-facilitated transport of cesium in variably saturated Hanford sediments. *Environmental Science & Technology*, **2005**, 39, 3435-42	10.3	61
88	Electropolishing of surfaces: theory and applications. *Surface Engineering*, **2017**, 33, 149-166	2.6	51
87	Agricultural waste-derived superabsorbent hydrogels: Preparation, performance, and socioeconomic impacts. *Journal of Cleaner Production*, **2020**, 251, 119669	10.3	49
86	Bacillus anthracis and Bacillus subtilis spore surface properties and transport. *Colloids and Surfaces B: Biointerfaces*, **2010**, 76, 512-8	6	45
85	Bacterial adhesion to silica sand as related to Gibbs energy variations. *Colloids and Surfaces B: Biointerfaces*, **2005**, 44, 41-8	6	44
84	Cesium migration in saturated silica sand and Hanford sediments as impacted by ionic strength. *Journal of Contaminant Hydrology*, **2004**, 71, 111-26	3.9	41
83	Municipal wastewater phosphorus removal by coagulation. *Environmental Technology (United Kingdom)*, **2010**, 31, 601-9	2.6	38

82	Naphthalene, phenanthrene and surfactant biodegradation. *Biodegradation*, **2001**, 12, 433-42	4.1	36
81	Factors Affecting the Effectiveness of Bioelectrochemical System Applications: Data Synthesis and Meta-Analysis. *Batteries*, **2018**, 4, 34	5.7	34
80	Public health risk of trace metals in fresh chicken meat products on the food markets of a major production region in southern China. *Environmental Pollution*, **2018**, 234, 667-676	9.3	29
79	Power generation and nitrogen removal of landfill leachate using microbial fuel cell technology. *Environmental Technology (United Kingdom)*, **2013**, 34, 2727-36	2.6	28
78	Microbial surface thermodynamics and interactions in aqueous media. *Journal of Colloid and Interface Science*, **2003**, 261, 283-90	9.3	24
77	Bacterial deposition in porous medium as impacted by solution chemistry. *Research in Microbiology*, **2004**, 155, 467-74	4	22
76	Rhamnolipid surface thermodynamic properties and transport in agricultural soil. *Colloids and Surfaces B: Biointerfaces*, **2014**, 115, 317-22	6	21
75	Impact of carbon and nitrogen conditions on E. coli surface thermodynamics. *Colloids and Surfaces B: Biointerfaces*, **2003**, 28, 135-146	6	21
74	Bacterial desorption in water-saturated porous media in the presence of rhamnolipid biosurfactant. *Research in Microbiology*, **2004**, 155, 655-61	4	21
73	Reductive dehalogenation of tetrachloroethylene by microorganisms: current knowledge and application strategies. *Applied Microbiology and Biotechnology*, **2004**, 63, 373-7	5.7	20
72	Towards selenium recovery: Biocathode induced selenate reduction to extracellular elemental selenium nanoparticles. *Chemical Engineering Journal*, **2018**, 351, 1095-1103	14.7	18
71	Microbial Deposition in Porous Media: A Surface Thermodynamic Investigation. *Environmental Engineering Science*, **2003**, 20, 237-248	2	16
70	Landfill Leachate Treatment by Electrocoagulation and Fiber Filtration. *Water Environment Research*, **2017**, 89, 2015-2020	2.8	15
69	Bacterial interactions and transport in unsaturated porous media. *Colloids and Surfaces B: Biointerfaces*, **2008**, 67, 265-71	6	15
68	Equilibrium and kinetic adsorption of bacteria on alluvial sand and surface thermodynamic interpretation. *Research in Microbiology*, **2003**, 154, 175-81	4	14
67	Bacterial interactions and transport in geological formation of alumino-silica clays. *Colloids and Surfaces B: Biointerfaces*, **2015**, 125, 45-50	6	13
66	Microwave-induced heavy metal removal from dewatered biosolids for cost-effective composting. *Journal of Cleaner Production*, **2019**, 241, 118342	10.3	13
65	Surface Free Energy Relationships used to Evaluate Microbial Transport. *Journal of Environmental Engineering, ASCE*, **2002**, 128, 408-415	2	13

64	lux-marked Pseudomonas aeruginosa lipopolysaccharide production in the presence of rhamnolipid. *Colloids and Surfaces B: Biointerfaces*, **2005**, 41, 43-8	6	12
63	Microbial Community Analysis Provides Insights into the Effects of Tetrahydrofuran on 1,4-Dioxane Biodegradation. *Applied and Environmental Microbiology*, **2019**, 85,	4.8	11
62	Microbial Biofouling: A Mechanistic Investigation. *Journal of Adhesion Science and Technology*, **2011**, 25, 2155-2168	2	11
61	Contemporary strategies for enhancing nitrogen retention and mitigating nitrous oxide emission in agricultural soils: present and future. *Environment, Development and Sustainability*, **2020**, 22, 2703-2741	4.5	11
60	Rhamnolipid biosurfactant behavior in solutions. *Journal of Biomaterials Science, Polymer Edition*, **2004**, 15, 229-35	3.5	10
59	Applications of Emerging Bioelectrochemical Technologies in Agricultural Systems: A Current Review. *Energies*, **2018**, 11, 2951	3.1	10
58	COLLOID RELEASE AND TRANSPORT IN AGRICULTURAL SOIL AS IMPACTED BY SOLUTION CHEMISTRY. *Journal of Urban and Environmental Engineering*, **2011**, 5, 84-90	1.5	9
57	Role of Bacterial Adhesion in Their Subsurface Deposition and Transport: A Critical Review. *Reviews of Adhesion and Adhesives*, **2015**, 3, 216-252	2.4	9
56	Effects of evolving quality of landfill leachate on microbial fuel cell performance. *Waste Management and Research*, **2018**, 36, 59-67	4	9
55	Rhamnolipid Transport in Biochar-Amended Agricultural Soil. *Water, Air, and Soil Pollution*, **2015**, 226, 1	2.6	8
54	Energy Recovery and Nitrogen Management from Struvite Precipitation Effluent via Microbial Fuel Cells. *Journal of Environmental Engineering, ASCE*, **2019**, 145, 04018145	2	8
53	E. coli interactions, adhesion and transport in alumino-silica clays. *Colloids and Surfaces B: Biointerfaces*, **2017**, 154, 82-88	6	7
52	Bacterial-facilitated uranium transport in the presence of phytate at Savannah River Site. *Chemosphere*, **2019**, 223, 351-357	8.4	7
51	Speciation and conversion of carbon and nitrogen in young landfill leachate during anaerobic biological pretreatment. *Waste Management*, **2020**, 106, 88-98	8.6	7
50	Cry1Ab Adsorption and Transport in Humic Acid-Coated Geological Formation of Alumino-Silica Clays. *Water, Air, and Soil Pollution*, **2017**, 228, 1	2.6	7
49	S. typhimurium and E. coli O157:H7 retention and transport in agricultural soil during irrigation practices. *European Journal of Soil Science*, **2012**, 63, 239-248	3.4	7
48	Impact of surface charge density on colloid deposition in unsaturated porous media. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2007**, 302, 342-348	5.1	7
47	Impact of Bacterial Extracellular Polymers on Lindane Transport. *Environmental Engineering Science*, **2001**, 18, 191-203	2	7

46	Synthesis of microwave-mediated biochar-hydrogel composites for enhanced water absorbency and nitrogen release. *Polymer Testing*, **2021**, 93, 106996	4.5	7
45	Investigating promising substrates for promoting 1,4-dioxane biodegradation: effects of ethane and tetrahydrofuran on microbial consortia. *Biodegradation*, **2020**, 31, 171-182	4.1	6
44	Escherichia coli growth and transport in the presence of nanosilver under variable growth conditions. *Environmental Technology (United Kingdom)*, **2014**, 35, 2306-13	2.6	6
43	Sorption and Transport of Naphthalene and Phenanthrene in Silica Sand in the Presence of Rhamnolipid Biosurfactant. *Separation Science and Technology*, **2005**, 40, 2411-2425	2.5	6
42	CHLORIDE REMOVAL FROM LANDFILL LEACHATE BY THE ULTRA-HIGH LIME WITH ALUMINUM PROCESS. *Journal of Urban and Environmental Engineering*,3-8	1.5	6
41	Chemical-Free Recovery of Elemental Selenium from Selenate-Contaminated Water by a System Combining a Biological Reactor, a Bacterium-Nanoparticle Separator, and a Tangential Flow Filter. *Environmental Science & Technology*, **2018**, 52, 13231-13238	10.3	6
40	Colloid Retention in Unsaturated Porous Media as Impacted by Colloid Size. *Particulate Science and Technology*, **2009**, 27, 35-49	2	5
39	Cadmium-Bacteria Complexation and Subsequent Bacteria-Facilitated Cadmium Transport in Saturated Porous Media. *Journal of Environmental Quality*, **2019**, 48, 1524-1533	3.4	4
38	Sustainable landfill leachate treatment. *Waste Management and Research*, **2020**, 38, 1093-1100	4	4
37	Bacterial deposition in unsaturated porous media as related to surface properties. *International Journal of Environment and Pollution*, **2010**, 40, 363	0.7	4
36	Bacterial Retention in Lipopolysaccharide Coated Silica Sand. *Separation Science and Technology*, **2007**, 42, 1031-1047	2.5	4
35	Lindane Affinity to Silica Sand as Related to Surface Properties. *Separation Science and Technology*, **2005**, 40, 1277-1291	2.5	4
34	E. coli O157:H7 Desorption by Rhamnolipid Biosurfactant in Water-Unsaturated Porous Media. *Journal of Adhesion Science and Technology*, **2011**, 25, 1803-1818	2	3
33	Modeling Bacterial Adhesion and Transport in the Environment: Surface Free Energy Relationships in Interpreting Bacterial Deposition in Porous Media. *ACS Symposium Series*, **2008**, 245-260	0.4	3
32	Escherichia coli adhesion to abiotic surfaces in the presence of non-ionic surfactants. *Journal of Adhesion Science and Technology*, **2003**, 17, 2131-2139	2	3
31	Using hydrogel-biochar composites for enhanced cadmium removal from aqueous media. *Material Science & Engineering International Journal*, **2018**, 2,	1.4	3
30	Effectiveness of dicyandiamide as a nitrification inhibitor in biochar-amended soil. *Pedosphere*, **2020**, 30, 352-362	5	3
29	Evaluating Water Balance Variables under Land Use and Climate Projections in the Upper Choctawhatchee River Watershed, in Southeast US. *Water (Switzerland)*, **2020**, 12, 2205	3	3

28	Limiting factors of heavy metals removal during anaerobic biological pretreatment of municipal solid waste landfill leachate. *Journal of Hazardous Materials*, **2021**, 416, 126081	12.8	3
27	Role of Interfacial Interactions in the Deposition of Colloidal Clay Particles in Porous Media. *Journal of Adhesion Science and Technology*, **2009**, 23, 1845-1859	2	2
26	Impact of lipopolysaccharide coating on clay particle wettability. *Colloids and Surfaces B: Biointerfaces*, **2004**, 35, 143-7	6	2
25	Interaction decay of nonionic surfactants at water surfaces. *Chemical Physics Letters*, **2003**, 376, 758-760	2.5	2
24	Lindane adsorption isotherms interpreted in terms of interaction free energies with porous media. *Journal of Adhesion Science and Technology*, **2005**, 19, 579-593	2	2
23	A mechanical investigation of perfluorooctane acid adsorption by engineered biochar. *Journal of Cleaner Production*, **2022**, 340, 130742	10.3	2
22	Comparing Physicochemical Properties and Sorption Behaviors of Pyrolysis-Derived and Microwave-Mediated Biochar. *Sustainability*, **2021**, 13, 2359	3.6	2
21	Soil and microbial characterisation and microbial-mediated iron release nearby landfills in Northwest Florida, USA. *International Journal of Environment and Waste Management*, **2012**, 10, 56	0.9	1
20	An environmental perspective of nitrogen cycle. *International Journal of Global Environmental Issues* , **2009**, 9, 199	0.8	1
19	Impact of lux gene insertion on bacterial surface properties and transport. *Research in Microbiology*, **2008**, 159, 145-51	4	1
18	Neutrally charged nanosilver antimicrobial effects: A surface thermodynamic perspective.. *Colloids and Surfaces B: Biointerfaces*, **2022**, 212, 112390	6	1
17	Nonionic Surfactant Behavior in Ionic Liquids. *E-Journal of Surface Science and Nanotechnology*, **2011**, 9, 390-394	0.7	1
16	Water quality deterioration near culverts within the Apalachicola National Forest. *Environmental Earth Sciences*, **2021**, 80, 1	2.9	1
15	Impact of Humic Acids on Phosphorus Retention and Transport. *Journal of Soil Science and Plant Nutrition*, **2020**, 20, 2431-2439	3.2	1
14	Agricultural Greenhouse Gas Emissions in a Data-Scarce Region Using a Scenario-Based Modeling Approach: A Case Study in Southeastern USA. *Agronomy*, **2021**, 11, 1323	3.6	1
13	A GIS-based framework for local agricultural decision-making and regional crop yield simulation. *Agricultural Systems*, **2021**, 193, 103213	6.1	1
12	Reduction and bacterial adsorption of dissolved mercuric ion by indigenous bacteria at the Oak Ridge Reservation site. *Chemosphere*, **2021**, 280, 130629	8.4	1
11	Water Accounting and Productivity Analysis to Improve Water Savings of Nile River Basin, East Africa: From Accountability to Sustainability. *Agronomy*, **2022**, 12, 818	3.6	1

10	Nitrous oxide emission from agricultural soils. *International Journal of Global Warming*, **2015**, 7, 62	0.6	0
9	Ammonia removal from landfill leachate by struvite precipitation/coated silica sand filtration. *International Journal of Environment and Waste Management*, **2015**, 15, 201	0.9	0
8	DefineInvestigateEstimateMap (DIEM) Framework for Modeling Habitat Threats. *Sustainability*, **2021**, 13, 11259	3.6	0
7	Nitrate source apportionment and risk assessment: A study in the largest ion-adsorption rare earth mine in China.. *Environmental Pollution*, **2022**, 302, 119052	9.3	0
6	Soil Salinity Variations and Associated Implications for Agriculture and Land Resources Development Using Remote Sensing Datasets in Central Asia. *Remote Sensing*, **2022**, 14, 2501	5	0
5	Effect of solution chemistry on the transport of short-chain and long-chain perfluoroalkyl carboxylic acids (PFCAs) in saturated porous media. *Chemosphere*, **2022**, 303, 135160	8.4	0
4	Correlation of water quality indicators for coastal marshes. *International Journal of Water*, **2015**, 9, 263	0.9	
3	Impact of Lipopolysaccharide Extraction on Bacterial Adhesion and Transport. *Journal of Adhesion Science and Technology*, **2008**, 22, 1073-1088	2	
2	Determination of Microbial Sorption Isotherms from Column Experiments. *Separation Science and Technology*, **2006**, 41, 3639-3654	2.5	
1	Adhesion of Colloids and Bacteria to Porous Media **2020**, 417-459		