Mutai Bao

List of Publications by Citations

102 papers	2,178 citations	27 h-index	42 g-index
103 ext. papers	2,738 ext. citations	7.4 avg, IF	5.46 L-index

#	Paper	IF	Citations
102	Facile fabrication of acidified g-C3N4/g-C3N4 hybrids with enhanced photocatalysis performance under visible light irradiation. *Applied Catalysis B: Environmental*, **2016**, 193, 22-35	21.8	283
101	Biodegradation of partially hydrolyzed polyacrylamide by bacteria isolated from production water after polymer flooding in an oil field. *Journal of Hazardous Materials*, **2010**, 184, 105-110	12.8	111
100	Insight into the highly efficient degradation of PAHs in water over graphene oxide/Ag3PO4 composites under visible light irradiation. *Chemical Engineering Journal*, **2018**, 334, 355-376	14.7	79
99	Constructing a novel ternary composite (C16H33(CH3)3N)4W10O32/g-C3N4/rGO with enhanced visible-light-driven photocatalytic activity for degradation of dyes and phenol. *Applied Catalysis B: Environmental*, **2017**, 200, 283-296	21.8	78
98	Treatment of partially hydrolyzed polyacrylamide wastewater by combined Fenton oxidation and anaerobic biological processes. *Chemical Engineering Journal*, **2015**, 273, 1-6	14.7	63
97	Study on bioadsorption and biodegradation of petroleum hydrocarbons by a microbial consortium. *Bioresource Technology*, **2013**, 149, 22-30	11	60
96	Facile Fabrication of Cyclodextrin-Modified Magnetic Particles for Effective Demulsification from Various Types of Emulsions. *Environmental Science & Technology*, **2016**, 50, 8809-16	10.3	59
95	Rhamnolipids enhance marine oil spill bioremediation in laboratory system. *Marine Pollution Bulletin*, **2013**, 71, 269-75	6.7	59
94	Effect of rhamnolipid biosurfactant on solubilization of polycyclic aromatic hydrocarbons. *Marine Pollution Bulletin*, **2015**, 101, 219-225	6.7	52
93	Study on the biodegradation of crude oil by free and immobilized bacterial consortium in marine environment. *PLoS ONE*, **2017**, 12, e0174445	3.7	49
92	Unprecedented efficient degradation of phenanthrene in water by intimately coupling novel ternary composite Mn3O4/MnO2-Ag3PO4 and functional bacteria under visible light irradiation. *Chemical Engineering Journal*, **2019**, 369, 1078-1092	14.7	44
91	An environmentally benign approach to prepare superhydrophobic magnetic melamine sponge for effective oil/water separation. *Separation and Purification Technology*, **2020**, 236, 116308	8.3	44
90	Microbial degradation of four crude oil by biosurfactant producing strain Rhodococcus sp. *Bioresource Technology*, **2017**, 232, 263-269	11	43
89	Biodegradation for hydrolyzed polyacrylamide in the anaerobic baffled reactor combined aeration tank. *Ecological Engineering*, **2015**, 84, 121-127	3.9	41
88	Highly permeable and stable forward osmosis (FO) membrane based on the incorporation of Al2O3 nanoparticles into both substrate and polyamide active layer. *RSC Advances*, **2017**, 7, 40311-40320	3.7	41
87	Biodegradation of different petroleum hydrocarbons by free and immobilized microbial consortia. *Environmental Sciences: Processes and Impacts*, **2015**, 17, 2022-33	4.3	39
86	Fingerprinting and source identification of an oil spill in China Bohai Sea by gas chromatography-flame ionization detection and gas chromatography-mass spectrometry coupled with multi-statistical analyses. *Journal of Chromatography A*, **2009**, 1216, 830-6	4.5	38

85	Biodegradation of hydrolyzed polyacrylamide by the combined expanded granular sludge bed reactor-aerobic biofilm reactor biosystem and key microorganisms involved in this bioprocess. *Bioresource Technology*, **2018**, 263, 153-162	11	37
84	Novel and Environmentally Friendly Oil Spill Dispersant Based on the Synergy of Biopolymer Xanthan Gum and Silica Nanoparticles. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 3095-3102	8.3	36
83	Lipopeptide biosurfactant production bacteria Acinetobacter sp. D3-2 and its biodegradation of crude oil. *Environmental Sciences: Processes and Impacts*, **2014**, 16, 897-903	4.3	34
82	Fabrication of organic-inorganic nanofiltration membrane using ordered stacking SiO2 thin film as rejection layer assisted with layer-by-layer method. *Chemical Engineering Journal*, **2017**, 330, 337-344	14.7	34
81	3D Bombax-structured carbon nanotube sponge coupling with AgPO for tetracycline degradation under ultrasound and visible light irradiation. *Science of the Total Environment*, **2019**, 695, 133694	10.2	33
80	Facile one-step synthesis of onion-like carbon modified ultrathin g-CN 2D nanosheets with enhanced visible-light photocatalytic performance. *Journal of Colloid and Interface Science*, **2019**, 533, 47-58	9.3	33
79	Preparation of Oil-in-Seawater Emulsions Based on Environmentally Benign Nanoparticles and Biosurfactant for Oil Spill Remediation. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 2686-2693	8.3	32
78	Microbial community structure shifts are associated with temperature, dispersants and nutrients in crude oil-contaminated seawaters. *Marine Pollution Bulletin*, **2016**, 111, 203-212	6.7	31
77	An efficient and environmental-friendly dispersant based on the synergy of amphiphilic surfactants for oil spill remediation. *Chemosphere*, **2019**, 215, 241-247	8.4	31
76	Hydrolyzed polyacrylamide biodegradation and mechanism in sequencing batch biofilm reactor. *Bioresource Technology*, **2016**, 207, 315-21	11	27
75	The contribution of chemical dispersants and biosurfactants on crude oil biodegradation by Pseudomonas sp. LSH-7?. *Journal of Cleaner Production*, **2017**, 153, 74-82	10.3	26
74	Metabolic pathway for a new strain Pseudomonas synxantha LSH-7₹ from chemotaxis to uptake of n-hexadecane. *Scientific Reports*, **2017**, 7, 39068	4.9	26
73	Degradation of crude oil and relationship with bacteria and enzymatic activities in laboratory testing. *International Biodeterioration and Biodegradation*, **2016**, 106, 106-116	4.8	22
72	Construction of a Superhydrophobic Sodium Alginate Aerogel for Efficient Oil Absorption and Emulsion Separation. *Langmuir*, **2021**, 37, 882-893	4	22
71	The enhanced stability and biodegradation of dispersed crude oil droplets by Xanthan Gum as an additive of chemical dispersant. *Marine Pollution Bulletin*, **2017**, 118, 275-280	6.7	21
70	Micelle-vesicle transitions in catanionic mixtures of SDS/DTAB induced by salt, temperature, and selective solvents: a dissipative particle dynamics simulation study. *Colloid and Polymer Science*, **2014**, 292, 2349-2360	2.4	21
69	Dissipative particle dynamics simulation on the properties of the oil/water/surfactant system in the absence and presence of polymer. *Molecular Simulation*, **2013**, 39, 299-308	2	21
68	Amphiphilic Janus particles for efficient dispersion of oil contaminants in seawater. *Journal of Colloid and Interface Science*, **2019**, 556, 54-64	9.3	20

67	Biohydrogen and polyhydroxyalkanoate production from original hydrolyzed polyacrylamide-containing wastewater. *Bioresource Technology*, **2019**, 287, 121404	11	19
66	Preparation of superhydrophobic magnetic sawdust for effective oil/water separation. *Journal of Cleaner Production*, **2020**, 253, 120058	10.3	19
65	Morphology and Surface Chemistry of Gas-Wetting Nanoparticles and Their Effect on the Liquid Menisci in Porous Media. *Industrial & Engineering Chemistry Research*, **2019**, 58, 6747-6755	3.9	18
64	Potential of hydrolyzed polyacrylamide biodegradation to final products through regulating its own nitrogen transformation in different dissolved oxygen systems. *Bioresource Technology*, **2018**, 256, 61-68	11	18
63	Petroleum hydrocarbon degrading bacteria associated with chitosan as effective particle-stabilizers for oil emulsification. *RSC Advances*, **2015**, 5, 37640-37647	3.7	17
62	Bioremediation of the oil spill polluted marine intertidal zone and its toxicity effect on microalgae. *Environmental Sciences: Processes and Impacts*, **2015**, 17, 877-85	4.3	16
61	Construction of a hydrophobic magnetic aerogel based on chitosan for oil/water separation applications. *International Journal of Biological Macromolecules*, **2020**, 165, 1869-1880	7.9	16
60	Kinetics and thermodynamics of biodegradation of hydrolyzed polyacrylamide under anaerobic and aerobic conditions. *Bioresource Technology*, **2016**, 216, 95-104	11	16
59	Multi-functional magnetic bacteria as efficient and economical Pickering emulsifiers for encapsulation and removal of oil from water. *Journal of Colloid and Interface Science*, **2020**, 560, 349-358	9.3	16
58	Biodegradation of hydrolyzed polyacrylamide by a Bacillus megaterium strain SZK-5: Functional enzymes and antioxidant defense mechanism. *Chemosphere*, **2019**, 231, 184-193	8.4	15
57	Hydrolyzed polyacrylamide biotransformation in an up-flow anaerobic sludge blanket reactor system: key enzymes, functional microorganisms, and biodegradation mechanisms. *Bioprocess and Biosystems Engineering*, **2019**, 42, 941-951	3.7	15
56	Magnet-Responsive Silica Microrods as Solid Stabilizer and Adsorbent for Simultaneous Removal of Coexisting Contaminants in Water. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 13786-13795	8.3	14
55	Aggregation Behavior of Surfactants with Different Molecular Structures in Aqueous Solution: DPD Simulation Study. *Journal of Dispersion Science and Technology*, **2012**, 33, 1437-1443	1.5	14
54	An efficient classification method for fuel and crude oil types based on m/z 256 mass chromatography by COW-PCA-LDA. *Fuel*, **2018**, 222, 416-423	7.1	13
53	Effects of different electron acceptors on the methanogenesis of hydrolyzed polyacrylamide biodegradation in anaerobic activated sludge systems. *Bioresource Technology*, **2018**, 247, 759-768	11	13
52	Dodecanol-Modified Petroleum Hydrocarbon Degrading Bacteria for Oil Spill Remediation: Double Effect on Dispersion and Degradation. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 169-176	8.3	13
51	Advanced treatment for actual hydrolyzed polyacrylamide-containing wastewater in a biofilm/activated sludge membrane bioreactor system: Biodegradation and interception. *Biochemical Engineering Journal*, **2019**, 141, 120-130	4.2	13
50	Enhanced hydrolyzed polyacrylamide removal from water by an aerobic biofilm reactor-ozone reactor-aerobic biofilm reactor hybrid treatment system: Performance, key enzymes and functional microorganisms. *Bioresource Technology*, **2019**, 291, 121811	11	12

49	Removal efficiency of heavy oil by free and immobilised microorganisms on laboratory-scale. *Canadian Journal of Chemical Engineering*, **2013**, 91, 1-8	2.3	12
48	Highly Efficient Photocatalytic Remediation of Simulated Polycyclic Aromatic Hydrocarbons (PAHs) Contaminated Wastewater under Visible Light Irradiation by Graphene Oxide Enwrapped Ag3PO4 Composite.. *Chinese Journal of Chemistry*, **2017**, 35, 1549-1558	4.9	11
47	Effects of suspended particulate matter, surface oil layer thickness and surfactants on the formation and transport of oil-sediment aggregates (OSA). *International Biodeterioration and Biodegradation*, **2020**, 149, 104925	4.8	10
46	Promoting the treatment of crude oil alkane pollution through the study of enzyme activity. *International Journal of Biological Macromolecules*, **2018**, 119, 708-716	7.9	9
45	Effect of surfactants on the solubilization, sorption and biodegradation of benzo (a) pyrene by Pseudomonas aeruginosa BT-1. *Journal of the Taiwan Institute of Chemical Engineers*, **2019**, 96, 121-130	5.3	9
44	Individually immobilized and surface-modified hydrocarbon-degrading bacteria for oil emulsification and biodegradation. *Marine Pollution Bulletin*, **2017**, 125, 433-439	6.7	8
43	Characterization of crude oil degrading microbial cultures isolated in Qingdao China. *RSC Advances*, **2015**, 5, 97665-97674	3.7	8
42	Construction of long-chain alkane degrading bacteria and its application in bioremediation of crude oil pollution. *International Journal of Biological Macromolecules*, **2018**, 119, 524-532	7.9	8
41	Solid inoculants as a practice for bioaugmentation to enhance bioremediation of hydrocarbon contaminated areas. *Chemosphere*, **2021**, 263, 128175	8.4	8
40	Great correlation: Biodegradation and chemotactic adsorption of Pseudomonas synxantha LSH-7R for oil contaminated seawater bioremediation. *Water Research*, **2019**, 153, 160-168	12.5	7
39	The formation process and responsive impacts of single oil droplet in submerged process. *Marine Pollution Bulletin*, **2017**, 124, 139-146	6.7	7
38	Hydrolyzed polyacrylamide-containing wastewater treatment using ozone reactor-upflow anaerobic sludge blanket reactor-aerobic biofilm reactor multistage treatment system. *Environmental Pollution*, **2021**, 269, 116111	9.3	7
37	Magnetic chitosan-based aerogel decorated with polydimethylsiloxane: A high-performance scavenger for oil in water. *Journal of Applied Polymer Science*, **2021**, 138, 50461	2.9	7
36	Kinetics and thermodynamics of dissolved petroleum hydrocarbons in sediment under sophorolipid application and their effects on oil behaviour end-results in marine environment. *RSC Advances*, **2017**, 7, 45843-45851	3.7	6
35	Insights into the effect of different levels of crude oil on hydrolyzed polyacrylamide biotransformation in aerobic and anoxic biosystems: Bioresource production, enzymatic activity, and microbial function. *Bioresource Technology*, **2019**, 293, 122023	11	6
34	Improvement in emulsifying properties of whey protein-Rhamnolipid conjugates through short-time heat treatment. *Colloids and Surfaces B: Biointerfaces*, **2019**, 181, 688-695	6	6
33	Microbial degradation of four dispersed crude oils by Rhodococcus sp. evaluated using carbon stable isotope analysis. *Journal of Chemical Technology and Biotechnology*, **2019**, 94, 1800-1807	3.5	6
32	Sensitivity and Identification Indexes for Fuel Oils and Crude Oils Based on the Hydrocarbon Components and Diagnostic Ratios Using Principal Component Analysis (PCA) Biplots. *Energy & Fuels*, **2015**, 29, 3032-3040	4.1	6

31	Biodegradation of marine surface floating crude oil in a large-scale field simulated experiment. *Environmental Sciences: Processes and Impacts*, **2014**, 16, 1948-56	4.3	6
30	TiO2@palygorskite composite for the efficient remediation of oil spills via a dispersion-photodegradation synergy. *Frontiers of Environmental Science and Engineering*, **2021**, 15, 1	5.8	6
29	Fabrication of MIL-Fe (53)/modified g-C3N4 photocatalyst synergy H2O2 for degradation of tetracycline. *Separation and Purification Technology*, **2021**, 279, 119661	8.3	6
28	Regulation of different electron acceptors on petroleum hydrocarbon biotransformation to final products in activated sludge biosystems. *Bioprocess and Biosystems Engineering*, **2019**, 42, 643-655	3.7	5
27	A new perspective of particle adsorption: Dispersed oil and granular materials interactions in simulated coastal environment. *Marine Pollution Bulletin*, **2017**, 122, 100-109	6.7	5
26	Study and Application on the Oil-Film Method Used for Reservoir Protection Drilling and Completion Fluid Systems. *Journal of Dispersion Science and Technology*, **2010**, 31, 1273-1277	1.5	5
25	Simultaneous nitrification and denitrification in an aerobic biofilm biosystem with loofah sponges as carriers for biodegrading hydrolyzed polyacrylamide-containing wastewater. *Bioprocess and Biosystems Engineering*, **2020**, 43, 529-540	3.7	5
24	RNA-seq analysis reveals the significant effects of different light conditions on oil degradation by marine Chlorella vulgaris. *Marine Pollution Bulletin*, **2018**, 137, 267-276	6.7	5
23	Petroleum hydrocarbon release behavior study in oil-sediment aggregates: turbulence intensity and chemical dispersion effect.. *RSC Advances*, **2019**, 9, 7922-7931	3.7	4
22	Integrated asymmetric superwetting Janus membrane for the efficient separation of various surfactant-stabilized oil–water emulsions. *Environmental Science: Nano*, **2021**, 8, 2235-2248	7.1	4
21	The physical–biological processes of petroleum hydrocarbons in seawater/sediments after an oil spill. *RSC Advances*, **2015**, 5, 98990-98998	3.7	3
20	Rapid capturing of oil-degrading bacteria by engineered attapulgite and their synergistic remediation for oil spill. *Journal of Colloid and Interface Science*, **2021**, 604, 272-280	9.3	3
19	Key role of different levels of dissolved oxygen in hydrolyzed polyacrylamide bioconversion: Focusing on metabolic products, key enzymes and functional microorganisms. *Bioresource Technology*, **2020**, 306, 123089	11	2
18	Experimental study of oil plume stability: Parametric dependences and optimization. *Marine Pollution Bulletin*, **2016**, 111, 358-364	6.7	2
17	Automatic integration method for single and multiple peaks in the GC and GC-MS chromatograms of characteristic oil compounds. *Analytical Methods*, **2015**, 7, 2670-2679	3.2	1
16	Dominant species succession and oil behavior change under LSH-7? petroleum hydrocarbon degradation bacteria and chemical dispersant in open water columns. *Journal of the Taiwan Institute of Chemical Engineers*, **2018**, 93, 519-527	5.3	1
15	Temperature mediates metabolism switching of Bacillus sp. ZT-1: Analysis of the properties and structure of exopolysaccharides. *Microbiological Research*, **2021**, 251, 126839	5.3	1
14	Deep remediation of oil spill based on the dispersion and photocatalytic degradation of biosurfactant-modified TiO. *Chemosphere*, **2021**, 281, 130744	8.4	1

13	Correlation between polyhydroxyalkanoates and extracellular polymeric substances in the activated sludge biosystems with different carbon to nitrogen ratio. *Biochemical Engineering Journal*, **2021**, 176, 108204	4.2	1
12	Enhanced photocatalytic activity of glyphosate over a combination strategy of GQDs/TNAs heterojunction composites. *Journal of Colloid and Interface Science*, **2022**, 607, 607-620	9.3	1
11	A super-hydrophobic and antibiofouling membrane constructed from carbon sphere-welded MnO2 nanowires for ultra-fast separation of emulsion. *Journal of Membrane Science*, **2022**, 653, 120514	9.6	1
10	A solar-heated antibacterial sodium alginate aerogel for highly efficient cleanup of viscous oil spills.. *Journal of Colloid and Interface Science*, **2022**, 621, 241-253	9.3	1
9	Mesoscale evaluation of oil submerging and floating processes during marine oil spill response: effects of dispersant on submerging stability and the associated mechanism. *Journal of Hazardous Materials*, **2022**, 129153	12.8	1
8	The proliferation and colonization of functional bacteria on amorphous polyethylene terephthalate: Key role of ultraviolet irradiation and nonionic surfactant polysorbate 80 addition. *Chemosphere*, **2021**, 132940	8.4	0
7	Occurrence and distribution of cyclic-alkane-consuming psychrophilic bacteria in the Yellow Sea and East China Sea.. *Journal of Hazardous Materials*, **2021**, 427, 128129	12.8	0
6	Efficient biodegradation of phenanthrene using Pseudomonas stutzeri LSH-PAH1 with the addition of sophorolipids: Alleviation of biotoxicity and cometabolism studies.. *Environmental Pollution*, **2022**, 119011	9.3	0
5	New insights into the interaction between asphaltene and hydrolyzed polyacrylamide at the oil-water interface based on emulsion stability. *Journal of Petroleum Science and Engineering*, **2022**, 215, 110628	4.4	0
4	Letter to the editor: Recognition of Athas et al. (Langmuir, 2014). *Chemosphere*, **2019**, 233, 985	8.4	
3	The interaction between dispersed crude oil droplets and particulate matter. *Environmental Sciences: Processes and Impacts*, **2020**, 22, 1397-1407	4.3	
2	Back Cover: Highly Efficient Photocatalytic Remediation of Simulated Polycyclic Aromatic Hydrocarbons (PAHs) Contaminated Wastewater under Visible Light Irradiation by Graphene Oxide Enwrapped Ag3PO4 Composite (Chin. J. Chem. 10/2017). *Chinese Journal of Chemistry*, **2017**, 35, 1650-1650	4.9	
1	Contrasting vertical distribution between prokaryotes and fungi in different water masses on the Ninety-East Ridge, Southern Indian Ocean. *Journal of Oceanology and Limnology*,1	1.5	