Bing Wu

List of Publications by Year in Descending Order

74 papers	2,717 citations	31 h-index	50 g-index
74 ext. papers	3,237 ext. citations	8.2 avg, IF	5.73 L-index

#	Paper	IF	Citations
74	Gravity-driven membrane filtration of primary wastewater effluent for edible plant cultivations: Membrane performance and health risk assessment. *Journal of Environmental Chemical Engineering*, **2022**, 10, 107046	6.8	2
73	Design of nanofibre interlayer supported forward osmosis composite membranes and its evaluation in fouling study with cleaning. *Frontiers of Environmental Science and Engineering*, **2022**, 16, 1	5.8	0
72	Biocarriers facilitated gravity-driven membrane filtration of domestic wastewater in cold climate: Combined effect of temperature and periodic cleaning.. *Science of the Total Environment*, **2022**, 155248	10.2	0
71	Characterizing spatial distribution of fouling on flat-sheet membranes in a pilot-scale gravity-driven membrane reactor for seawater pretreatment. *Journal of Water Process Engineering*, **2021**, 44, 102436	6.7	0
70	Fouling and mitigation mechanisms during direct microfiltration and ultrafiltration of primary wastewater. *Journal of Water Process Engineering*, **2021**, 44, 102331	6.7	3
69	Membrane filtration of manganese (II) remediated-microalgae: Manganese (II) removal, extracellular organic matter, and membrane fouling. *Algal Research*, **2021**, 55, 102279	5	2
68	Gravity-Driven Membrane Reactor for Decentralized Wastewater Treatment: Effect of Reactor Configuration and Cleaning Protocol. *Membranes*, **2021**, 11,	3.8	2
67	Mitigation of emerging pollutants and pathogens in decentralized wastewater treatment processes: A review. *Science of the Total Environment*, **2021**, 779, 146545	10.2	12
66	Combined alginate-humic acid fouling mechanism and mitigation during microfiltration: Effect of alginate viscosity. *Journal of Water Process Engineering*, **2021**, 39, 101852	6.7	3
65	Thermal associated pressure-retarded osmosis processes for energy production: A review. *Science of the Total Environment*, **2021**, 757, 143731	10.2	5
64	Direct membrane filtration of municipal wastewater: Linking periodical physical cleaning with fouling mechanisms. *Separation and Purification Technology*, **2021**, 259, 118125	8.3	10
63	Enhancing performance of biocarriers facilitated gravity-driven membrane (GDM) reactor for decentralized wastewater treatment: Effect of internal recirculation and membrane packing density. *Science of the Total Environment*, **2021**, 762, 144104	10.2	9
62	Gravity-driven membrane (GDM) filtration of algae-polluted surface water. *Journal of Water Process Engineering*, **2020**, 36, 101257	6.7	15
61	Membrane fouling mitigation by fluidized granular activated carbon: Effect of fiber looseness and impact on irreversible fouling. *Separation and Purification Technology*, **2020**, 242, 116764	8.3	6
60	Phytoremediation of pharmaceutical-contaminated wastewater: Insights into rhizobacterial dynamics related to pollutant degradation mechanisms during plant life cycle. *Chemosphere*, **2020**, 253, 126681	8.4	14
59	Direct membrane filtration for wastewater treatment and resource recovery: A review. *Science of the Total Environment*, **2020**, 710, 136375	10.2	157
58	Integration of an anaerobic fluidized-bed membrane bioreactor (MBR) with zeolite adsorption and reverse osmosis (RO) for municipal wastewater reclamation: Comparison with an anoxic-aerobic MBR coupled with RO. *Chemosphere*, **2020**, 245, 125569	8.4	20

57	Engineered bacterial biofloc formation enhancing phenol removal and cell tolerance. *Applied Microbiology and Biotechnology*, **2020**, 104, 1187-1199	5.7	6
56	Anaerobic Membrane Bioreactors for Nonpotable Water Reuse and Energy Recovery. *Journal of Environmental Engineering, ASCE*, **2020**, 146, 03119002	2	20
55	Impact of salt accumulation in the bioreactor on the performance of nanofiltration membrane bioreactor (NF-MBR)+Reverse osmosis (RO) process for water reclamation. *Water Research*, **2020**, 170, 115352	12.5	9
54	The roles of particles in enhancing membrane filtration: A review. *Journal of Membrane Science*, **2020**, 595, 117570	9.6	28
53	Biocarriers facilitated gravity-driven membrane (GDM) reactor for wastewater reclamation: Effect of intermittent aeration cycle. *Science of the Total Environment*, **2019**, 694, 133719	10.2	20
52	A comparison of gravity-driven membrane (GDM) reactor and biofiltration + GDM reactor for seawater reverse osmosis desalination pretreatment. *Water Research*, **2019**, 154, 72-83	12.5	17
51	Spacer vibration for fouling control of submerged flat sheet membranes. *Separation and Purification Technology*, **2019**, 210, 719-728	8.3	23
50	Enhancing fouling mitigation of submerged flat-sheet membranes by vibrating 3D-spacers. *Separation and Purification Technology*, **2019**, 215, 70-80	8.3	22
49	Gravity-driven membrane filtration for water and wastewater treatment: A review. *Water Research*, **2019**, 149, 553-565	12.5	153
48	Recycling rainwater by submerged gravity-driven membrane (GDM) reactors: Effect of hydraulic retention time and periodic backwash. *Science of the Total Environment*, **2019**, 654, 10-18	10.2	19
47	A novel thin film composite hollow fiber osmotic membrane with one-step prepared dual-layer substrate for sludge thickening. *Journal of Membrane Science*, **2019**, 575, 98-108	9.6	11
46	Membrane-based technology in greywater reclamation: A review. *Science of the Total Environment*, **2019**, 656, 184-200	10.2	57
45	Monitoring local membrane fouling mitigation by fluidized GAC in lab-scale and pilot-scale AnFMBRs. *Separation and Purification Technology*, **2018**, 199, 331-345	8.3	9
44	High-strength N-methyl-2-pyrrolidone-containing process wastewater treatment using sequencing batch reactor and membrane bioreactor: A feasibility study. *Chemosphere*, **2018**, 194, 534-542	8.4	7
43	The feasibility of nanofiltration membrane bioreactor (NF-MBR)+reverse osmosis (RO) process for water reclamation: Comparison with ultrafiltration membrane bioreactor (UF-MBR)+RO process. *Water Research*, **2018**, 129, 180-189	12.5	70
42	Effect of mechanical scouring by granular activated carbon (GAC) on membrane fouling mitigation. *Desalination*, **2017**, 403, 80-87	10.3	42
41	Improved performance of gravity-driven membrane filtration for seawater pretreatment: Implications of membrane module configuration. *Water Research*, **2017**, 114, 59-68	12.5	45
40	Gravity-driven microfiltration pretreatment for reverse osmosis (RO) seawater desalination: Microbial community characterization and RO performance. *Desalination*, **2017**, 418, 1-8	10.3	32

39	The roles of bacteriophages in membrane-based water and wastewater treatment processes: A review. *Water Research*, **2017**, 110, 120-132	12.5	52
38	Single-stage versus two-stage anaerobic fluidized bed bioreactors in treating municipal wastewater: Performance, foulant characteristics, and microbial community. *Chemosphere*, **2017**, 171, 158-167	8.4	45
37	Effect of fluidized granular activated carbon (GAC) on critical flux in the microfiltration of particulate foulants. *Journal of Membrane Science*, **2017**, 523, 409-417	9.6	24
36	High-throughput pyrosequencing analysis of bacteria relevant to cometabolic and metabolic degradation of ibuprofen in horizontal subsurface flow constructed wetlands. *Science of the Total Environment*, **2016**, 562, 604-613	10.2	42
35	Characterizing the scouring efficiency of Granular Activated Carbon (GAC) particles in membrane fouling mitigation via wavelet decomposition of accelerometer signals. *Journal of Membrane Science*, **2016**, 498, 105-115	9.6	36
34	Correlating the hydrodynamics of fluidized granular activated carbon (GAC) with membrane-fouling mitigation. *Journal of Membrane Science*, **2016**, 510, 38-49	9.6	37
33	Optimization of gravity-driven membrane (GDM) filtration process for seawater pretreatment. *Water Research*, **2016**, 93, 133-140	12.5	53
32	Enhanced performance of submerged hollow fibre microfiltration by fluidized granular activated carbon. *Journal of Membrane Science*, **2016**, 499, 47-55	9.6	27
31	Phytoextraction, phytotransformation and rhizodegradation of ibuprofen associated with Typha angustifolia in a horizontal subsurface flow constructed wetland. *Water Research*, **2016**, 102, 294-304	12.5	44
30	Gravity-driven membrane filtration as pretreatment for seawater reverse osmosis: linking biofouling layer morphology with flux stabilization. *Water Research*, **2015**, 70, 158-73	12.5	88
29	The potential roles of granular activated carbon in anaerobic fluidized membrane bioreactors: effect on membrane fouling and membrane integrity. *Desalination and Water Treatment*, **2015**, 53, 1450-1459		29
28	Impact of membrane bioreactor operating conditions on fouling behavior of reverse osmosis membranes in MBR-RO processes. *Desalination*, **2013**, 311, 37-45	10.3	35
27	Optimization of membrane bioreactors by the addition of powdered activated carbon. *Bioresource Technology*, **2013**, 138, 38-47	11	49
26	Flux-Dependent Fouling Phenomena in Membrane Bioreactors under Different Food to Microorganisms (F/M) Ratios. *Separation Science and Technology*, **2013**, 48, 840-848	2.5	8
25	Fouling reduction in MBR-RO processes: the effect of MBR F/M ratio. *Desalination and Water Treatment*, **2013**, 51, 4829-4838		3
24	Role of initially formed cake layers on limiting membrane fouling in membrane bioreactors. *Bioresource Technology*, **2012**, 118, 589-93	11	21
23	Microbial relevant fouling in membrane bioreactors: influencing factors, characterization, and fouling control. *Membranes*, **2012**, 2, 565-84	3.8	41
22	Effect of Substrate Composition (C/N/P ratio) on Microbial Community and Membrane Fouling Tendency of Biomass in Membrane Bioreactors. *Separation Science and Technology*, **2012**, 47, 440-445	2.5	13

21	Nanoparticles facilitate gene delivery to microorganisms via an electrospray process. *Journal of Microbiological Methods*, **2011**, 84, 228-33	2.8	20
20	Cu-doped TiO(2) nanoparticles enhance survival of Shewanella oneidensis MR-1 under ultraviolet light (UV) exposure. *Science of the Total Environment*, **2011**, 409, 4635-9	10.2	29
19	Microbial community developments and biomass characteristics in membrane bioreactors under different organic loadings. *Bioresource Technology*, **2011**, 102, 6808-14	11	34
18	Evaluating factors that influence microbial synthesis yields by linear regression with numerical and ordinal variables. *Biotechnology and Bioengineering*, **2011**, 108, 893-901	4.9	24
17	Microbial behaviors involved in cake fouling in membrane bioreactors under different solids retention times. *Bioresource Technology*, **2011**, 102, 2511-6	11	57
16	Role of dopant concentration, crystal phase and particle size on microbial inactivation of Cu-doped TiO2 nanoparticles. *Nanotechnology*, **2011**, 22, 415704	3.4	12
15	Post-treatment of upflow anaerobic sludge blanket effluent by combining the membrane filtration process: fouling control by intermittent permeation and air sparging. *Water and Environment Journal*, **2010**, 24, 32-38	1.7	16
14	Alternative isoleucine synthesis pathway in cyanobacterial species. *Microbiology (United Kingdom)*, **2010**, 156, 596-602	2.9	44
13	Mixotrophic and photoheterotrophic metabolism in Cyanothece sp. ATCC 51142 under continuous light. *Microbiology (United Kingdom)*, **2010**, 156, 2566-2574	2.9	67
12	Mechanisms of Fouling Control in Membrane Bioreactors by the Addition of Powdered Activated Carbon. *Separation Science and Technology*, **2010**, 45, 873-889	2.5	29
11	Comparative eco-toxicities of nano-ZnO particles under aquatic and aerosol exposure modes. *Environmental Science & Technology*, **2010**, 44, 1484-9	10.3	134
10	Viability and metal reduction of Shewanella oneidensis MR-1 under CO2 stress: implications for ecological effects of CO2 leakage from geologic CO2 sequestration. *Environmental Science & Technology*, **2010**, 44, 9213-8	10.3	28
9	Bacterial responses to Cu-doped TiO(2) nanoparticles. *Science of the Total Environment*, **2010**, 408, 1755-8	10.2	110
8	Anti-microbial activities of aerosolized transition metal oxide nanoparticles. *Chemosphere*, **2010**, 80, 5258-64	4	98
7	Characterization of the central metabolic pathways in Thermoanaerobacter sp. strain X514 via isotopomer-assisted metabolite analysis. *Applied and Environmental Microbiology*, **2009**, 75, 5001-8	4.8	52
6	Experimental Study and Design of a Submerged Membrane Distillation Bioreactor. *Chemical Engineering and Technology*, **2009**, 32, 38-44	2	64
5	Effect of adsorption/coagulation on membrane fouling in microfiltration process post-treating anaerobic digestion effluent. *Desalination*, **2009**, 242, 183-192	10.3	49
4	A novel membrane bioreactor based on membrane distillation. *Desalination*, **2008**, 223, 386-395	10.3	116

3	The integration of methanogenesis with shortcut nitrification and denitrification in a combined UASB with MBR. *Bioresource Technology*, **2008**, 99, 3714-20	11	36
2	Membrane bioreactor with bubble-size transformer: Design and fouling control. *AICHE Journal*, **2007**, 53, 243-248	3.6	23
1	Biodegradation of p-nitrophenol by aerobic granules in a sequencing batch reactor. *Environmental Science & Technology*, **2006**, 40, 2396-401	10.3	178