

# Bing Wu

## List of Publications by Year in descending order

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74  
papers

3,853  
citations

101496

36  
h-index

128225

60  
g-index

74  
all docs

74  
docs citations

74  
times ranked

4050  
citing authors

#	ARTICLE	IF	CITATIONS
1	Gravity-driven membrane filtration of primary wastewater effluent for edible plant cultivations: Membrane performance and health risk assessment. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107046.	3.3	12
2	Design of nanofibre interlayer supported forward osmosis composite membranes and its evaluation in fouling study with cleaning. <i>Frontiers of Environmental Science and Engineering</i> , 2022, 16, 1.	3.3	3
3	Biocarriers facilitated gravity-driven membrane filtration of domestic wastewater in cold climate: Combined effect of temperature and periodic cleaning. <i>Science of the Total Environment</i> , 2022, 833, 155248.	3.9	7
4	Combined alginate-humic acid fouling mechanism and mitigation during microfiltration: Effect of alginate viscosity. <i>Journal of Water Process Engineering</i> , 2021, 39, 101852.	2.6	6
5	Thermal associated pressure-retarded osmosis processes for energy production: A review. <i>Science of the Total Environment</i> , 2021, 757, 143731.	3.9	15
6	Direct membrane filtration of municipal wastewater: Linking periodical physical cleaning with fouling mechanisms. <i>Separation and Purification Technology</i> , 2021, 259, 118125.	3.9	25
7	Enhancing performance of biocarriers facilitated gravity-driven membrane (GDM) reactor for decentralized wastewater treatment: Effect of internal recirculation and membrane packing density. <i>Science of the Total Environment</i> , 2021, 762, 144104.	3.9	26
8	Membrane filtration of manganese (II) remediated-microalgae: Manganese (II) removal, extracellular organic matter, and membrane fouling. <i>Algal Research</i> , 2021, 55, 102279.	2.4	5
9	Gravity-Driven Membrane Reactor for Decentralized Wastewater Treatment: Effect of Reactor Configuration and Cleaning Protocol. <i>Membranes</i> , 2021, 11, 388.	1.4	9
10	Mitigation of emerging pollutants and pathogens in decentralized wastewater treatment processes: A review. <i>Science of the Total Environment</i> , 2021, 779, 146545.	3.9	52
11	Fouling and mitigation mechanisms during direct microfiltration and ultrafiltration of primary wastewater. <i>Journal of Water Process Engineering</i> , 2021, 44, 102331.	2.6	13
12	Characterizing spatial distribution of fouling on flat-sheet membranes in a pilot-scale gravity-driven membrane reactor for seawater pretreatment. <i>Journal of Water Process Engineering</i> , 2021, 44, 102436.	2.6	7
13	The roles of particles in enhancing membrane filtration: A review. <i>Journal of Membrane Science</i> , 2020, 595, 117570.	4.1	55
14	Direct membrane filtration for wastewater treatment and resource recovery: A review. <i>Science of the Total Environment</i> , 2020, 710, 136375.	3.9	336
15	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. <i>Chemosphere</i> , 2020, 245, 125569.	4.2	30
16	Engineered bacterial biofloc formation enhancing phenol removal and cell tolerance. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 1187-1199.	1.7	13
17	Anaerobic Membrane Bioreactors for Nonpotable Water Reuse and Energy Recovery. <i>Journal of Environmental Engineering, ASCE</i> , 2020, 146, .	0.7	34
18	Impact of salt accumulation in the bioreactor on the performance of nanofiltration membrane bioreactor (NF-MBR)+Reverse osmosis (RO) process for water reclamation. <i>Water Research</i> , 2020, 170, 115352.	5.3	19

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19	Gravity-driven membrane (GDM) filtration of algae-polluted surface water. <i>Journal of Water Process Engineering</i> , 2020, 36, 101257.	2.6	25
20	Membrane fouling mitigation by fluidized granular activated carbon: Effect of fiber looseness and impact on irreversible fouling. <i>Separation and Purification Technology</i> , 2020, 242, 116764.	3.9	13
21	Phytoremediation of pharmaceutical-contaminated wastewater: Insights into rhizobacterial dynamics related to pollutant degradation mechanisms during plant life cycle. <i>Chemosphere</i> , 2020, 253, 126681.	4.2	32
22	Biocarriers facilitated gravity-driven membrane (GDM) reactor for wastewater reclamation: Effect of intermittent aeration cycle. <i>Science of the Total Environment</i> , 2019, 694, 133719.	3.9	34
23	A comparison of gravity-driven membrane (GDM) reactor and biofiltration+ GDM reactor for seawater reverse osmosis desalination pretreatment. <i>Water Research</i> , 2019, 154, 72-83.	5.3	31
24	Spacer vibration for fouling control of submerged flat sheet membranes. <i>Separation and Purification Technology</i> , 2019, 210, 719-728.	3.9	36
25	Enhancing fouling mitigation of submerged flat-sheet membranes by vibrating 3D-spacers. <i>Separation and Purification Technology</i> , 2019, 215, 70-80.	3.9	44
26	Gravity-driven membrane filtration for water and wastewater treatment: A review. <i>Water Research</i> , 2019, 149, 553-565.	5.3	306
27	Recycling rainwater by submerged gravity-driven membrane (GDM) reactors: Effect of hydraulic retention time and periodic backwash. <i>Science of the Total Environment</i> , 2019, 654, 10-18.	3.9	34
28	A novel thin film composite hollow fiber osmotic membrane with one-step prepared dual-layer substrate for sludge thickening. <i>Journal of Membrane Science</i> , 2019, 575, 98-108.	4.1	21
29	Membrane-based technology in greywater reclamation: A review. <i>Science of the Total Environment</i> , 2019, 656, 184-200.	3.9	91
30	Monitoring local membrane fouling mitigation by fluidized GAC in lab-scale and pilot-scale AnFMBRs. <i>Separation and Purification Technology</i> , 2018, 199, 331-345.	3.9	14
31	High-strength N-methyl-2-pyrrolidone-containing process wastewater treatment using sequencing batch reactor and membrane bioreactor: A feasibility study. <i>Chemosphere</i> , 2018, 194, 534-542.	4.2	13
32	The feasibility of nanofiltration membrane bioreactor (NF-MBR)+reverse osmosis (RO) process for water reclamation: Comparison with ultrafiltration membrane bioreactor (UF-MBR)+RO process. <i>Water Research</i> , 2018, 129, 180-189.	5.3	87
33	Effect of mechanical scouring by granular activated carbon (GAC) on membrane fouling mitigation. <i>Desalination</i> , 2017, 403, 80-87.	4.0	49
34	Improved performance of gravity-driven membrane filtration for seawater pretreatment: Implications of membrane module configuration. <i>Water Research</i> , 2017, 114, 59-68.	5.3	62
35	Gravity-driven microfiltration pretreatment for reverse osmosis (RO) seawater desalination: Microbial community characterization and RO performance. <i>Desalination</i> , 2017, 418, 1-8.	4.0	50
36	The roles of bacteriophages in membrane-based water and wastewater treatment processes: A review. <i>Water Research</i> , 2017, 110, 120-132.	5.3	73

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37	Single-stage versus two-stage anaerobic fluidized bed bioreactors in treating municipal wastewater: Performance, foulant characteristics, and microbial community. <i>Chemosphere</i> , 2017, 171, 158-167.	4.2	54
38	Effect of fluidized granular activated carbon (GAC) on critical flux in the microfiltration of particulate foulants. <i>Journal of Membrane Science</i> , 2017, 523, 409-417.	4.1	26
39	Phytoextraction, phytotransformation and rhizodegradation of ibuprofen associated with <i>Typha angustifolia</i> in a horizontal subsurface flow constructed wetland. <i>Water Research</i> , 2016, 102, 294-304.	5.3	61
40	High-throughput pyrosequencing analysis of bacteria relevant to cometabolic and metabolic degradation of ibuprofen in horizontal subsurface flow constructed wetlands. <i>Science of the Total Environment</i> , 2016, 562, 604-613.	3.9	52
41	Characterizing the scouring efficiency of Granular Activated Carbon (GAC) particles in membrane fouling mitigation via wavelet decomposition of accelerometer signals. <i>Journal of Membrane Science</i> , 2016, 498, 105-115.	4.1	43
42	Correlating the hydrodynamics of fluidized granular activated carbon (GAC) with membrane-fouling mitigation. <i>Journal of Membrane Science</i> , 2016, 510, 38-49.	4.1	45
43	Optimization of gravity-driven membrane (GDM) filtration process for seawater pretreatment. <i>Water Research</i> , 2016, 93, 133-140.	5.3	78
44	Enhanced performance of submerged hollow fibre microfiltration by fluidized granular activated carbon. <i>Journal of Membrane Science</i> , 2016, 499, 47-55.	4.1	33
45	The potential roles of granular activated carbon in anaerobic fluidized membrane bioreactors: effect on membrane fouling and membrane integrity. <i>Desalination and Water Treatment</i> , 2015, 53, 1450-1459.	1.0	37
46	Gravity-driven membrane filtration as pretreatment for seawater reverse osmosis: Linking biofouling layer morphology with flux stabilization. <i>Water Research</i> , 2015, 70, 158-173.	5.3	129
47	Impact of membrane bioreactor operating conditions on fouling behavior of reverse osmosis membranes in MBR-RO processes. <i>Desalination</i> , 2013, 311, 37-45.	4.0	39
48	Optimization of membrane bioreactors by the addition of powdered activated carbon. <i>Bioresource Technology</i> , 2013, 138, 38-47.	4.8	56
49	Flux-Dependent Fouling Phenomena in Membrane Bioreactors under Different Food to Microorganisms (F/M) Ratios. <i>Separation Science and Technology</i> , 2013, 48, 840-848.	1.3	9
50	Fouling reduction in MBR-RO processes: the effect of MBR F/M ratio. <i>Desalination and Water Treatment</i> , 2013, 51, 4829-4838.	1.0	5
51	Microbial Relevant Fouling in Membrane Bioreactors: Influencing Factors, Characterization, and Fouling Control. <i>Membranes</i> , 2012, 2, 565-584.	1.4	51
52	Effect of Substrate Composition (C/N/P ratio) on Microbial Community and Membrane Fouling Tendency of Biomass in Membrane Bioreactors. <i>Separation Science and Technology</i> , 2012, 47, 440-445.	1.3	15
53	Role of initially formed cake layers on limiting membrane fouling in membrane bioreactors. <i>Bioresource Technology</i> , 2012, 118, 589-593.	4.8	28
54	Nanoparticles facilitate gene delivery to microorganisms via an electrospray process. <i>Journal of Microbiological Methods</i> , 2011, 84, 228-233.	0.7	23

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55	Cu-doped TiO <sub>2</sub> nanoparticles enhance survival of <i>Shewanella oneidensis</i> MR-1 under Ultraviolet Light (UV) exposure. <i>Science of the Total Environment</i> , 2011, 409, 4635-4639.	3.9	40
56	Microbial community developments and biomass characteristics in membrane bioreactors under different organic loadings. <i>Bioresource Technology</i> , 2011, 102, 6808-6814.	4.8	40
57	Evaluating Factors That Influence Microbial Synthesis Yields by Linear Regression with Numerical and Ordinal Variables. <i>Biotechnology and Bioengineering</i> , 2011, 108, 893-901.	1.7	29
58	Microbial behaviors involved in cake fouling in membrane bioreactors under different solids retention times. <i>Bioresource Technology</i> , 2011, 102, 2511-2516.	4.8	64
59	Role of dopant concentration, crystal phase and particle size on microbial inactivation of Cu-doped TiO <sub>2</sub> nanoparticles. <i>Nanotechnology</i> , 2011, 22, 415704.	1.3	16
60	Post-treatment of upflow anaerobic sludge blanket effluent by combining the membrane filtration process: fouling control by intermittent permeation and air sparging. <i>Water and Environment Journal</i> , 2010, 24, 32-38.	1.0	18
61	Alternative isoleucine synthesis pathway in cyanobacterial species. <i>Microbiology (United Kingdom)</i> , 2010, 156, 596-602.	0.7	52
62	Mixotrophic and photoheterotrophic metabolism in <i>Cyanothece</i> sp. ATCC 51142 under continuous light. <i>Microbiology (United Kingdom)</i> , 2010, 156, 2566-2574.	0.7	80
63	Mechanisms of Fouling Control in Membrane Bioreactors by the Addition of Powdered Activated Carbon. <i>Separation Science and Technology</i> , 2010, 45, 873-889.	1.3	31
64	Comparative Eco-Toxicities of Nano-ZnO Particles under Aquatic and Aerosol Exposure Modes. <i>Environmental Science &amp; Technology</i> , 2010, 44, 1484-1489.	4.6	145
65	Viability and Metal Reduction of <i>Shewanella oneidensis</i> MR-1 under CO <sub>2</sub> Stress: Implications for Ecological Effects of CO <sub>2</sub> Leakage from Geologic CO <sub>2</sub> Sequestration. <i>Environmental Science &amp; Technology</i> , 2010, 44, 9213-9218.	4.6	34
66	Bacterial responses to Cu-doped TiO <sub>2</sub> nanoparticles. <i>Science of the Total Environment</i> , 2010, 408, 1755-1758.	3.9	127
67	Anti-microbial activities of aerosolized transition metal oxide nanoparticles. <i>Chemosphere</i> , 2010, 80, 525-529.	4.2	118
68	Characterization of the Central Metabolic Pathways in <i>Thermoanaerobacter</i> sp. Strain X514 via Isotopomer-Assisted Metabolite Analysis. <i>Applied and Environmental Microbiology</i> , 2009, 75, 5001-5008.	1.4	57
69	Experimental Study and Design of a Submerged Membrane Distillation Bioreactor. <i>Chemical Engineering and Technology</i> , 2009, 32, 38-44.	0.9	87
70	Effect of adsorption/coagulation on membrane fouling in microfiltration process post-treating anaerobic digestion effluent. <i>Desalination</i> , 2009, 242, 183-192.	4.0	55
71	A novel membrane bioreactor based on membrane distillation. <i>Desalination</i> , 2008, 223, 386-395.	4.0	130
72	The integration of methanogenesis with shortcut nitrification and denitrification in a combined UASB with MBR. <i>Bioresource Technology</i> , 2008, 99, 3714-3720.	4.8	40

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73	Membrane bioreactor with bubble-size transformer: Design and fouling control. <i>AIChE Journal</i> , 2007, 53, 243-248.	1.8	27
74	Biodegradation of p-Nitrophenol by Aerobic Granules in a Sequencing Batch Reactor. <i>Environmental Science &amp; Technology</i> , 2006, 40, 2396-2401.	4.6	197