Fangang Meng

List of Publications by Year in Descending Order

130 papers	7,281 citations	41 h-index	84 g-index
134 ext. papers	8,631 ext. citations	8.8 avg, IF	6.35 L-index

#	Paper	IF	Citations
130	The counteraction of anammox community to long-term nitrite stress: Crucial roles of rare subcommunity.. *Science of the Total Environment*, **2022**, 822, 153062	10.2	0
129	Carbon sources driven supernatant micro-particles differentiate in submerged anaerobic membrane bioreactors (AnMBRs). *Chemical Engineering Journal*, **2022**, 430, 133020	14.7	0
128	Comparing biotransformation of extracellular polymeric substances (EPS) under aerobic and anoxic conditions: Reactivities, components, and bacterial responses.. *Chemosphere*, **2022**, 296, 133996	8.4	1
127	Interactive Effects between the Bio-Reactivity Continuum and the Ecological Role of Soluble Microbial Products during Biotransformation. *ACS ES&T Water*, **2022**, 2, 883-894		0
126	Synergistic fouling behaviors and thermodynamic mechanisms of proteins and polysaccharides in forward osmosis: The unique role of reverse solute diffusion. *Desalination*, **2022**, 536, 115850	10.3	1
125	Achieving simultaneous nitrification, denitrification, and phosphorus removal in pilot-scale flow-through biofilm reactor with low dissolved oxygen concentrations: Performance and mechanisms. *Bioresource Technology*, **2022**, 358, 127373	11	0
124	A unified thermodynamic fouling mechanism based on forward osmosis membrane unique properties: An asymmetric structure and reverse solute diffusion. *Science of the Total Environment*, **2021**, 152219	10.2	2
123	Biochemical characteristics and membrane fouling behaviors of soluble microbial products during the lifecycle of Escherichia coli. *Water Research*, **2021**, 192, 116835	12.5	5
122	Overlooked Ecological Roles of Influent Wastewater Microflora in Improving Biological Phosphorus Removal in an Anoxic/Aerobic MBR Process. *Environmental Science & Technology*, **2021**, 55, 6270-6280	10.3	3
121	Activated sludge diffusion for efficient simultaneous treatment of municipal wastewater and odor in a membrane bioreactor. *Chemical Engineering Journal*, **2021**, 415, 128765	14.7	4
120	Roles of nitrite in mediating the composition and metacommunity of multispecies biofilms. *Journal of Water Process Engineering*, **2021**, 40, 101764	6.7	5
119	Hierarchical Janus membrane with superior fouling and wetting resistance for efficient water recovery from challenging wastewater via membrane distillation. *Journal of Membrane Science*, **2021**, 618, 118676	9.6	22
118	Greenhouse gases emissions from duckweed pond system treating polyester resin wastewater containing 1,4-dioxane and heavy metals. *Ecotoxicology and Environmental Safety*, **2021**, 207, 111253	7	9
117	Core activated sludge communities are influenced little by immigration: Case study of a membrane bioreactor plant. *Journal of Environmental Sciences*, **2021**, 102, 244-255	6.4	1
116	Linking dynamics in morphology, components, and microbial communities of biocakes to fouling evolution: A comparative study of anaerobic and aerobic membrane bioreactors. *Chemical Engineering Journal*, **2021**, 413, 127483	14.7	12
115	An antifouling catechol/chitosan-modified polyvinylidene fluoride membrane for sustainable oil-in-water emulsions separation. *Frontiers of Environmental Science and Engineering*, **2021**, 15, 1	5.8	17
114	A novel pilot-scale IFAS-MBR system with low aeration for municipal wastewater treatment: Linkages between nutrient removal and core functional microbiota. *Science of the Total Environment*, **2021**, 776, 145858	10.2	5

113	Ecological Linkages between a Biofilm Ecosystem and Reactor Performance: The Specificity of Biofilm Development Phases. *Environmental Science & Technology*, **2021**, 55, 11948-11960	10.3	5
112	Cellulose-induced shifts in microbial communities and microbial interactions in an anoxic/aerobic membrane bioreactor. *Journal of Water Process Engineering*, **2021**, 42, 102106	6.7	2
111	Liquid-like surface modification for effective anti-scaling membrane distillation with uncompromised flux. *Journal of Membrane Science*, **2021**, 637, 119673	9.6	1
110	Efficient treatment of digested piggery wastewater via an improved anoxic/aerobic process with Myriophyllum spicatum and bionic aquatic weed. *Bioresource Technology*, **2021**, 341, 125825	11	0
109	Development of a Flow-through Biofilm Reactor for Anammox Startup and Operation: Nitrogen Removal and Metacommunity. *ACS ES&T Water*, **2021**, 1, 573-583		1
108	Deciphering the genesis of anammox granular sludge floating from the perspective of microbial community. *Journal of Water Process Engineering*, **2020**, 36, 101265	6.7	10
107	Application of activated sludge for odor control in wastewater treatment plants: Approaches, advances and outlooks. *Water Research*, **2020**, 181, 115915	12.5	22
106	Deciphering the succession dynamics of dominant and rare genera in biofilm development process. *Science of the Total Environment*, **2020**, 739, 139961	10.2	3
105	Taxonomic and functional variations in the microbial community during the upgrade process of a full-scale landfill leachate treatment plant from conventional to partial nitrification-denitrification. *Frontiers of Environmental Science and Engineering*, **2020**, 14, 1	5.8	10
104	Ultrastable Nanofiltration Membranes Engineered by Polydopamine-Assisted Polyelectrolyte Layer-by-Layer Assembly for Water Reclamation. *ACS Sustainable Chemistry and Engineering*, **2020**,	8.3	3
103	Roles of Organic Matter-Induced Heterotrophic Bacteria in Nitritation Reactors: Ammonium Removal and Bacterial Interactions. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 3976-3985	8.3	7
102	Ecological insights into the underlying evolutionary patterns of biofilm formation from biological wastewater treatment systems: Red or Black Queen Hypothesis?. *Biotechnology and Bioengineering*, **2020**, 117, 1270-1280	4.9	2
101	Discrepant roles of a quorum quenching bacterium (Rhodococcus sp. BH4) in growing dual-species biofilms. *Science of the Total Environment*, **2020**, 713, 136402	10.2	11
100	Large-sized planktonic bioaggregates possess high biofilm formation potentials: Bacterial succession and assembly in the biofilm metacommunity. *Water Research*, **2020**, 170, 115307	12.5	15
99	Metagenomics reveals microbial community differences lead to differential nitrate production in anammox reactors with differing nitrogen loading rates. *Water Research*, **2020**, 169, 115279	12.5	36
98	Response of anammox metacommunity to varying hydrodynamic wash. *Journal of Water Process Engineering*, **2020**, 33, 101096	6.7	6
97	The short- and long-term effects of formic acid on rapid nitritation start-up. *Environment International*, **2020**, 135, 105350	12.9	17
96	Development of a Quartz Sand Protocol for Exoproteome Exploration from Anammox Consortia. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 14330-14339	8.3	3

95	Metabolome responses of Enterococcus faecium to acid shock and nitrite stress. *Biotechnology and Bioengineering*, **2020**, 117, 3559-3571	4.9	1
94	Seasonality and Community Separation of Fungi in a Municipal Wastewater Treatment Plant. *Applied and Environmental Microbiology*, **2020**, 86,	4.8	3
93	Micro-particlesÂ Neglected but Critical Cause of Different Membrane Fouling between Aerobic and Anaerobic Membrane Bioreactors. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 16680-16690	8.3	19
92	Regularized S-Map Reveals Varying Bacterial Interactions. *Applied and Environmental Microbiology*, **2020**, 86,	4.8	4
91	Impacts of diel temperature variations on nitrogen removal and metacommunity of anammox biofilm reactors. *Water Research*, **2019**, 160, 1-9	12.5	28
90	Size-dependent microbial diversity of sub-visible particles in a submerged anaerobic membrane bioreactor (SAnMBR): Implications for membrane fouling. *Water Research*, **2019**, 159, 20-29	12.5	40
89	Metagenomics Response of Anaerobic Ammonium Oxidation (anammox) Bacteria to Bio-Refractory Humic Substances in Wastewater. *Water (Switzerland)*, **2019**, 11, 365	3	8
88	Floc-size effects of the pathogenic bacteria in a membrane bioreactor plant. *Environment International*, **2019**, 127, 645-652	12.9	6
87	Changes in nitrogen removal and microbiota of anammox biofilm reactors under tetracycline stress at environmentally and industrially relevant concentrations. *Science of the Total Environment*, **2019**, 668, 379-388	10.2	35
86	Bacterial assembly in the bio-cake of membrane bioreactors: Stochastic vs. deterministic processes. *Water Research*, **2019**, 157, 535-545	12.5	36
85	Reactive Nitrogen Species Are Also Involved in the Transformation of Micropollutants by the UV/Monochloramine Process. *Environmental Science & Technology*, **2019**, 53, 11142-11152	10.3	57
84	Molecular traits of phenolic moieties in dissolved organic matter: Linkages with membrane fouling development. *Environment International*, **2019**, 133, 105202	12.9	9
83	Combination of self-organizing map and parallel factor analysis to characterize the evolution of fluorescent dissolved organic matter in a full-scale landfill leachate treatment plant. *Science of the Total Environment*, **2019**, 654, 1187-1195	10.2	28
82	Response of Microbial Community Structures and Functions of Nitrosifying Consortia to Biorefractory Humic Substances. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 4744-4754	8.3	15
81	Roles of ammonia-oxidizing bacteria in improving metabolism and cometabolism of trace organic chemicals in biological wastewater treatment processes: A review. *Science of the Total Environment*, **2019**, 659, 419-441	10.2	47
80	Linking Exoproteome Function and Structure to Anammox Biofilm Development. *Environmental Science & Technology*, **2019**, 53, 1490-1500	10.3	42
79	Roles of quorum sensing in biological wastewater treatment: A critical review. *Chemosphere*, **2019**, 221, 616-629	8.4	79
78	Effect of driving force on the performance of anaerobic osmotic membrane bioreactors: New insight into enhancing water flux of FO membrane via controlling driving force in a two-stage pattern. *Journal of Membrane Science*, **2019**, 569, 41-47	9.6	22

77	Removal of sulfadiazine and tetracycline in membrane bioreactors: linking pathway to microbial community shift. *Environmental Technology (United Kingdom)*, **2019**, 40, 134-143	2.6	14
76	Interactive effects between tetracycline and nitrosifying sludge microbiota in a nitritation membrane bioreactor. *Chemical Engineering Journal*, **2018**, 341, 556-564	14.7	25
75	Multi-objective optimization integrated with life cycle assessment for rainwater harvesting systems. *Journal of Hydrology*, **2018**, 558, 659-666	6	27
74	Sunlight irradiation triggers changes in the fouling potentials of natural dissolved organic matter. *Science of the Total Environment*, **2018**, 627, 227-234	10.2	5
73	Effect of support material pore size on the filtration behavior of dynamic membrane bioreactor. *Bioresource Technology*, **2018**, 255, 359-363	11	24
72	Deciphering the core fouling-causing microbiota in a membrane bioreactor: Low abundance but important roles. *Chemosphere*, **2018**, 195, 108-118	8.4	32
71	Two-Dimensional FTIR Spectroscopic Characterization of Functional Groups of NaOCl-Exposed Alginate: Insights into Membrane Refouling after Online Chemical Cleaning.. *ACS Applied Bio Materials*, **2018**, 1, 593-603	4.1	6
70	Day/night temperature differences (DNTD) trigger changes in nutrient removal and functional bacteria in membrane bioreactors. *Science of the Total Environment*, **2018**, 636, 1202-1210	10.2	7
69	Interactions between algal (AOM) and natural organic matter (NOM): Impacts on their photodegradation in surface waters. *Environmental Pollution*, **2018**, 242, 1185-1197	9.3	25
68	The mechanical scouring of bio-carriers improves phosphorus removal and mediates functional microbiomes in membrane bioreactors. *Environmental Science: Water Research and Technology*, **2018**, 4, 241-252	4.2	7
67	Increased salinity triggers significant changes in the functional proteins of ANAMMOX bacteria within a biofilm community. *Chemosphere*, **2018**, 207, 655-664	8.4	20
66	Functional Determinants of Extracellular Polymeric Substances in Membrane Biofouling: Experimental Evidence from Pure-Cultured Sludge Bacteria. *Applied and Environmental Microbiology*, **2018**, 84,	4.8	28
65	Removal of non-point source pollutants from domestic sewage and agricultural runoff by vegetated drainage ditches (VDDs): Design, mechanism, management strategies, and future directions. *Science of the Total Environment*, **2018**, 639, 742-759	10.2	70
64	Using UV□is spectral parameters to characterize the cleaning efficacy and mechanism of sodium hypochlorite (NaOCl) on fouled membranes. *Journal of Membrane Science*, **2017**, 527, 18-25	9.6	13
63	Fouling in membrane bioreactors: An updated review. *Water Research*, **2017**, 114, 151-180	12.5	566
62	Seeking urbanization security and sustainability: Multi-objective optimization of rainwater harvesting systems in China. *Journal of Hydrology*, **2017**, 550, 42-53	6	19
61	Selective elimination of chromophoric and fluorescent dissolved organic matter in a full-scale municipal wastewater treatment plant. *Journal of Environmental Sciences*, **2017**, 57, 150-161	6.4	24
60	Factors affecting the roles of reactive species in the degradation of micropollutants by the UV/chlorine process. *Water Research*, **2017**, 126, 351-360	12.5	168

59	DOM-mediated membrane retention of fluoroquinolone as revealed by fluorescence quenching properties. *Scientific Reports*, **2017**, 7, 5372	4.9	4
58	Unveiling the Susceptibility of Functional Groups of Poly(ether sulfone)/Polyvinylpyrrolidone Membranes to NaOCl: A Two-Dimensional Correlation Spectroscopic Study. *Environmental Science & Technology*, **2017**, 51, 14342-14351	10.3	27
57	New insights into the spatial variability of biofilm communities and potentially negative bacterial groups in hydraulic concrete structures. *Water Research*, **2017**, 123, 495-504	12.5	20
56	Chemically induced alterations in the characteristics of fouling-causing bio-macromolecules - Implications for the chemical cleaning of fouled membranes. *Water Research*, **2017**, 108, 115-123	12.5	53
55	Roles of reactive chlorine species in trimethoprim degradation in the UV/chlorine process: Kinetics and transformation pathways. *Water Research*, **2016**, 104, 272-282	12.5	192
54	Differential ultraviolet-visible absorbance spectra for characterizing metal ions binding onto extracellular polymeric substances in different mixed microbial cultures. *Chemosphere*, **2016**, 159, 267-274	8.4	11
53	Characteristics and fouling propensity of polysaccharides in the presence of different monovalent ions. *AICHE Journal*, **2016**, 62, 2501-2507	3.6	6
52	Aluminum-induced changes in properties and fouling propensity of DOM solutions revealed by UV-vis absorbance spectral parameters. *Water Research*, **2016**, 93, 153-162	12.5	24
51	Effects of carbon-to-sulfur (C/S) ratio and nitrate (N) dosage on Denitrifying Sulfur cycle-associated Enhanced Biological Phosphorus Removal (DS-EBPR). *Scientific Reports*, **2016**, 6, 23221	4.9	14
50	Using UV-vis absorbance spectral parameters to characterize the fouling propensity of humic substances during ultrafiltration. *Water Research*, **2015**, 87, 311-9	12.5	33
49	Effects of naturally occurring grit on the reactor performance and microbial community structure of membrane bioreactors. *Journal of Membrane Science*, **2015**, 496, 284-292	9.6	25
48	Effects of fluoroquinolone antibiotics on reactor performance and microbial community structure of a membrane bioreactor. *Chemical Engineering Journal*, **2015**, 280, 448-458	14.7	70
47	Spectroscopic characterization of extracellular polymeric substances from a mixed culture dominated by ammonia-oxidizing bacteria. *Water Research*, **2015**, 68, 740-9	12.5	211
46	Interactions between protein-like and humic-like components in dissolved organic matter revealed by fluorescence quenching. *Water Research*, **2015**, 68, 404-13	12.5	104
45	Monovalent ion-mediated fouling propensity of model proteins during low-pressure membrane filtration. *Separation and Purification Technology*, **2015**, 152, 200-206	8.3	7
44	Metaproteomic analysis of biocake proteins to understand membrane fouling in a submerged membrane bioreactor. *Environmental Science & Technology*, **2015**, 49, 1068-77	10.3	37
43	A critical review of extracellular polymeric substances (EPSs) in membrane bioreactors: Characteristics, roles in membrane fouling and control strategies. *Journal of Membrane Science*, **2014**, 460, 110-125	9.6	454
42	Improving nitrogen removal in an ANAMMOX reactor using a permeable reactive biobarrier. *Water Research*, **2014**, 58, 82-91	12.5	38

41	Reactor performance and microbial ecology of a nitritation membrane bioreactor. *Journal of Membrane Science*, **2014**, 462, 139-146	9.6	47
40	Photochemical alteration of biogenic particles in wastewater effluents. *Science Bulletin*, **2014**, 59, 3659-3668		7
39	Simultaneous alkali supplementation and fouling mitigation in membrane bioreactors by on-line NaOH backwashing. *Journal of Membrane Science*, **2014**, 457, 120-127	9.6	32
38	Optimisation and performance of NaClO-assisted maintenance cleaning for fouling control in membrane bioreactors. *Water Research*, **2014**, 53, 1-11	12.5	54
37	Sunlight-induced changes in chromophores and fluorophores of wastewater-derived organic matter in receiving waters--the role of salinity. *Water Research*, **2014**, 62, 281-92	12.5	35
36	A novel nearly plug-flow membrane bioreactor for enhanced biological nutrient removal. *AICHE Journal*, **2013**, 59, 46-54	3.6	11
35	Identifying the sources and fate of anthropogenically impacted dissolved organic matter (DOM) in urbanized rivers. *Water Research*, **2013**, 47, 5027-39	12.5	125
34	Denitrification-caused suppression of soluble microbial products (SMP) in MBRs used for biological nitrogen removal. *AICHE Journal*, **2013**, 59, 3569-3573	3.6	5
33	Effect of sludge properties on the filtration characteristics of self-forming dynamic membranes (SFDMs) in aerobic bioreactors: Formation time, filtration resistance, and fouling propensity. *Journal of Membrane Science*, **2013**, 436, 186-194	9.6	45
32	Occurrence and fate of PPCPs and correlations with water quality parameters in urban riverine waters of the Pearl River Delta, South China. *Environmental Science and Pollution Research*, **2013**, 20, 5864-75	5.1	67
31	A novel nonwoven hybrid bioreactor (NWHBR) for enhancing simultaneous nitrification and denitrification. *Biotechnology and Bioengineering*, **2013**, 110, 1903-12	4.9	18
30	Role of microorganism growth phase in the accumulation and characteristics of biomacromolecules (BMM) in a membrane bioreactor. *RSC Advances*, **2012**, 2, 453-460	3.7	13
29	Cure of Filament-Caused MBR Fouling in the Presence of Antibiotics: Taking Ciprofloxacin Exposure As an Example. *Industrial & Engineering Chemistry Research*, **2012**, 51, 13784-13791	3.9	15
28	Microbial Transformation of Structural and Functional Makeup of Human-Impacted Riverine Dissolved Organic Matter. *Industrial & Engineering Chemistry Research*, **2012**, 51, 6212-6218	3.9	12
27	Recent Advances in Membrane Bioreactors: Configuration Development, Pollutant Elimination, and Sludge Reduction. *Environmental Engineering Science*, **2012**, 29, 139-160	2	67
26	Membrane Bioreactors for Industrial Wastewater Treatment: A Critical Review. *Critical Reviews in Environmental Science and Technology*, **2012**, 42, 677-740	11.1	207
25	Microbial transformation of biomacromolecules in a membrane bioreactor: implications for membrane fouling investigation. *PLoS ONE*, **2012**, 7, e42270	3.7	19
24	Characterization of the size-fractionated biomacromolecules: tracking their role and fate in a membrane bioreactor. *Water Research*, **2011**, 45, 4661-71	12.5	85

23	Biodegradation behavior of natural organic matter (NOM) in a biological aerated filter (BAF) as a pretreatment for ultrafiltration (UF) of river water. *Applied Microbiology and Biotechnology*, **2011**, 90, 1795-803	5.7	51
22	Searching for a universal fouling indicator for membrane bioreactors. *Desalination and Water Treatment*, **2010**, 18, 264-269		19
21	High flux and antifouling filtration membrane based on non-woven fabric with chitosan coating for membrane bioreactors. *Bioresource Technology*, **2010**, 101, 5469-74	11	38
20	Morphological visualization, componential characterization and microbiological identification of membrane fouling in membrane bioreactors (MBRs). *Journal of Membrane Science*, **2010**, 361, 1-14	9.6	131
19	Fouling mitigation through flocculants and adsorbents addition in membrane bioreactors: Comparing lab and pilot studies. *Journal of Membrane Science*, **2009**, 345, 21-30	9.6	51
18	Occurrence, source, and fate of dissolved organic matter (DOM) in a pilot-scale membrane bioreactor. *Environmental Science & Technology*, **2009**, 43, 8821-6	10.3	57
17	Recent advances in membrane bioreactors (MBRs): membrane fouling and membrane material. *Water Research*, **2009**, 43, 1489-512	12.5	1370
16	Effects of COD/N ratio and DO concentration on simultaneous nitrification and denitrification in an airlift internal circulation membrane bioreactor. *Journal of Environmental Sciences*, **2008**, 20, 933-9	6.4	60
15	Application of seawater to enhance SO2 removal from simulated flue gas through hollow fiber membrane contactor. *Journal of Membrane Science*, **2008**, 312, 6-14	9.6	46
14	A comprehensive study on membrane fouling in submerged membrane bioreactors operated under different aeration intensities. *Separation and Purification Technology*, **2008**, 59, 91-100	8.3	168
13	Enhanced anammox consortium activity for nitrogen removal: impacts of static magnetic field. *Journal of Biotechnology*, **2008**, 138, 96-102	3.7	96
12	Application of anaerobic ammonium-oxidizing consortium to achieve completely autotrophic ammonium and sulfate removal. *Bioresource Technology*, **2008**, 99, 6817-25	11	91
11	Characterization of cake layer in submerged membrane bioreactor. *Environmental Science & Technology*, **2007**, 41, 4065-70	10.3	204
10	Membrane fouling behavior during filtration of sludge supernatant. *Environmental Progress*, **2007**, 26, 86-93		4
9	New insights into membrane fouling in submerged membrane bioreactor based on rheology and hydrodynamics concepts. *Journal of Membrane Science*, **2007**, 302, 87-94	9.6	64
8	Fouling mechanisms of deflocculated sludge, normal sludge, and bulking sludge in membrane bioreactor. *Journal of Membrane Science*, **2007**, 305, 48-56	9.6	93
7	Comparison of membrane fouling during short-term filtration of aerobic granular sludge and activated sludge. *Journal of Environmental Sciences*, **2007**, 19, 1281-6	6.4	63
6	Effect of hydraulic retention time on membrane fouling and biomass characteristics in submerged membrane bioreactors. *Bioprocess and Biosystems Engineering*, **2007**, 30, 359-67	3.7	120

5	Identification of activated sludge properties affecting membrane fouling in submerged membrane bioreactors. *Separation and Purification Technology*, **2006**, 51, 95-103	8.3	197
4	A new insight into membrane fouling mechanism during membrane filtration of bulking and normal sludge suspension. *Journal of Membrane Science*, **2006**, 285, 159-165	9.6	64
3	Effect of filamentous bacteria on membrane fouling in submerged membrane bioreactor. *Journal of Membrane Science*, **2006**, 272, 161-168	9.6	164
2	Application of fractal permeation model to investigate membrane fouling in membrane bioreactor. *Journal of Membrane Science*, **2005**, 262, 107-116	9.6	70
1	Cake layer morphology in microfiltration of activated sludge wastewater based on fractal analysis. *Separation and Purification Technology*, **2005**, 44, 250-257	8.3	64