

# Xinhua Wang

## List of Publications by Year in descending order

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68  
papers

2,230  
citations

293460

24  
h-index

263392

45  
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68  
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68  
docs citations

68  
times ranked

2234  
citing authors

#	ARTICLE	IF	CITATIONS
1	Preparation of electrically enhanced forward osmosis (FO) membrane by two-dimensional MXenes for organic fouling mitigation. <i>Chinese Chemical Letters</i> , 2022, 33, 3818-3822.	4.8	18
2	A Novel Hybrid Reactor of Pressure-Retarded Osmosis Coupling with Activated Sludge Process for Simultaneously Treating Concentrated Seawater Brine and Wastewater and Recovering Energy. <i>Membranes</i> , 2022, 12, 380.	1.4	0
3	Engineering pressure retarded osmosis membrane bioreactor (PRO-MBR) for simultaneous water and energy recovery from municipal wastewater. <i>Science of the Total Environment</i> , 2022, 826, 154048.	3.9	9
4	Effect of Initial Water Flux on the Performance of Anaerobic Membrane Bioreactor: Constant Flux Mode versus Varying Flux Mode. <i>Membranes</i> , 2021, 11, 203.	1.4	3
5	A novel forward osmosis reactor assisted with microfiltration for deep thickening waste activated sludge: performance and implication. <i>Water Research</i> , 2021, 195, 116998.	5.3	14
6	Effect of anaerobic sludge on the bioelectricity generation enhancement of bufferless single-chamber microbial fuel cells. <i>Bioelectrochemistry</i> , 2020, 131, 107387.	2.4	10
7	Secret underneath: Fouling of membrane support layer in anaerobic osmotic membrane bioreactor (AnOMBR). <i>Journal of Membrane Science</i> , 2020, 614, 118530.	4.1	13
8	Self-generated electric field to suppress sludge production and fouling development in a membrane bioreactor for wastewater treatment. <i>Chemosphere</i> , 2020, 261, 128046.	4.2	10
9	Performance Improvement and Biofouling Mitigation in Osmotic Microbial Fuel Cells via In Situ Formation of Silver Nanoparticles on Forward Osmosis Membrane. <i>Membranes</i> , 2020, 10, 122.	1.4	20
10	Pressure retarded osmosis coupled with activated sludge process for wastewater treatment: Performance and fouling behaviors. <i>Bioresource Technology</i> , 2020, 307, 123224.	4.8	9
11	Fate of proteins of waste activated sludge during thermal alkali pretreatment in terms of sludge protein recovery. <i>Frontiers of Environmental Science and Engineering</i> , 2019, 13, 1.	3.3	20
12	Endogenous inorganic carbon buffers accumulation and self-buffering capacity enhancement of air-cathode microbial fuel cells through anolyte recycling. <i>Science of the Total Environment</i> , 2019, 676, 11-17.	3.9	15
13	In situ extracting organic-bound calcium: A novel approach to mitigating organic fouling in forward osmosis treating wastewater via gradient diffusion thin-films. <i>Water Research</i> , 2019, 156, 102-109.	5.3	18
14	A spontaneous electric field membrane bioreactor with the innovative Cu <sub>2</sub> O nanowires conductive microfiltration membrane for membrane fouling mitigation and pollutant removal. <i>Water Environment Research</i> , 2019, 91, 780-787.	1.3	11
15	EDTA-based adsorption layer for mitigating FO membrane fouling via in situ removing calcium binding with organic foulants. <i>Journal of Membrane Science</i> , 2019, 578, 95-102.	4.1	17
16	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. <i>Journal of Membrane Science</i> , 2019, 569, 41-47.	4.1	31
17	Insight into the distribution of metallic elements in membrane bioreactor: Influence of operational temperature and role of extracellular polymeric substances. <i>Journal of Environmental Sciences</i> , 2019, 76, 111-120.	3.2	9
18	Osmotic membrane bioreactors assisted with microfiltration membrane for salinity control (MF-OMBR) operating at high sludge concentrations: Performance and implications. <i>Chemical Engineering Journal</i> , 2018, 337, 576-583.	6.6	38

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19	Enhanced bioelectricity generation of air-cathode buffer-free microbial fuel cells through short-term anolyte pH adjustment. <i>Bioelectrochemistry</i> , 2018, 120, 145-149.	2.4	16
20	Removal of cytostatic drugs from wastewater by an anaerobic osmotic membrane bioreactor. <i>Chemical Engineering Journal</i> , 2018, 339, 153-161.	6.6	62
21	Simultaneously recovering electricity and water from wastewater by osmotic microbial fuel cells: Performance and membrane fouling. <i>Frontiers of Environmental Science and Engineering</i> , 2018, 12, 1.	3.3	14
22	Effect of binder-free graphene-cetyltrimethylammonium bromide anode on the performance of microbial fuel cells. <i>Journal of Chemical Technology and Biotechnology</i> , 2017, 92, 157-162.	1.6	7
23	Development of a novel anaerobic membrane bioreactor simultaneously integrating microfiltration and forward osmosis membranes for low-strength wastewater treatment. <i>Journal of Membrane Science</i> , 2017, 527, 1-7.	4.1	84
24	Effect of stirring rates in anodic area of sediment microbial fuel cell on its power generation. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2017, 39, 23-28.	1.2	9
25	Effect of short-term alkaline intervention on the performance of buffer-free single-chamber microbial fuel cell. <i>Bioelectrochemistry</i> , 2017, 115, 41-46.	2.4	13
26	Synchronous recovery of iron and electricity using a single chamber air-cathode microbial fuel cell. <i>RSC Advances</i> , 2017, 7, 12503-12510.	1.7	11
27	Impacts of inorganic draw solutes on the performance of thin-film composite forward osmosis membrane in a microfiltration assisted anaerobic osmotic membrane bioreactor. <i>RSC Advances</i> , 2017, 7, 16057-16063.	1.7	31
28	Preparation of conductive microfiltration membrane and its performance in a coupled configuration of membrane bioreactor with microbial fuel cell. <i>RSC Advances</i> , 2017, 7, 20824-20832.	1.7	21
29	Behavior of copper in membrane-less sediment microbial fuel cell. <i>Journal of Renewable and Sustainable Energy</i> , 2017, 9, 023103.	0.8	7
30	Performance evaluation of a microfiltration-osmotic membrane bioreactor (MF-OMBR) during removing silver nanoparticles from simulated wastewater. <i>Chemical Engineering Journal</i> , 2017, 313, 171-178.	6.6	36
31	Integrating microbial fuel cells with anaerobic acidification and forward osmosis membrane for enhancing bio-electricity and water recovery from low-strength wastewater. <i>Water Research</i> , 2017, 110, 74-82.	5.3	62
32	Anolyte recycling enhanced bioelectricity generation of the buffer-free single-chamber air-cathode microbial fuel cell. <i>Bioresource Technology</i> , 2017, 244, 1183-1187.	4.8	15
33	Permeability recovery of fouled forward osmosis membranes by chemical cleaning during a long-term operation of anaerobic osmotic membrane bioreactors treating low-strength wastewater. <i>Water Research</i> , 2017, 123, 505-512.	5.3	56
34	New insight into sludge digestion mechanism for simultaneous sludge thickening and reduction using flat-sheet membrane-coupled aerobic digesters. <i>Chemical Engineering Journal</i> , 2017, 309, 41-48.	6.6	20
35	Metagenomic insights into the influence of salinity and cytostatic drugs on the composition and functional genes of microbial community in forward osmosis anaerobic membrane bioreactors. <i>Chemical Engineering Journal</i> , 2017, 326, 462-469.	6.6	46
36	Effect of Graphene-Graphene Oxide Modified Anode on the Performance of Microbial Fuel Cell. <i>Nanomaterials</i> , 2016, 6, 174.	1.9	9

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37	In-situ modified carbon cloth with polyaniline/graphene as anode to enhance performance of microbial fuel cell. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 11369-11379.	3.8	110
38	Effect of Fe(III) on the performance of sediment microbial fuel cells in treating waste-activated sludge. <i>RSC Advances</i> , 2016, 6, 47974-47980.	1.7	12
39	Effect of static magnetic field on the performances of anode biofilms in microbial fuel cells. <i>RSC Advances</i> , 2016, 6, 82301-82308.	1.7	26
40	Nanoparticle fouling and its combination with organic fouling during forward osmosis process for silver nanoparticles removal from simulated wastewater. <i>Scientific Reports</i> , 2016, 6, 25859.	1.6	8
41	A pilot-scale forward osmosis membrane system for concentrating low-strength municipal wastewater: performance and implications. <i>Scientific Reports</i> , 2016, 6, 21653.	1.6	74
42	Effect of graphite fibers on the performance of sediment microbial fuel cell. <i>Environmental Progress and Sustainable Energy</i> , 2016, 35, 876-881.	1.3	2
43	Osmotic membrane bioreactor (OMBR) technology for wastewater treatment and reclamation: Advances, challenges, and prospects for the future. <i>Journal of Membrane Science</i> , 2016, 504, 113-132.	4.1	217
44	Comparison of biofouling mechanisms between cellulose triacetate (CTA) and thin-film composite (TFC) polyamide forward osmosis membranes in osmotic membrane bioreactors. <i>Bioresource Technology</i> , 2016, 202, 50-58.	4.8	96
45	A monolithic three-dimensional macroporous graphene anode with low cost for high performance microbial fuel cells. <i>RSC Advances</i> , 2016, 6, 21001-21010.	1.7	23
46	Impacts of Calcium on the Forward Osmosis Membrane Fouling in Osmotic Membrane Bioreactors Treating Municipal Wastewater. <i>Current Environmental Engineering</i> , 2015, 2, 19-25.	0.6	1
47	In situ observation of the growth of biofouling layer in osmotic membrane bioreactors by multiple fluorescence labeling and confocal laser scanning microscopy. <i>Water Research</i> , 2015, 75, 188-200.	5.3	126
48	Electricity generation from sulfide tailings using a double-chamber microbial fuel cell. <i>RSC Advances</i> , 2015, 5, 89062-89068.	1.7	6
49	Impacts of sludge retention time on sludge characteristics and membrane fouling in a submerged osmotic membrane bioreactor. <i>Bioresource Technology</i> , 2014, 161, 340-347.	4.8	118
50	Integration of micro-filtration into osmotic membrane bioreactors to prevent salinity build-up. <i>Bioresource Technology</i> , 2014, 167, 116-123.	4.8	94
51	Novel insights into the evaluation of submerged membrane bioreactors under different aeration intensities by carbon emission. <i>Desalination</i> , 2013, 325, 25-29.	4.0	8
52	Effect of polyaniline-graphene nanosheets modified cathode on the performance of sediment microbial fuel cell. <i>Journal of Chemical Technology and Biotechnology</i> , 2013, 88, 1946-1950.	1.6	58
53	Impact of calcium-to-magnesium ratio on the performance of submerged membrane bioreactors. <i>Desalination and Water Treatment</i> , 2012, 49, 181-188.	1.0	1
54	Reactive Extraction of Short-Chain Fatty Acids from Synthetic Acidic Fermentation Broth of Organic Solid Wastes and Their Stripping. <i>Journal of Chemical &amp; Engineering Data</i> , 2012, 57, 46-51.	1.0	18

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55	Electricity generation from Taihu Lake cyanobacteria by sediment microbial fuel cells. <i>Journal of Chemical Technology and Biotechnology</i> , 2012, 87, 1567-1573.	1.6	61
56	Influences of sludge retention time on the performance of submerged membrane bioreactors with the addition of iron ion. <i>Desalination</i> , 2012, 296, 24-29.	4.0	25
57	Impacts of sludge retention time on the performance of submerged membrane bioreactor with the addition of calcium ion. <i>Separation and Purification Technology</i> , 2011, 82, 148-155.	3.9	47
58	Influence of aeration intensity on the performance of A/O-type sequencing batch MBR system treating azo dye wastewater. <i>Frontiers of Environmental Science and Engineering in China</i> , 2011, 5, 615-622.	0.8	9
59	Novel insights into destruction mechanisms in a hybrid membrane process for simultaneous sludge thickening and digestion by characterization of dissolved organic matter. <i>Chemical Engineering Journal</i> , 2011, 171, 897-903.	6.6	5
60	The application of membrane bioreactor technology to the treatment of wastewater from a multifunctional supermarket. <i>Environmental Progress and Sustainable Energy</i> , 2010, 29, 52-59.	1.3	0
61	A hybrid membrane process for simultaneous thickening and digestion of waste activated sludge. <i>Frontiers of Environmental Science and Engineering in China</i> , 2010, 4, 272-279.	0.8	4
62	Simulation and assessment of sludge concentration and rheology in the process of waste activated sludge treatment. <i>Journal of Environmental Sciences</i> , 2009, 21, 1639-1645.	3.2	13
63	Floc destruction and its impact on dewatering properties in the process of using flat-sheet membrane for simultaneous thickening and digestion of waste activated sludge. <i>Bioresource Technology</i> , 2009, 100, 1937-1942.	4.8	18
64	Identification of sustainable flux in the process of using flat-sheet membrane for simultaneous thickening and digestion of waste activated sludge. <i>Journal of Hazardous Materials</i> , 2009, 162, 1397-1403.	6.5	20
65	Membrane fouling mechanisms in the process of using flat-sheet membrane for simultaneous thickening and digestion of activated sludge. <i>Separation and Purification Technology</i> , 2008, 63, 676-683.	3.9	26
66	Research and applications of membrane bioreactors in China: Progress and prospect. <i>Separation and Purification Technology</i> , 2008, 62, 249-263.	3.9	114
67	Effects of various factors on critical flux in submerged membrane bioreactors for municipal wastewater treatment. <i>Separation and Purification Technology</i> , 2008, 62, 56-63.	3.9	69
68	Application of flat-sheet membrane to thickening and digestion of waste activated sludge (WAS). <i>Journal of Hazardous Materials</i> , 2008, 154, 535-542.	6.5	37