

Xia Huang

List of Publications by Citations

Source: <https://exaly.com/author-pdf/9132765/xia-huang-publications-by-citations.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

234
papers

8,065
citations

45
h-index

78
g-index

244
ext. papers

9,949
ext. citations

9.6
avg. IF

6.58
L-index

#	Paper	IF	Citations
234	A new method for water desalination using microbial desalination cells. <i>Environmental Science & Technology</i> , 2009 , 43, 7148-52	10.3	578
233	Highly hydrophilic polyvinylidene fluoride (PVDF) ultrafiltration membranes via postfabrication grafting of surface-tailored silica nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 6694-703	9.5	235
232	Using microbial desalination cells to reduce water salinity prior to reverse osmosis. <i>Energy and Environmental Science</i> , 2010 , 3, 1114	35.4	212
231	One-year operation of 1000-L modularized microbial fuel cell for municipal wastewater treatment. <i>Water Research</i> , 2018 , 141, 1-8	12.5	182
230	Stacked microbial desalination cells to enhance water desalination efficiency. <i>Environmental Science & Technology</i> , 2011 , 45, 2465-70	10.3	175
229	Current state and challenges of full-scale membrane bioreactor applications: A critical review. <i>Bioresour Technol</i> , 2019 , 271, 473-481	11	163
228	Enhanced activated carbon cathode performance for microbial fuel cell by blending carbon black. <i>Environmental Science & Technology</i> , 2014 , 48, 2075-81	10.3	161
227	A novel pilot-scale stacked microbial fuel cell for efficient electricity generation and wastewater treatment. <i>Water Research</i> , 2016 , 98, 396-403	12.5	153
226	Improved antifouling properties of polyamide nanofiltration membranes by reducing the density of surface carboxyl groups. <i>Environmental Science & Technology</i> , 2012 , 46, 13253-61	10.3	150
225	Combined effect of membrane and foulant hydrophobicity and surface charge on adsorptive fouling during microfiltration. <i>Journal of Membrane Science</i> , 2011 , 373, 140-151	9.6	147
224	A completely anoxic microbial fuel cell using a photo-biocathode for cathodic carbon dioxide reduction. <i>Energy and Environmental Science</i> , 2009 , 2, 498	35.4	143
223	Carbon dioxide and organic waste valorization by microbial electrosynthesis and electro-fermentation. <i>Water Research</i> , 2019 , 149, 42-55	12.5	132
222	Microbial fuel cell sensors for water quality early warning systems: Fundamentals, signal resolution, optimization and future challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2018 , 81, 292-305	16.2	119
221	The use of nylon and glass fiber filter separators with different pore sizes in air-cathode single-chamber microbial fuel cells. <i>Energy and Environmental Science</i> , 2010 , 3, 659	35.4	114
220	Binder-free graphene and manganese oxide coated carbon felt anode for high-performance microbial fuel cell. <i>Biosensors and Bioelectronics</i> , 2016 , 81, 32-38	11.8	112
219	Optimized desalination performance of high voltage flow-electrode capacitive deionization by adding carbon black in flow-electrode. <i>Desalination</i> , 2017 , 420, 63-69	10.3	98
218	Trace organic contaminants in biosolids: Impact of conventional wastewater and sludge processing technologies and emerging alternatives. <i>Journal of Hazardous Materials</i> , 2015 , 300, 1-17	12.8	93

217	Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. <i>Environmental Science & Technology</i> , 2017 , 51, 10274-10281	10.3	93
216	Enhancing the response of microbial fuel cell based toxicity sensors to Cu(II) with the applying of flow-through electrodes and controlled anode potentials. <i>Bioresource Technology</i> , 2015 , 190, 367-72	11	92
215	Organic fouling behavior of superhydrophilic polyvinylidene fluoride (PVDF) ultrafiltration membranes functionalized with surface-tailored nanoparticles: Implications for organic fouling in membrane bioreactors. <i>Journal of Membrane Science</i> , 2014 , 463, 94-101	9.6	92
214	Engineering application of membrane bioreactor for wastewater treatment in China: Current state and future prospect. <i>Frontiers of Environmental Science and Engineering</i> , 2014 , 8, 805-819	5.8	91
213	Characterization of soluble microbial products in 10 large-scale membrane bioreactors for municipal wastewater treatment in China. <i>Journal of Membrane Science</i> , 2012 , 415-416, 336-345	9.6	91
212	Recent advances in membrane bioreactor technology for wastewater treatment in China. <i>Frontiers of Environmental Science and Engineering in China</i> , 2010 , 4, 245-271		86
211	Electrical stimulation on biodegradation of phenol and responses of microbial communities in conductive carriers supported biofilms of the bioelectrochemical reactor. <i>Bioresource Technology</i> , 2016 , 201, 1-7	11	85
210	A novel microbial fuel cell sensor with biocathode sensing element. <i>Biosensors and Bioelectronics</i> , 2017 , 94, 344-350	11.8	84
209	In-situ combined dual-layer CNT/PVDF membrane for electrically-enhanced fouling resistance. <i>Journal of Membrane Science</i> , 2015 , 491, 37-44	9.6	77
208	A ten liter stacked microbial desalination cell packed with mixed ion-exchange resins for secondary effluent desalination. <i>Environmental Science & Technology</i> , 2014 , 48, 9917-24	10.3	70
207	Enhancement of methanogenesis via direct interspecies electron transfer between Geobacteraceae and Methanosaetaceae conducted by granular activated carbon. <i>Bioresource Technology</i> , 2017 , 245, 132-137	11	69
206	Sustainable water desalination and electricity generation in a separator coupled stacked microbial desalination cell with buffer free electrolyte circulation. <i>Bioresource Technology</i> , 2012 , 119, 88-93	11	68
205	Oxygen Reduction Reaction on Graphene in an Electro-Fenton System: In Situ Generation of H ₂ O ₂ for the Oxidation of Organic Compounds. <i>ChemSusChem</i> , 2016 , 9, 1194-9	8.3	67
204	Microbial electrochemical nutrient recovery in anaerobic osmotic membrane bioreactors. <i>Water Research</i> , 2017 , 114, 181-188	12.5	66
203	Enhanced desalination performance of membrane capacitive deionization cells by packing the flow chamber with granular activated carbon. <i>Water Research</i> , 2015 , 85, 371-6	12.5	65
202	Impacts of Metal-Organic Frameworks on Structure and Performance of Polyamide Thin-Film Nanocomposite Membranes. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 13724-13734	9.5	61
201	Effect of varying piperazine concentration and post-modification on prepared nanofiltration membranes in selectively rejecting organic micropollutants and salts. <i>Journal of Membrane Science</i> , 2019 , 582, 274-283	9.6	60
200	Direct concentration of municipal sewage by forward osmosis and membrane fouling behavior. <i>Bioresource Technology</i> , 2018 , 247, 730-735	11	58

199	A new perspective on the effect of complexation between calcium and alginate on fouling during nanofiltration. <i>Separation and Purification Technology</i> , 2011 , 82, 121-127	8.3	56
198	Removal and fate of polycyclic aromatic hydrocarbons in a hybrid anaerobic-anoxic-oxic process for highly toxic coke wastewater treatment. <i>Science of the Total Environment</i> , 2018 , 635, 716-724	10.2	56
197	Enhancing direct interspecies electron transfer in syntrophic-methanogenic associations with (semi)conductive iron oxides: Effects and mechanisms. <i>Science of the Total Environment</i> , 2019 , 695, 1338-1346	10.2	55
196	Long-term effect of set potential on biocathodes in microbial fuel cells: electrochemical and phylogenetic characterization. <i>Bioresource Technology</i> , 2012 , 120, 26-33	11	55
195	Improvement on the modified Lowry method against interference of divalent cations in soluble protein measurement. <i>Applied Microbiology and Biotechnology</i> , 2013 , 97, 4167-78	5.7	53
194	Reducing aeration energy consumption in a large-scale membrane bioreactor: Process simulation and engineering application. <i>Water Research</i> , 2016 , 93, 205-213	12.5	50
193	Preparation of nanofiltration membranes for high rejection of organic micropollutants and low rejection of divalent cations. <i>Journal of Membrane Science</i> , 2019 , 572, 152-160	9.6	50
192	Evaluation of applied cathode potential to enhance biocathode in microbial fuel cells. <i>Journal of Chemical Technology and Biotechnology</i> , 2009 , 84, 794-799	3.5	49
191	Excess sludge reduction induced by Tubifex tubifex in a recycled sludge reactor. <i>Journal of Biotechnology</i> , 2007 , 127, 443-51	3.7	48
190	High-performance thin film nanocomposite membranes enabled by nanomaterials with different dimensions for nanofiltration. <i>Journal of Membrane Science</i> , 2020 , 596, 117717	9.6	47
189	Self-sustaining advanced wastewater purification and simultaneous in situ nutrient recovery in a novel bioelectrochemical system. <i>Chemical Engineering Journal</i> , 2017 , 330, 692-697	14.7	44
188	Competitive migration behaviors of multiple ions and their impacts on ion-exchange resin packed microbial desalination cell. <i>Bioresource Technology</i> , 2013 , 146, 637-642	11	43
187	Excitation-emission matrix (EEM) fluorescence spectroscopy for characterization of organic matter in membrane bioreactors: Principles, methods and applications. <i>Frontiers of Environmental Science and Engineering</i> , 2020 , 14, 1	5.8	42
186	Air-cathode structure optimization in separator-coupled microbial fuel cells. <i>Biosensors and Bioelectronics</i> , 2011 , 30, 267-71	11.8	42
185	Ni-Induced C-AlO-Framework (CAF) Supported Core-Multishell Catalysts for Efficient Catalytic Ozonation: A Structure-to-Performance Study. <i>Environmental Science & Technology</i> , 2019 , 53, 6917-6926	10.3	41
184	Bioelectrochemical systems-driven directional ion transport enables low-energy water desalination, pollutant removal, and resource recovery. <i>Bioresource Technology</i> , 2016 , 215, 274-284	11	41
183	Scaling up a novel denitrifying microbial fuel cell with an oxic-anoxic two stage biocathode. <i>Frontiers of Environmental Science and Engineering</i> , 2013 , 7, 913-919	5.8	41
182	An analytical model for membrane fouling evolution associated with gel layer growth during constant pressure stirred dead-end filtration. <i>Journal of Membrane Science</i> , 2013 , 427, 139-149	9.6	41

181	Electrochemical Control of Redox Potential Arrests Methanogenesis and Regulates Products in Mixed Culture Electro-Fermentation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 8650-8658	8.3	41
180	Stimulated electron transfer inside electroactive biofilm by magnetite for increased performance microbial fuel cell. <i>Applied Energy</i> , 2018 , 216, 382-388	10.7	40
179	Hierarchically textured superhydrophobic polyvinylidene fluoride membrane fabricated via nanocasting for enhanced membrane distillation performance. <i>Desalination</i> , 2018 , 443, 228-236	10.3	40
178	A novel microbial fuel cell sensor with a gas diffusion biocathode sensing element for water and air quality monitoring. <i>Chemosphere</i> , 2018 , 203, 21-25	8.4	39
177	Hydrogen peroxide generation in microbial fuel cells using graphene-based air-cathodes. <i>Bioresource Technology</i> , 2018 , 247, 684-689	11	39
176	Binder-free nitrogen-doped graphene catalyst air-cathodes for microbial fuel cells. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 12387-12391	13	39
175	A systematic analysis of fouling evolution and irreversibility behaviors of MBR supernatant hydrophilic/hydrophobic fractions during microfiltration. <i>Journal of Membrane Science</i> , 2014 , 467, 206-216	9.6	38
174	Novel Self-driven Microbial Nutrient Recovery Cell with Simultaneous Wastewater Purification. <i>Scientific Reports</i> , 2015 , 5, 15744	4.9	38
173	The Microbial Electrochemical Current Accelerates Urea Hydrolysis for Recovery of Nutrients from Source-Separated Urine. <i>Environmental Science and Technology Letters</i> , 2017 , 4, 305-310	11	37
172	Full-scale MBR applications for leachate treatment in China: Practical, technical, and economic features. <i>Journal of Hazardous Materials</i> , 2020 , 389, 122138	12.8	37
171	High-Performance Carbon Aerogel Air Cathodes for Microbial Fuel Cells. <i>ChemSusChem</i> , 2016 , 9, 2788-2795	10.5	37
170	Diffusion layer characteristics for increasing the performance of activated carbon air cathodes in microbial fuel cells. <i>Environmental Science: Water Research and Technology</i> , 2016 , 2, 266-273	4.2	36
169	Fluorescence properties of dissolved organic matter as a function of hydrophobicity and molecular weight: case studies from two membrane bioreactors and an oxidation ditch. <i>RSC Advances</i> , 2016 , 6, 24050-24059	3.7	36
168	Decreased charge transport distance by titanium mesh-membrane assembly for flow-electrode capacitive deionization with high desalination performance. <i>Water Research</i> , 2019 , 164, 114904	12.5	36
167	Linkages between microbial functional potential and wastewater constituents in large-scale membrane bioreactors for municipal wastewater treatment. <i>Water Research</i> , 2014 , 56, 162-71	12.5	36
166	Effect of membrane pore morphology on microfiltration organic fouling: PTFE/PVDF blend membranes compared with PVDF membranes. <i>Desalination</i> , 2014 , 343, 217-225	10.3	35
165	A novel microfluidic system enables visualization and analysis of antibiotic resistance gene transfer to activated sludge bacteria in biofilm. <i>Science of the Total Environment</i> , 2018 , 642, 582-590	10.2	34
164	Factors influencing water quality indices in a typical urban river originated with reclaimed water. <i>Frontiers of Environmental Science and Engineering</i> , 2017 , 11, 1	5.8	34

163	Hydraulic optimization of membrane bioreactor via baffle modification using computational fluid dynamics. <i>Bioresource Technology</i> , 2015 , 175, 633-7	11	33
162	Anammox bacteria enrichment and denitrification in moving bed biofilm reactors packed with different buoyant carriers: Performances and mechanisms. <i>Science of the Total Environment</i> , 2020 , 719, 137277	10.2	33
161	Phosphorus removal by in situ generated Fe(II): Efficacy, kinetics and mechanism. <i>Water Research</i> , 2018 , 136, 120-130	12.5	33
160	Periodic polarity reversal for stabilizing the pH in two-chamber microbial electrolysis cells. <i>Applied Energy</i> , 2016 , 165, 670-675	10.7	32
159	Carbon Black Flow Electrode Enhanced Electrochemical Desalination Using Single-Cycle Operation. <i>Environmental Science & Technology</i> , 2020 , 54, 1177-1185	10.3	32
158	Real-Time Study of Rapid Spread of Antibiotic Resistance Plasmid in Biofilm Using Microfluidics. <i>Environmental Science & Technology</i> , 2018 , 52, 11132-11141	10.3	32
157	Optimization of membrane stack configuration in enlarged microbial desalination cells for efficient water desalination. <i>Journal of Power Sources</i> , 2016 , 324, 79-85	8.9	31
156	Self-Driven Desalination and Advanced Treatment of Wastewater in a Modularized Filtration Air Cathode Microbial Desalination Cell. <i>Environmental Science & Technology</i> , 2016 , 50, 7254-62	10.3	30
155	Multiple antibiotic resistance genes distribution in ten large-scale membrane bioreactors for municipal wastewater treatment. <i>Bioresource Technology</i> , 2016 , 222, 100-106	11	30
154	Simultaneous determination of surface energy and roughness of dense membranes by a modified contact angle method. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019 , 562, 370-376	5.1	30
153	Open external circuit for microbial fuel cell sensor to monitor the nitrate in aquatic environment. <i>Biosensors and Bioelectronics</i> , 2018 , 111, 97-101	11.8	29
152	Moderately oxidized graphene-carbon nanotubes hybrid for high performance capacitive deionization. <i>RSC Advances</i> , 2016 , 6, 58907-58915	3.7	29
151	Energy recovery from the flow-electrode capacitive deionization. <i>Journal of Power Sources</i> , 2019 , 421, 50-55	8.9	28
150	Carbon filtration cathode in microbial fuel cell to enhance wastewater treatment. <i>Bioresource Technology</i> , 2015 , 185, 426-30	11	28
149	Impact of membrane pore morphology on multi-cycle fouling and cleaning of hydrophobic and hydrophilic membranes during MBR operation. <i>Journal of Membrane Science</i> , 2018 , 556, 312-320	9.6	28
148	Enhancing Signal Output and Avoiding BOD/Toxicity Combined Shock Interference by Operating a Microbial Fuel Cell Sensor with an Optimized Background Concentration of Organic Matter. <i>International Journal of Molecular Sciences</i> , 2016 , 17,	6.3	28
147	Adaptation of nitrifying community in activated sludge to free ammonia inhibition and inactivation. <i>Science of the Total Environment</i> , 2020 , 728, 138713	10.2	27
146	Capacitive deionization for nutrient recovery from wastewater with disinfection capability. <i>Environmental Science: Water Research and Technology</i> , 2018 , 4, 33-39	4.2	27

145	Hydrodynamic optimization of membrane bioreactor by horizontal geometry modification using computational fluid dynamics. <i>Bioresource Technology</i> , 2016 , 200, 328-34	11	27
144	Characteristic Regions of the Fluorescence Excitation-Emission Matrix (EEM) To Identify Hydrophobic/Hydrophilic Contents of Organic Matter in Membrane Bioreactors. <i>Environmental Science & Technology</i> , 2018 , 52, 11251-11258	10.3	27
143	A novel electrochemical reactor for nitrogen and phosphorus recovery from domestic wastewater. <i>Frontiers of Environmental Science and Engineering</i> , 2017 , 11, 1	5.8	26
142	Membrane Fouling Control in an Anaerobic Membrane Bioreactor Coupled with Online Ultrasound Equipment for Digestion of Waste Activated Sludge. <i>Separation Science and Technology</i> , 2010 , 45, 941-947	2.5	26
141	Development and application of some renovated technologies for municipal wastewater treatment in China. <i>Frontiers of Environmental Science and Engineering in China</i> , 2007 , 1, 1-12		26
140	Exploring the interactions of organic micropollutants with polyamide nanofiltration membranes: A molecular docking study. <i>Journal of Membrane Science</i> , 2019 , 577, 285-293	9.6	25
139	Outlining the Roles of Membrane-Foulant and Foulant-Foulant Interactions in Organic Fouling During Microfiltration and Ultrafiltration: A Mini-Review. <i>Frontiers in Chemistry</i> , 2020 , 8, 417	5	25
138	Enrichment of denitrifying methanotrophic bacteria from Taihu sediments by a membrane biofilm bioreactor at ambient temperature. <i>Environmental Science and Pollution Research</i> , 2016 , 23, 5627-34	5.1	25
137	Achieving mainstream nitrogen removal via the nitrite pathway from real municipal wastewater using intermittent ultrasonic treatment. <i>Ultrasonics Sonochemistry</i> , 2019 , 51, 406-411	8.9	25
136	Enhancement of the sensitivity of a microbial fuel cell sensor by transient-state operation. <i>Environmental Science: Water Research and Technology</i> , 2017 , 3, 472-479	4.2	24
135	A novel bioaugmentation strategy to accelerate methanogenesis via adding <i>Geobacter sulfurreducens</i> PCA in anaerobic digestion system. <i>Science of the Total Environment</i> , 2018 , 642, 322-326	10.2	24
134	Removal of antibiotic resistance genes in four full-scale membrane bioreactors. <i>Science of the Total Environment</i> , 2019 , 653, 112-119	10.2	24
133	Enhancing the stability of power generation of single-chamber microbial fuel cells using an anion exchange membrane. <i>Journal of Chemical Technology and Biotechnology</i> , 2009 , 84, 1767-1772	3.5	23
132	Stokes Shift and Specific Fluorescence as Potential Indicators of Organic Matter Hydrophobicity and Molecular Weight in Membrane Bioreactors. <i>Environmental Science & Technology</i> , 2019 , 53, 8985-8993	10.3	22
131	Energy-neutral sustainable nutrient recovery incorporated with the wastewater purification process in an enlarged microbial nutrient recovery cell. <i>Journal of Power Sources</i> , 2018 , 384, 160-164	8.9	22
130	Robustness of granular activated carbon-synergized anaerobic membrane bioreactor for pilot-scale application over a wide seasonal temperature change. <i>Water Research</i> , 2021 , 189, 116552	12.5	22
129	A facile approach to fabrication of superhydrophilic ultrafiltration membranes with surface-tailored nanoparticles. <i>Separation and Purification Technology</i> , 2018 , 203, 251-259	8.3	21
128	Predictions of the Influent and Operational Conditions for Partial Nitritation with a Model Incorporating pH Dynamics. <i>Environmental Science & Technology</i> , 2018 , 52, 6457-6465	10.3	21

127	A Facile and Scalable Fabrication Procedure for Thin-Film Composite Membranes: Integration of Phase Inversion and Interfacial Polymerization. <i>Environmental Science & Technology</i> , 2020 , 54, 1946-1954	10.3	21
126	Reverse osmosis membrane autopsy in coal chemical wastewater treatment: Evidences of spatially heterogeneous fouling and organic-inorganic synergistic effect. <i>Journal of Cleaner Production</i> , 2020 , 246, 118964	10.3	21
125	Hydrogen sulfide generation and emission in urban sanitary sewer in China: what factor plays the critical role?. <i>Environmental Science: Water Research and Technology</i> , 2019 , 5, 839-848	4.2	20
124	A novel multi-stage microbial desalination cell for simultaneous desalination and enhanced organics and nitrogen removal from domestic wastewater. <i>Environmental Science: Water Research and Technology</i> , 2016 , 2, 832-837	4.2	20
123	Enhancing charge harvest from microbial fuel cells by controlling the charging and discharging frequency of capacitors. <i>Bioresource Technology</i> , 2013 , 146, 812-815	11	20
122	Toxicity change patterns and its mechanism during the degradation of nitrogen-heterocyclic compounds by O ₃ /UV. <i>Chemosphere</i> , 2007 , 69, 747-54	8.4	20
121	Remediation of simulated malodorous surface water by columnar air-cathode microbial fuel cells. <i>Science of the Total Environment</i> , 2019 , 687, 287-296	10.2	19
120	Relationship between fluorescence excitation-emission matrix properties and the relative degree of DOM hydrophobicity in wastewater treatment effluents. <i>Chemosphere</i> , 2020 , 254, 126830	8.4	19
119	Tailored design of nanofiltration membranes for water treatment based on synthesis-property-performance relationships.. <i>Chemical Society Reviews</i> , 2021 ,	58.5	19
118	Addition of conductive particles to improve the performance of activated carbon air-cathodes in microbial fuel cells. <i>Environmental Science: Water Research and Technology</i> , 2017 , 3, 806-810	4.2	18
117	Integrated ultrafiltration-capacitive-deionization (UCDI) for enhanced antifouling performance and synchronous removal of organic matter and salts. <i>Separation and Purification Technology</i> , 2019 , 226, 146-153	8.3	18
116	Significant enhancement in catalytic ozonation efficacy: From granular to super-fine powdered activated carbon. <i>Frontiers of Environmental Science and Engineering</i> , 2018 , 12, 1	5.8	18
115	Urine-powered synergy of nutrient recovery and urine purification in a microbial electrochemical system. <i>Environmental Science: Water Research and Technology</i> , 2018 , 4, 1427-1438	4.2	18
114	Effects of ultrasonic treatment on the ammonia-oxidizing bacterial (AOB) growth kinetics. <i>Science of the Total Environment</i> , 2019 , 690, 629-635	10.2	18
113	Dual-signal-biosensor based on luminescent bacteria biofilm for real-time online alert of Cu(II) shock. <i>Biosensors and Bioelectronics</i> , 2019 , 142, 111500	11.8	18
112	Anaerobic digestion performance of concentrated municipal sewage by forward osmosis membrane: Focus on the impact of salt and ammonia nitrogen. <i>Bioresource Technology</i> , 2019 , 276, 204-210	11	18
111	Superhydrophilic and oleophobic membrane functionalized with heterogeneously tailored two-dimensional layered double hydroxide nanosheets for antifouling. <i>Journal of Membrane Science</i> , 2019 , 577, 165-175	9.6	17
110	Construction of innovative 3D-weaved carbon mesh anode network to boost electron transfer and microbial activity in bioelectrochemical system. <i>Water Research</i> , 2020 , 172, 115493	12.5	17

109	A mini-microbial fuel cell for voltage testing of exoelectrogenic bacteria. <i>Frontiers of Environmental Science and Engineering in China</i> , 2009 , 3, 307-312		17
108	Effects of online chemical cleaning on removing biofouling and resilient microbes in a pilot membrane bioreactor. <i>International Biodeterioration and Biodegradation</i> , 2016 , 112, 119-127	4.8	17
107	A novel operational strategy to enhance wastewater treatment with dual-anode assembled microbial desalination cell. <i>Bioelectrochemistry</i> , 2019 , 126, 99-104	5.6	17
106	Nitrite production from urine for sulfide control in sewers. <i>Water Research</i> , 2017 , 122, 447-454	12.5	16
105	Iron-based clusters embedded in nitrogen doped activated carbon catalysts with superior cathodic activity in microbial fuel cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 10772-10778	13	15
104	Optimization of membrane unit location in a full-scale membrane bioreactor using computational fluid dynamics. <i>Bioresource Technology</i> , 2018 , 249, 402-409	11	15
103	Electrically released iron for fouling control in membrane bioreactors: A double-edged sword?. <i>Desalination</i> , 2014 , 347, 10-14	10.3	15
102	Enhanced performance of bio-cathode microbial fuel cells with the applying of transient-state operation modes. <i>Bioresource Technology</i> , 2013 , 147, 228-233	11	15
101	Membrane bioreactor vs. oxidation ditch: full-scale long-term performance related with mixed liquor seasonal characteristics. <i>Process Biochemistry</i> , 2015 , 50, 2224-2233	4.8	15
100	Relationship between sludge settleability and membrane fouling in a membrane bioreactor. <i>Frontiers of Environmental Science and Engineering in China</i> , 2007 , 1, 221-225		15
99	Roles and performance enhancement of feed spacer in spiral wound membrane modules for water treatment: A 20-year review on research evolvement. <i>Water Research</i> , 2021 , 198, 117146	12.5	15
98	Selective membranes in water and wastewater treatment: Role of advanced materials. <i>Materials Today</i> , 2021 , 50, 516-516	21.8	15
97	Improved blending strategy for membrane modification by virtue of surface segregation using surface-tailored amphiphilic nanoparticles. <i>Frontiers of Environmental Science and Engineering</i> , 2016 , 10, 1	5.8	15
96	An extended standard blocking filtration law for exploring membrane pore internal fouling due to rate-determining adsorption. <i>Separation and Purification Technology</i> , 2019 , 212, 974-979	8.3	15
95	Enhancement of salt removal in capacitive deionization cell through periodically alternated oxidation of electrodes. <i>Separation and Purification Technology</i> , 2018 , 194, 451-456	8.3	15
94	A Single-Use Paper-Shaped Microbial Fuel Cell for Rapid Aqueous Biosensing. <i>ChemSusChem</i> , 2015 , 8, 2035-40	8.3	14
93	Membrane autopsy deciphering keystone microorganisms stubborn against online NaOCl cleaning in a full-scale MBR. <i>Water Research</i> , 2020 , 171, 115390	12.5	14
92	Critical Factors Facilitating Nitrotoga To Be Prevalent Nitrite-Oxidizing Bacteria in Activated Sludge. <i>Environmental Science & Technology</i> , 2020 , 54, 15414-15423	10.3	14

91	Impacts of non-uniform filament feed spacers characteristics on the hydraulic and anti-fouling performances in the spacer-filled membrane channels: Experiment and numerical simulation. <i>Water Research</i> , 2020 , 185, 116251	12.5	14
90	Conjugative potential of antibiotic resistance plasmids to activated sludge bacteria from wastewater treatment plants. <i>International Biodeterioration and Biodegradation</i> , 2019 , 138, 33-40	4.8	14
89	An electroactive biofilm-based biosensor for water safety: Pollutants detection and early-warning. <i>Biosensors and Bioelectronics</i> , 2020 , 173, 112822	11.8	14
88	Effect of powdered activated carbon (PAC) on MBR performance and effluent trihalomethane formation: At the initial stage of PAC addition. <i>Bioresource Technology</i> , 2016 , 216, 838-44	11	13
87	Occurrence of Arsenic in Groundwater in the Suburbs of Beijing and its Removal Using an Iron-Cerium Bimetal Oxide Adsorbent. <i>Water Quality Research Journal of Canada</i> , 2006 , 41, 140-146	1.7	13
86	Preparation and adsorption mechanism of rare earth-doped adsorbent for arsenic(V) removal from groundwater. <i>Science in China Series B: Chemistry</i> , 2003 , 46, 252-258		13
85	High-rate nitrogen removal from carbon limited wastewater using sulfur-based constructed wetland: Impact of sulfur sources. <i>Science of the Total Environment</i> , 2020 , 744, 140969	10.2	13
84	Fluorescence quotient of excitation-emission matrices as a potential indicator of organic matter behavior in membrane bioreactors. <i>Environmental Science: Water Research and Technology</i> , 2018 , 4, 281-290	4.2	13
83	Effect of blending landfill leachate with activated sludge on the domestic wastewater treatment process. <i>Environmental Science: Water Research and Technology</i> , 2019 , 5, 268-276	4.2	12
82	Evaluating the performance of inorganic draw solution concentrations in an anaerobic forward osmosis membrane bioreactor for real municipal sewage treatment. <i>Bioresource Technology</i> , 2020 , 307, 123254	11	12
81	Quantifying the dynamic evolution of organic, inorganic and biological synergistic fouling during nanofiltration using statistical approaches. <i>Environment International</i> , 2019 , 133, 105201	12.9	12
80	Control sulfide and methane production in sewers based on free ammonia inactivation. <i>Environment International</i> , 2020 , 143, 105928	12.9	12
79	Facile and low-cost ceramic fiber-based carbon-carbon composite for solar evaporation. <i>Science of the Total Environment</i> , 2021 , 759, 143546	10.2	12
78	Correlating fluorescence spectral properties with DOM molecular weight and size distribution in wastewater treatment systems. <i>Environmental Science: Water Research and Technology</i> , 2018 , 4, 1933-1943	4.3	12
77	Cross-stacked super-aligned carbon nanotube/activated carbon composite electrodes for efficient water purification via capacitive deionization enhanced ultrafiltration. <i>Frontiers of Environmental Science and Engineering</i> , 2020 , 14, 1	5.8	11
76	A hybrid fluidized-bed reactor (HFBR) based on arrayed ceramic membranes (ACMs) coupled with powdered activated carbon (PAC) for efficient catalytic ozonation: A comprehensive study on a pilot scale. <i>Water Research</i> , 2020 , 173, 115536	12.5	11
75	Surface charge regulation of reverse osmosis membrane for anti-silica and organic fouling. <i>Science of the Total Environment</i> , 2020 , 715, 137013	10.2	11
74	One-step ball milling-prepared nano Fe ₂ O ₃ and nitrogen-doped graphene with high oxygen reduction activity and its application in microbial fuel cells. <i>Frontiers of Environmental Science and Engineering</i> , 2020 , 14, 1	5.8	11

73	Free nitrous acid-based suppression of sulfide production in sewer sediments: In-situ effect mechanism. <i>Science of the Total Environment</i> , 2020 , 715, 136871	10.2	11
72	pH Adjusting to Reduce Fouling Propensity of Activated Sludge Mixed Liquor in Membrane Bioreactors. <i>Separation Science and Technology</i> , 2010 , 45, 890-895	2.5	11
71	Membrane fouling control by ultrasound in an anaerobic membrane bioreactor. <i>Frontiers of Environmental Science and Engineering in China</i> , 2007 , 1, 362-367		11
70	Evaluating oxygen mass transfer parameters for large-scale engineering application of membrane bioreactors. <i>Process Biochemistry</i> , 2017 , 60, 13-18	4.8	10
69	Enzymatic Cleaning Mitigates Polysaccharide-Induced Refouling of RO Membrane: Evidence from Foulant Layer Structure and Microbial Dynamics. <i>Environmental Science & Technology</i> , 2021 , 55, 5453-5462	10.3	10
68	Effects of graphite nanoparticles on nitrification in an activated sludge system. <i>Chemosphere</i> , 2017 , 182, 231-237	8.4	9
67	Effect of nanofiltration membrane surface fouling on organic micro-pollutants rejection: The roles of aqueous transport and solid transport. <i>Desalination</i> , 2015 , 367, 103-111	10.3	9
66	Cost-benefit analysis and technical efficiency evaluation of full-scale membrane bioreactors for wastewater treatment using economic approaches. <i>Journal of Cleaner Production</i> , 2021 , 301, 126984	10.3	9
65	A Feasible Data-Driven Mining System to Optimize Wastewater Treatment Process Design and Operation. <i>Water (Switzerland)</i> , 2018 , 10, 1342	3	9
64	Biofilm morphology design for high sensitivity of bioelectrochemical sensor: An experimental and modeling study. <i>Science of the Total Environment</i> , 2020 , 729, 138908	10.2	8
63	Enhancing extracellular electron transfer efficiency and bioelectricity production by vapor polymerization Poly (3,4-ethylenedioxythiophene)/MnO hybrid anode. <i>Bioelectrochemistry</i> , 2019 , 126, 72-78	5.6	8
62	DL-cysteine and L-cystine formation and their enhancement effects during sulfur autotrophic denitrification. <i>Science of the Total Environment</i> , 2019 , 695, 133823	10.2	8
61	Determination of Surface Energy Parameters of Hydrophilic Porous Membranes via a Corrected Contact Angle Approach. <i>Langmuir</i> , 2019 , 35, 15009-15016	4	8
60	Fouling control of a pilot scale self-forming dynamic membrane bioreactor for municipal wastewater treatment. <i>Desalination and Water Treatment</i> , 2010 , 18, 302-308		8
59	High-Power Microbial Fuel Cells Based on a Carbon-Carbon Composite Air Cathode. <i>Small</i> , 2020 , 16, e1905240	10.5	8
58	Organic carbon coupling with sulfur reducer boosts sulfur based denitrification by Thiobacillus denitrificans. <i>Science of the Total Environment</i> , 2020 , 748, 142445	10.2	8
57	A Simple Method to Identify the Dominant Fouling Mechanisms during Membrane Filtration Based on Piecewise Multiple Linear Regression. <i>Membranes</i> , 2020 , 10,	3.8	8
56	Artificial electrochemically active biofilm for improved sensing performance and quickly devising of water quality early warning biosensors. <i>Water Research</i> , 2021 , 198, 117164	12.5	8

55	Probing the key foulants and membrane fouling under increasing salinity in anaerobic osmotic membrane bioreactors for low-strength wastewater treatment. <i>Chemical Engineering Journal</i> , 2021 , 413, 127450	14.7	8
54	Estimating rainfall-induced inflow and infiltration in a sanitary sewer system based on water quality modelling: which parameter to use?. <i>Environmental Science: Water Research and Technology</i> , 2018 , 4, 385-393	4.2	7
53	Phenol Degradation by Suspended Biomass in Aerobic/Anaerobic Electrochemical Reactor. <i>Water, Air, and Soil Pollution</i> , 2016 , 227, 1	2.6	7
52	A pilot study on a submerged membrane bioreactor for domestic wastewater treatment. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2000 , 35, 1761-1772	2.3	7
51	Surface Grafting of Reverse Osmosis Membrane with Chlorhexidine Using Biopolymer Alginate Dialdehyde as a Facile Green Platform for In Situ Biofouling Control. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 37515-37526	9.5	7
50	Hierarchically textured superhydrophilic polyvinylidene fluoride membrane via nanocasting and post-fabrication grafting of surface-tailored silica nanoparticles. <i>Environmental Science: Nano</i> , 2019 , 6, 3579-3589	7.1	7
49	Grafting d-amino acid onto MF polyamide nylon membrane for biofouling control using biopolymer alginate dialdehyde as a versatile platform. <i>Separation and Purification Technology</i> , 2020 , 231, 115891	8.3	7
48	Temperature Variations Shape Niche Occupation of Nitrotoga-like Bacteria in Activated Sludge. <i>ACS ES&T Water</i> , 2021 , 1, 167-174		7
47	Enhancement of nitrite reduction and enrichment of <i>Methylomonas</i> via conductive materials in a nitrite-dependent anaerobic methane oxidation system. <i>Environmental Research</i> , 2021 , 193, 110565	7.9	7
46	Large-Scale Membrane Bioreactors for Industrial Wastewater Treatment in China: Technical and Economic Features, Driving Forces, and Perspectives. <i>Engineering</i> , 2021 , 7, 868-880	9.7	7
45	Membrane Fouling in the Reclamation of Secondary Effluent with an Ozone-Membrane Hybrid System. <i>Separation Science and Technology</i> , 2009 , 44, 121-130	2.5	6
44	Enhanced atrazine removal using membrane bioreactor bioaugmented with genetically engineered microorganism. <i>Frontiers of Environmental Science and Engineering in China</i> , 2008 , 2, 452-460		6
43	A freestanding carbon submicro fiber sponge as high-efficient bioelectrochemical anode for wastewater energy recovery and treatment. <i>Applied Energy</i> , 2021 , 281, 115913	10.7	6
42	Impact of electrical stimulation modes on the degradation of refractory phenolics and the analysis of microbial communities in an anaerobic-aerobic-coupled upflow bioelectrochemical reactor. <i>Bioresource Technology</i> , 2021 , 320, 124371	11	6
41	P-C Bond Cleavage Induced Ni(II) Complexes Bearing Rare-Earth-Metal-Based Metalloligand and Reactivities toward Isonitrile, Nitrile, and Epoxide. <i>Inorganic Chemistry</i> , 2021 , 60, 3249-3258	5.1	6
40	Electricity Enhances Biological Fe(III) Reduction and Phosphorus Recovery from FeP Complex: Proof of Concept and Kinetic Analysis. <i>ACS ES&T Engineering</i> , 2021 , 1, 523-532		6
39	Techno-economic characteristics of wastewater treatment plants retrofitted from the conventional activated sludge process to the membrane bioreactor process. <i>Frontiers of Environmental Science and Engineering</i> , 2022 , 16, 1	5.8	6
38	Short-chain fatty acid (SCFA) production maximization by modeling thermophilic sludge fermentation. <i>Environmental Science: Water Research and Technology</i> , 2019 , 5, 11-18	4.2	5

37	Roles of membrane and organic fouling layers on the removal of endocrine disrupting chemicals in microfiltration. <i>Journal of Environmental Sciences</i> , 2018 , 72, 176-184	6.4	5
36	Photodegradation of soluble microbial products (SMPs) from membrane bioreactor by GO-COOH/TiO/Ag. <i>Journal of Environmental Sciences</i> , 2020 , 88, 292-300	6.4	5
35	Enhancement of nitrite-dependent anaerobic methane oxidation via <i>Geobacter sulfurreducens</i> . <i>Science of the Total Environment</i> , 2021 , 766, 144230	10.2	5
34	Utilization of Elemental Sulfur in Constructed Wetlands Amended with Granular Activated Carbon for High-Rate Nitrogen Removal. <i>Water Research</i> , 2021 , 195, 116996	12.5	5
33	Distribution of antibiotic resistance genes and their association with bacteria and viruses in decentralized sewage treatment facilities. <i>Frontiers of Environmental Science and Engineering</i> , 2022 , 16, 35	5.8	5
32	Trickling filter in a biocathode microbial fuel cell for efficient wastewater treatment and energy production. <i>Science China Technological Sciences</i> , 2019 , 62, 1703-1709	3.5	5
31	Study of free nitrous acid (FNA)-based elimination of sulfamethoxazole: Kinetics, transformation pathways, and toxicity assessment. <i>Water Research</i> , 2021 , 189, 116629	12.5	5
30	Modulating the conformation of the TIR domain by a neoteric MyD88 inhibitor leads to the separation of GVHD from GVT. <i>Leukemia and Lymphoma</i> , 2019 , 60, 1528-1539	1.9	4
29	Superhydrophilic polyvinylidene fluoride membrane with hierarchical surface structures fabricated via nanoimprint and nanoparticle grafting. <i>Journal of Membrane Science</i> , 2020 , 612, 118332	9.6	4
28	The impact of ultrasonic treatment on activity of ammonia-oxidizing bacteria and nitrite-oxidizing bacteria in activated sludge. <i>Frontiers of Environmental Science and Engineering</i> , 2019 , 13, 1	5.8	4
27	Persistence of SARS-CoV-2 RNA in wastewater after the end of the COVID-19 epidemics.. <i>Journal of Hazardous Materials</i> , 2022 , 429, 128358	12.8	4
26	Challenges, solutions and prospects of mainstream anammox-based process for municipal wastewater treatment.. <i>Science of the Total Environment</i> , 2022 , 820, 153351	10.2	4
25	Bifunctional Fe for Induced Graphitization and Catalytic Ozonation Based on a Fe/N-Doped Carbon-ALO Framework: Theoretical Calculations Guided Catalyst Design and Optimization. <i>Environmental Science & Technology</i> , 2021 ,	10.3	4
24	Rapid dynamic quantification of sulfide generation flux in spatially heterogeneous sediments of gravity sewers. <i>Water Research</i> , 2021 , 203, 117494	12.5	4
23	In vivo gum arabic-coated tetrahydrobiopterin protects against myocardial ischemia reperfusion injury by preserving eNOS coupling. <i>Life Sciences</i> , 2019 , 219, 294-302	6.8	3
22	Emerging Trends and Prospects for Municipal Wastewater Management in China. <i>ACS ES&T Engineering</i> ,		3
21	In Situ Exploration of the Sulfidogenic Process at the Water-Sediment Interface in Sewers: Mechanism and Implications. <i>ACS ES&T Engineering</i> , 2021 , 1, 415-423		3
20	Quantitative relationships for the impact of gas sparging conditions on membrane fouling in anaerobic membrane bioreactor. <i>Journal of Cleaner Production</i> , 2020 , 276, 123139	10.3	3

19	Electrically Tuning Ultrafiltration Behavior for Efficient Water Purification. <i>Environmental Science & Technology</i> , 2020 , 54, 11536-11545	10.3	3
18	Additional polypyrrole as conductive medium in artificial electrochemically active biofilm (EAB) to increase the sensitivity of EAB based biosensor in water quality early-warning. <i>Biosensors and Bioelectronics</i> , 2021 , 190, 113453	11.8	3
17	Simultaneous nitrification and aerobic denitrification by a novel isolated <i>Ochrobactrum anthropi</i> HND19. <i>Bioresource Technology</i> , 2021 , 340, 125582	11	3
16	Spectroscopic sensing of membrane fouling potential in a long-term running anaerobic membrane bioreactor. <i>Chemical Engineering Journal</i> , 2021 , 426, 130799	14.7	3
15	Ferrous ion regulated extracellular electron transfer: towards self-suppressed microbial iron(III) oxide reduction. <i>Chemical Communications</i> , 2016 , 52, 3324-7	5.8	2
14	Simultaneous control of sulfide and methane in sewers achieved by a physical approach targeting dominant active zone in sediments.. <i>Water Research</i> , 2021 , 211, 118010	12.5	2
13	Interaction between humic acid and silica in reverse osmosis membrane fouling process: A spectroscopic and molecular dynamics insight. <i>Water Research</i> , 2021 , 206, 117773	12.5	2
12	Water-level based discrete integrated dynamic control to regulate the flow for sewer-WWTP operation. <i>Frontiers of Environmental Science and Engineering</i> , 2020 , 14, 1	5.8	1
11	Deciphering mono/multivalent draw solute-induced microbial ecology and membrane fouling in anaerobic osmotic membrane bioreactor. <i>Water Research</i> , 2021 , 209, 117869	12.5	1
10	Onset Investigation on Dynamic Change of Biohythane Generation and Microbial Structure in Dual-chamber versus Single-chamber Microbial Electrolysis Cells. <i>Water Research</i> , 2021 , 201, 117326	12.5	1
9	Incorporating catalytic ceramic membrane into the integrated process of in situ ozonation, membrane filtration and biological degradation: Enhanced performance and underlying mechanisms. <i>Journal of Membrane Science</i> , 2022 , 652, 120509	9.6	1
8	Recovery of ammonium nitrate solution from urine wastewater via novel free nitrous acid (FNA)-mediated two-stage processes. <i>Chemical Engineering Journal</i> , 2022 , 440, 135826	14.7	1
7	Two strategies of stubborn biofouling strains surviving from NaClO membrane cleaning: EPS shielding and/or quorum sensing. <i>Science of the Total Environment</i> , 2022 , 838, 156421	10.2	1
6	Deciphering the spatial fouling characteristics of reverse osmosis membranes for coal chemical wastewater treatment. <i>Separation and Purification Technology</i> , 2022 , 286, 120456	8.3	0
5	Analysis of the mixing performance of a full-scale membrane bioreactor for municipal wastewater treatment. <i>Bioresource Technology</i> , 2018 , 250, 932-935	11	0
4	Fluorescence excitation-emission matrix as a novel indicator of assimilable organic carbon in wastewater: Implication from a coal chemical wastewater study. <i>Science of the Total Environment</i> , 2022 , 804, 150144	10.2	0
3	Insights into the effect of iron-carbon particle amendment on food waste composting: physicochemical properties and the microbial community.. <i>Bioresource Technology</i> , 2022 , 126939	11	0
2	High-Performance Carbon Aerogel Air Cathodes for Microbial Fuel Cells. <i>ChemSusChem</i> , 2016 , 9, 2718-2731	11.8	0

- 1 Membrane-based electrochemical technologies: II. Microbial desalination cell **2022**, 361-401