Xia Huang

List of Publications by Year in descending order

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240 papers 12,007 citations

24978 57 h-index 94 g-index

244 all docs

244 docs citations

244 times ranked 8488 citing authors

#	Article	IF	Citations
1	A New Method for Water Desalination Using Microbial Desalination Cells. Environmental Science & Environmental	4.6	678
2	Highly Hydrophilic Polyvinylidene Fluoride (PVDF) Ultrafiltration Membranes via Postfabrication Grafting of Surface-Tailored Silica Nanoparticles. ACS Applied Materials & Samp; Interfaces, 2013, 5, 6694-6703.	4.0	279
3	Current state and challenges of full-scale membrane bioreactor applications: A critical review. Bioresource Technology, 2019, 271, 473-481.	4.8	266
4	Using microbial desalination cells to reduce water salinity prior to reverse osmosis. Energy and Environmental Science, 2010, 3, 1114.	15.6	262
5	One-year operation of 1000-L modularized microbial fuel cell for municipal wastewater treatment. Water Research, 2018, 141, 1-8.	5.3	261
6	Stacked Microbial Desalination Cells to Enhance Water Desalination Efficiency. Environmental Science &	4.6	205
7	A novel pilot-scale stacked microbial fuel cell for efficient electricity generation and wastewater treatment. Water Research, 2016, 98, 396-403.	5.3	197
8	Carbon dioxide and organic waste valorization by microbial electrosynthesis and electro-fermentation. Water Research, 2019, 149, 42-55.	5. 3	191
9	Enhanced Activated Carbon Cathode Performance for Microbial Fuel Cell by Blending Carbon Black. Environmental Science & Technology, 2014, 48, 2075-2081.	4.6	185
10	Tailored design of nanofiltration membranes for water treatment based on synthesis–property–performance relationships. Chemical Society Reviews, 2022, 51, 672-719.	18.7	182
11	Improved Antifouling Properties of Polyamide Nanofiltration Membranes by Reducing the Density of Surface Carboxyl Groups. Environmental Science & Envi	4.6	178
12	Combined effect of membrane and foulant hydrophobicity and surface charge on adsorptive fouling during microfiltration. Journal of Membrane Science, 2011, 373, 140-151.	4.1	175
13	Microbial fuel cell sensors for water quality early warning systems: Fundamentals, signal resolution, optimization and future challenges. Renewable and Sustainable Energy Reviews, 2018, 81, 292-305.	8.2	175
14	Optimized desalination performance of high voltage flow-electrode capacitive deionization by adding carbon black in flow-electrode. Desalination, 2017, 420, 63-69.	4.0	162
15	A completely anoxic microbial fuel cell using a photo-biocathode for cathodic carbon dioxide reduction. Energy and Environmental Science, 2009, 2, 498.	15.6	155
16	Binder-free graphene and manganese oxide coated carbon felt anode for high-performance microbial fuel cell. Biosensors and Bioelectronics, 2016, 81, 32-38.	5. 3	148
17	The use of nylon and glass fiber filter separators with different pore sizes in air-cathode single-chamber microbial fuel cells. Energy and Environmental Science, 2010, 3, 659.	15.6	134
18	Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. Environmental Science & Eamp; Technology, 2017, 51, 10274-10281.	4.6	129

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19	Trace organic contaminants in biosolids: Impact of conventional wastewater and sludge processing technologies and emerging alternatives. Journal of Hazardous Materials, 2015, 300, 1-17.	6.5	119
20	Organic fouling behavior of superhydrophilic polyvinylidene fluoride (PVDF) ultrafiltration membranes functionalized with surface-tailored nanoparticles: Implications for organic fouling in membrane bioreactors. Journal of Membrane Science, 2014, 463, 94-101.	4.1	110
21	Engineering application of membrane bioreactor for wastewater treatment in China: Current state and future prospect. Frontiers of Environmental Science and Engineering, 2014, 8, 805-819.	3.3	108
22	Electrical stimulation on biodegradation of phenol and responses of microbial communities in conductive carriers supported biofilms of the bioelectrochemical reactor. Bioresource Technology, 2016, 201, 1-7.	4.8	108
23	A novel microbial fuel cell sensor with biocathode sensing element. Biosensors and Bioelectronics, 2017, 94, 344-350.	5.3	107
24	Selective membranes in water and wastewater treatment: Role of advanced materials. Materials Today, 2021, 50, 516-532.	8.3	106
25	Characterization of soluble microbial products in 10 large-scale membrane bioreactors for municipal wastewater treatment in China. Journal of Membrane Science, 2012, 415-416, 336-345.	4.1	105
26	Enhancing the response of microbial fuel cell based toxicity sensors to Cu(II) with the applying of flow-through electrodes and controlled anode potentials. Bioresource Technology, 2015, 190, 367-372.	4.8	105
27	Effect of varying piperazine concentration and post-modification on prepared nanofiltration membranes in selectively rejecting organic micropollutants and salts. Journal of Membrane Science, 2019, 582, 274-283.	4.1	105
28	Impacts of Metal–Organic Frameworks on Structure and Performance of Polyamide Thin-Film Nanocomposite Membranes. ACS Applied Materials & Interfaces, 2019, 11, 13724-13734.	4.0	100
29	Excitation-emission matrix (EEM) fluorescence spectroscopy for characterization of organic matter in membrane bioreactors: Principles, methods and applications. Frontiers of Environmental Science and Engineering, 2020, 14, 1.	3.3	100
30	In-situ combined dual-layer CNT/PVDF membrane for electrically-enhanced fouling resistance. Journal of Membrane Science, 2015, 491, 37-44.	4.1	97
31	Recent advances in membrane bioreactor technology for wastewater treatment in China. Frontiers of Environmental Science and Engineering in China, 2010, 4, 245-271.	0.8	96
32	Ni-Induced C-Al ₂ O ₃ -Framework (_{Ni} CAF) Supported Core–Multishell Catalysts for Efficient Catalytic Ozonation: A Structure-to-Performance Study. Environmental Science & Technology, 2019, 53, 6917-6926.	4.6	96
33	Oxygen Reduction Reaction on Graphene in an Electroâ€Fenton System: Inâ€Situ Generation of H ₂ O ₂ for the Oxidation of Organic Compounds. ChemSusChem, 2016, 9, 1194-1199.	3.6	93
34	Enhancement of methanogenesis via direct interspecies electron transfer between Geobacteraceae and Methanosaetaceae conducted by granular activated carbon. Bioresource Technology, 2017, 245, 132-137.	4.8	88
35	Preparation of nanofiltration membranes for high rejection of organic micropollutants and low rejection of divalent cations. Journal of Membrane Science, 2019, 572, 152-160.	4.1	88
36	A Ten Liter Stacked Microbial Desalination Cell Packed With Mixed Ion-Exchange Resins for Secondary Effluent Desalination. Environmental Science & Effluent Desalination. Environmental Science & Envi	4.6	87

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37	Enhancing direct interspecies electron transfer in syntrophic-methanogenic associations with (semi)conductive iron oxides: Effects and mechanisms. Science of the Total Environment, 2019, 695, 133876.	3.9	87
38	High-performance thin film nanocomposite membranes enabled by nanomaterials with different dimensions for nanofiltration. Journal of Membrane Science, 2020, 596, 117717.	4.1	86
39	Enhanced desalination performance of membrane capacitive deionization cells by packing the flow chamber with granular activated carbon. Water Research, 2015, 85, 371-376.	5.3	83
40	Microbial electrochemical nutrient recovery in anaerobic osmotic membrane bioreactors. Water Research, 2017, 114, 181-188.	5.3	81
41	Reducing aeration energy consumption in a large-scale membrane bioreactor: Process simulation and engineering application. Water Research, 2016, 93, 205-213.	5.3	77
42	Direct concentration of municipal sewage by forward osmosis and membrane fouling behavior. Bioresource Technology, 2018, 247, 730-735.	4.8	77
43	Sustainable water desalination and electricity generation in a separator coupled stacked microbial desalination cell with buffer free electrolyte circulation. Bioresource Technology, 2012, 119, 88-93.	4.8	74
44	Improvement on the modified Lowry method against interference of divalent cations in soluble protein measurement. Applied Microbiology and Biotechnology, 2013, 97, 4167-4178.	1.7	73
45	Removal and fate of polycyclic aromatic hydrocarbons in a hybrid anaerobic–anoxic–oxic process for highly toxic coke wastewater treatment. Science of the Total Environment, 2018, 635, 716-724.	3.9	72
46	Carbon Black Flow Electrode Enhanced Electrochemical Desalination Using Single-Cycle Operation. Environmental Science & Enviro	4.6	71
47	Factors influencing water quality indices in a typical urban river originated with reclaimed water. Frontiers of Environmental Science and Engineering, 2017, 11 , 1 .	3.3	69
48	A new perspective on the effect of complexation between calcium and alginate on fouling during nanofiltration. Separation and Purification Technology, 2011, 82, 121-127.	3.9	67
49	Stimulated electron transfer inside electroactive biofilm by magnetite for increased performance microbial fuel cell. Applied Energy, 2018, 216, 382-388.	5.1	65
50	Hierarchically textured superhydrophobic polyvinylidene fluoride membrane fabricated via nanocasting for enhanced membrane distillation performance. Desalination, 2018, 443, 228-236.	4.0	65
51	Phosphorus removal by in situ generated Fe(II): Efficacy, kinetics and mechanism. Water Research, 2018, 136, 120-130.	5.3	64
52	Characteristic Regions of the Fluorescence Excitation–Emission Matrix (EEM) To Identify Hydrophobic/Hydrophilic Contents of Organic Matter in Membrane Bioreactors. Environmental Science & Environ	4.6	64
53	Emerging Trends and Prospects for Municipal Wastewater Management in China. ACS ES&T Engineering, 2022, 2, 323-336.	3.7	63
54	Full-scale MBR applications for leachate treatment in China: Practical, technical, and economic features. Journal of Hazardous Materials, 2020, 389, 122138.	6.5	60

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55	Robustness of granular activated carbon-synergized anaerobic membrane bioreactor for pilot-scale application over a wide seasonal temperature change. Water Research, 2021, 189, 116552.	5.3	60
56	Real-Time Study of Rapid Spread of Antibiotic Resistance Plasmid in Biofilm Using Microfluidics. Environmental Science & Envir	4.6	59
57	Challenges, solutions and prospects of mainstream anammox-based process for municipal wastewater treatment. Science of the Total Environment, 2022, 820, 153351.	3.9	59
58	Long-term effect of set potential on biocathodes in microbial fuel cells: Electrochemical and phylogenetic characterization. Bioresource Technology, 2012, 120, 26-33.	4.8	58
59	Decreased charge transport distance by titanium mesh-membrane assembly for flow-electrode capacitive deionization with high desalination performance. Water Research, 2019, 164, 114904.	5.3	58
60	Adaptation of nitrifying community in activated sludge to free ammonia inhibition and inactivation. Science of the Total Environment, 2020, 728, 138713.	3.9	58
61	Outlining the Roles of Membrane-Foulant and Foulant-Foulant Interactions in Organic Fouling During Microfiltration and Ultrafiltration: A Mini-Review. Frontiers in Chemistry, 2020, 8, 417.	1.8	58
62	Excess sludge reduction induced by Tubifex tubifex in a recycled sludge reactor. Journal of Biotechnology, 2007, 127, 443-451.	1.9	57
63	A novel microfluidic system enables visualization and analysis of antibiotic resistance gene transfer to activated sludge bacteria in biofilm. Science of the Total Environment, 2018, 642, 582-590.	3.9	57
64	Self-sustaining advanced wastewater purification and simultaneous in situ nutrient recovery in a novel bioelectrochemical system. Chemical Engineering Journal, 2017, 330, 692-697.	6.6	56
65	A Facile and Scalable Fabrication Procedure for Thin-Film Composite Membranes: Integration of Phase Inversion and Interfacial Polymerization. Environmental Science & Eamp; Technology, 2020, 54, 1946-1954.	4.6	56
66	Fluorescence properties of dissolved organic matter as a function of hydrophobicity and molecular weight: case studies from two membrane bioreactors and an oxidation ditch. RSC Advances, 2016, 6, 24050-24059.	1.7	55
67	Competitive migration behaviors of multiple ions and their impacts on ion-exchange resin packed microbial desalination cell. Bioresource Technology, 2013, 146, 637-642.	4.8	54
68	Electrochemical Control of Redox Potential Arrests Methanogenesis and Regulates Products in Mixed Culture Electro-Fermentation. ACS Sustainable Chemistry and Engineering, 2018, 6, 8650-8658.	3.2	54
69	Roles and performance enhancement of feed spacer in spiral wound membrane modules for water treatment: A 20-year review on research evolvement. Water Research, 2021, 198, 117146.	5.3	54
70	Anammox bacteria enrichment and denitrification in moving bed biofilm reactors packed with different buoyant carriers: Performances and mechanisms. Science of the Total Environment, 2020, 719, 137277.	3.9	53
71	Evaluation of applied cathode potential to enhance biocathode in microbial fuel cells. Journal of Chemical Technology and Biotechnology, 2009, 84, 794-799.	1.6	52
72	Hydrogen peroxide generation in microbial fuel cells using graphene-based air-cathodes. Bioresource Technology, 2018, 247, 684-689.	4.8	52

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73	A systematic analysis of fouling evolution and irreversibility behaviors of MBR supernatant hydrophilic/hydrophobic fractions during microfiltration. Journal of Membrane Science, 2014, 467, 206-216.	4.1	51
74	A novel microbial fuel cell sensor with a gas diffusion biocathode sensing element for water and air quality monitoring. Chemosphere, 2018, 203, 21-25.	4.2	51
75	Scaling up a novel denitrifying microbial fuel cell with an oxic-anoxic two stage biocathode. Frontiers of Environmental Science and Engineering, 2013, 7, 913-919.	3.3	50
76	An analytical model for membrane fouling evolution associated with gel layer growth during constant pressure stirred dead-end filtration. Journal of Membrane Science, 2013, 427, 139-149.	4.1	50
77	Bioelectrochemical systems-driven directional ion transport enables low-energy water desalination, pollutant removal, and resource recovery. Bioresource Technology, 2016, 215, 274-284.	4.8	50
78	The Microbial Electrochemical Current Accelerates Urea Hydrolysis for Recovery of Nutrients from Source-Separated Urine. Environmental Science and Technology Letters, 2017, 4, 305-310.	3.9	50
79	Simultaneous determination of surface energy and roughness of dense membranes by a modified contact angle method. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 562, 370-376.	2.3	49
80	Novel Self-driven Microbial Nutrient Recovery Cell with Simultaneous Wastewater Purification. Scientific Reports, 2015, 5, 15744.	1.6	47
81	Air-cathode structure optimization in separator-coupled microbial fuel cells. Biosensors and Bioelectronics, 2011, 30, 267-271.	5.3	46
82	Reverse osmosis membrane autopsy in coal chemical wastewater treatment: Evidences of spatially heterogeneous fouling and organic-inorganic synergistic effect. Journal of Cleaner Production, 2020, 246, 118964.	4.6	46
83	Binder-free nitrogen-doped graphene catalyst air-cathodes for microbial fuel cells. Journal of Materials Chemistry A, 2016, 4, 12387-12391.	5.2	45
84	Interaction between humic acid and silica in reverse osmosis membrane fouling process: A spectroscopic and molecular dynamics insight. Water Research, 2021, 206, 117773.	5.3	45
85	Impact of membrane pore morphology on multi-cycle fouling and cleaning of hydrophobic and hydrophilic membranes during MBR operation. Journal of Membrane Science, 2018, 556, 312-320.	4.1	44
86	Energy recovery from the flow-electrode capacitive deionization. Journal of Power Sources, 2019, 421, 50-55.	4.0	44
87	Effect of membrane pore morphology on microfiltration organic fouling: PTFE/PVDF blend membranes compared with PVDF membranes. Desalination, 2014, 343, 217-225.	4.0	43
88	Capacitive deionization for nutrient recovery from wastewater with disinfection capability. Environmental Science: Water Research and Technology, 2018, 4, 33-39.	1.2	43
89	Critical Factors Facilitating <i>Candidatus</i> Nitrotoga To Be Prevalent Nitrite-Oxidizing Bacteria in Activated Sludge. Environmental Science & Envi	4.6	43
90	Periodic polarity reversal for stabilizing the pH in two-chamber microbial electrolysis cells. Applied Energy, 2016, 165, 670-675.	5.1	42

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91	Open external circuit for microbial fuel cell sensor to monitor the nitrate in aquatic environment. Biosensors and Bioelectronics, 2018, 111, 97-101.	5.3	42
92	Linkages between microbial functional potential and wastewater constituents in large-scale membrane bioreactors for municipal wastewater treatment. Water Research, 2014, 56, 162-171.	5.3	41
93	Multiple antibiotic resistance genes distribution in ten large-scale membrane bioreactors for municipal wastewater treatment. Bioresource Technology, 2016, 222, 100-106.	4.8	41
94	Highâ€Performance Carbon Aerogel Air Cathodes for Microbial Fuel Cells. ChemSusChem, 2016, 9, 2788-2795.	3.6	41
95	Bifunctional Fe for Induced Graphitization and Catalytic Ozonation Based on a Fe/N-Doped Carbon–Al ₂ O ₃ Framework: Theoretical Calculations Guided Catalyst Design and Optimization. Environmental Science & Environmental Scie	4.6	41
96	Hydraulic optimization of membrane bioreactor via baffle modification using computational fluid dynamics. Bioresource Technology, 2015, 175, 633-637.	4.8	40
97	Stokes Shift and Specific Fluorescence as Potential Indicators of Organic Matter Hydrophobicity and Molecular Weight in Membrane Bioreactors. Environmental Science & Environm	4.6	39
98	Optimization of membrane stack configuration in enlarged microbial desalination cells for efficient water desalination. Journal of Power Sources, 2016, 324, 79-85.	4.0	38
99	Diffusion layer characteristics for increasing the performance of activated carbon air cathodes in microbial fuel cells. Environmental Science: Water Research and Technology, 2016, 2, 266-273.	1.2	38
100	Persistence of SARS-CoV-2 RNA in wastewater after the end of the COVID-19 epidemics. Journal of Hazardous Materials, 2022, 429, 128358.	6.5	38
101	Moderately oxidized graphene–carbon nanotubes hybrid for high performance capacitive deionization. RSC Advances, 2016, 6, 58907-58915.	1.7	37
102	Self-Driven Desalination and Advanced Treatment of Wastewater in a Modularized Filtration Air Cathode Microbial Desalination Cell. Environmental Science & Environmental Science & 2016, 50, 7254-7262.	4.6	37
103	A novel bioaugmentation strategy to accelerate methanogenesis via adding Geobacter sulfurreducens PCA in anaerobic digestion system. Science of the Total Environment, 2018, 642, 322-326.	3.9	37
104	Removal of antibiotic resistance genes in four full-scale membrane bioreactors. Science of the Total Environment, 2019, 653, 112-119.	3.9	37
105	Exploring the interactions of organic micropollutants with polyamide nanofiltration membranes: A molecular docking study. Journal of Membrane Science, 2019, 577, 285-293.	4.1	36
106	An electroactive biofilm-based biosensor for water safety: Pollutants detection and early-warning. Biosensors and Bioelectronics, 2021, 173, 112822.	5.3	36
107	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. International Journal of Molecular Sciences, 2016, 17, 1392.	1.8	35
108	Achieving mainstream nitrogen removal via the nitrite pathway from real municipal wastewater using intermittent ultrasonic treatment. Ultrasonics Sonochemistry, 2019, 51, 406-411.	3.8	35

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109	Relationship between fluorescence excitation-emission matrix properties and the relative degree of DOM hydrophobicity in wastewater treatment effluents. Chemosphere, 2020, 254, 126830.	4.2	35
110	Hydrodynamic optimization of membrane bioreactor by horizontal geometry modification using computational fluid dynamics. Bioresource Technology, 2016, 200, 328-334.	4.8	34
111	Predictions of the Influent and Operational Conditions for Partial Nitritation with a Model Incorporating pH Dynamics. Environmental Science & Environ	4.6	34
112	Anaerobic digestion performance of concentrated municipal sewage by forward osmosis membrane: Focus on the impact of salt and ammonia nitrogen. Bioresource Technology, 2019, 276, 204-210.	4.8	34
113	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. Water Research, 2020, 185, 116251.	5.3	34
114	Nitrite production from urine for sulfide control in sewers. Water Research, 2017, 122, 447-454.	5.3	33
115	A novel electrochemical reactor for nitrogen and phosphorus recovery from domestic wastewater. Frontiers of Environmental Science and Engineering, 2017, 11, 1.	3.3	33
116	Control sulfide and methane production in sewers based on free ammonia inactivation. Environment International, 2020, 143, 105928.	4.8	33
117	High-rate nitrogen removal from carbon limited wastewater using sulfur-based constructed wetland: Impact of sulfur sources. Science of the Total Environment, 2020, 744, 140969.	3.9	33
118	Large-Scale Membrane Bioreactors for Industrial Wastewater Treatment in China: Technical and Economic Features, Driving Forces, and Perspectives. Engineering, 2021, 7, 868-880.	3.2	33
119	Hydrogen sulfide generation and emission in urban sanitary sewer in China: what factor plays the critical role?. Environmental Science: Water Research and Technology, 2019, 5, 839-848.	1.2	32
120	Remediation of simulated malodorous surface water by columnar air-cathode microbial fuel cells. Science of the Total Environment, 2019, 687, 287-296.	3.9	31
121	Enhancement of the sensitivity of a microbial fuel cell sensor by transient-state operation. Environmental Science: Water Research and Technology, 2017, 3, 472-479.	1.2	30
122	Effects of ultrasonic treatment on the ammonia-oxidizing bacterial (AOB) growth kinetics. Science of the Total Environment, 2019, 690, 629-635.	3.9	30
123	Superhydrophilic and oleophobic membrane functionalized with heterogeneously tailored two-dimensional layered double hydroxide nanosheets for antifouling. Journal of Membrane Science, 2019, 577, 165-175.	4.1	30
124	Surface charge regulation of reverse osmosis membrane for anti-silica and organic fouling. Science of the Total Environment, 2020, 715, 137013.	3.9	30
125	Development and application of some renovated technologies for municipal wastewater treatment in China. Frontiers of Environmental Science and Engineering in China, 2007, 1, 1-12.	0.8	29
126	Carbon filtration cathode in microbial fuel cell to enhance wastewater treatment. Bioresource Technology, 2015, 185, 426-430.	4.8	29

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127	A facile approach to fabrication of superhydrophilic ultrafiltration membranes with surface-tailored nanoparticles. Separation and Purification Technology, 2018, 203, 251-259.	3.9	29
128	Energy-neutral sustainable nutrient recovery incorporated with the wastewater purification process in an enlarged microbial nutrient recovery cell. Journal of Power Sources, 2018, 384, 160-164.	4.0	29
129	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. Water Research, 2020, 173, 115536.	5.3	29
130	Facile and low-cost ceramic fiber-based carbon-carbon composite for solar evaporation. Science of the Total Environment, 2021, 759, 143546.	3.9	29
131	Simultaneous nitrification and aerobic denitrification by a novel isolated Ochrobactrum anthropi HND19. Bioresource Technology, 2021, 340, 125582.	4.8	29
132	Membrane Fouling Control in an Anaerobic Membrane Bioreactor Coupled with Online Ultrasound Equipment for Digestion of Waste Activated Sludge. Separation Science and Technology, 2010, 45, 941-947.	1.3	28
133	Enrichment of denitrifying methanotrophic bacteria from Taihu sediments by a membrane biofilm bioreactor at ambient temperature. Environmental Science and Pollution Research, 2016, 23, 5627-5634.	2.7	28
134	Construction of innovative 3D-weaved carbon mesh anode network to boost electron transfer and microbial activity in bioelectrochemical system. Water Research, 2020, 172, 115493.	5. 3	28
135	Enhancing the stability of power generation of singleâ€chamber microbial fuel cells using an anion exchange membrane. Journal of Chemical Technology and Biotechnology, 2009, 84, 1767-1772.	1.6	27
136	Significant enhancement in catalytic ozonation efficacy: From granular to super-fine powdered activated carbon. Frontiers of Environmental Science and Engineering, 2018, 12, 1.	3.3	27
137	Integrated ultrafiltration–capacitive-deionization (UCDI) for enhanced antifouling performance and synchronous removal of organic matter and salts. Separation and Purification Technology, 2019, 226, 146-153.	3.9	27
138	Iron-based clusters embedded in nitrogen doped activated carbon catalysts with superior cathodic activity in microbial fuel cells. Journal of Materials Chemistry A, 2020, 8, 10772-10778.	5. 2	27
139	Artificial electrochemically active biofilm for improved sensing performance and quickly devising of water quality early warning biosensors. Water Research, 2021, 198, 117164.	5.3	27
140	A novel multi-stage microbial desalination cell for simultaneous desalination and enhanced organics and nitrogen removal from domestic wastewater. Environmental Science: Water Research and Technology, 2016, 2, 832-837.	1.2	26
141	Toxicity change patterns and its mechanism during the degradation of nitrogen-heterocyclic compounds by O3/UV. Chemosphere, 2007, 69, 747-754.	4.2	25
142	Urine-powered synergy of nutrient recovery and urine purification in a microbial electrochemical system. Environmental Science: Water Research and Technology, 2018, 4, 1427-1438.	1.2	25
143	Evaluating the performance of inorganic draw solution concentrations in an anaerobic forward osmosis membrane bioreactor for real municipal sewage treatment. Bioresource Technology, 2020, 307, 123254.	4.8	25
144	Dual-signal-biosensor based on luminescent bacteria biofilm for real-time online alert of Cu(II) shock. Biosensors and Bioelectronics, 2019, 142, 111500.	5. 3	24

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145	Membrane autopsy deciphering keystone microorganisms stubborn against online NaOCl cleaning in a full-scale MBR. Water Research, 2020, 171, 115390.	5.3	24
146	Deciphering mono/multivalent draw solute-induced microbial ecology and membrane fouling in anaerobic osmotic membrane bioreactor. Water Research, 2022, 209, 117869.	5. 3	23
147	Effects of online chemical cleaning on removing biofouling and resilient microbes in a pilot membrane bioreactor. International Biodeterioration and Biodegradation, 2016, 112, 119-127.	1.9	22
148	Effect of powdered activated carbon (PAC) on MBR performance and effluent trihalomethane formation: At the initial stage of PAC addition. Bioresource Technology, 2016, 216, 838-844.	4.8	22
149	Optimization of membrane unit location in a full-scale membrane bioreactor using computational fluid dynamics. Bioresource Technology, 2018, 249, 402-409.	4.8	22
150	Correlating fluorescence spectral properties with DOM molecular weight and size distribution in wastewater treatment systems. Environmental Science: Water Research and Technology, 2018, 4, 1933-1943.	1.2	22
151	Quantifying the dynamic evolution of organic, inorganic and biological synergistic fouling during nanofiltration using statistical approaches. Environment International, 2019, 133, 105201.	4.8	22
152	A novel operational strategy to enhance wastewater treatment with dual-anode assembled microbial desalination cell. Bioelectrochemistry, 2019, 126, 99-104.	2.4	22
153	Organic carbon coupling with sulfur reducer boosts sulfur based denitrification by Thiobacillus denitrificans. Science of the Total Environment, 2020, 748, 142445.	3.9	22
154	Cost-benefit analysis and technical efficiency evaluation of full-scale membrane bioreactors for wastewater treatment using economic approaches. Journal of Cleaner Production, 2021, 301, 126984.	4.6	22
155	Insights into the effect of iron-carbon particle amendment on food waste composting: Physicochemical properties and the microbial community. Bioresource Technology, 2022, 351, 126939.	4.8	22
156	A mini-microbial fuel cell for voltage testing of exoelectrogenic bacteria. Frontiers of Environmental Science and Engineering in China, 2009, 3, 307-312.	0.8	21
157	Enhancing charge harvest from microbial fuel cells by controlling the charging and discharging frequency of capacitors. Bioresource Technology, 2013, 146, 812-815.	4.8	21
158	Addition of conductive particles to improve the performance of activated carbon air-cathodes in microbial fuel cells. Environmental Science: Water Research and Technology, 2017, 3, 806-810.	1.2	21
159	Enhancement of salt removal in capacitive deionization cell through periodically alternated oxidation of electrodes. Separation and Purification Technology, 2018, 194, 451-456.	3.9	21
160	Fluorescence quotient of excitation–emission matrices as a potential indicator of organic matter behavior in membrane bioreactors. Environmental Science: Water Research and Technology, 2018, 4, 281-290.	1.2	21
161	Enzymatic Cleaning Mitigates Polysaccharide-Induced Refouling of RO Membrane: Evidence from Foulant Layer Structure and Microbial Dynamics. Environmental Science & Enp.; Technology, 2021, 55, 5453-5462.	4.6	21
162	Techno-economic characteristics of wastewater treatment plants retrofitted from the conventional activated sludge process to the membrane bioreactor process. Frontiers of Environmental Science and Engineering, 2022, 16, 1.	3.3	21

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163	Improved blending strategy for membrane modification by virtue of surface segregation using surface-tailored amphiphilic nanoparticles. Frontiers of Environmental Science and Engineering, 2016, $10,1.$	3.3	20
164	Conjugative potential of antibiotic resistance plasmids to activated sludge bacteria from wastewater treatment plants. International Biodeterioration and Biodegradation, 2019, 138, 33-40.	1.9	20
165	A Simple Method to Identify the Dominant Fouling Mechanisms during Membrane Filtration Based on Piecewise Multiple Linear Regression. Membranes, 2020, 10, 171.	1.4	20
166	Study of free nitrous acid (FNA)-based elimination of sulfamethoxazole: Kinetics, transformation pathways, and toxicity assessment. Water Research, 2021, 189, 116629.	5. 3	20
167	Electrically released iron for fouling control in membrane bioreactors: A double-edged sword?. Desalination, 2014, 347, 10-14.	4.0	19
168	Biofilm's morphology design for high sensitivity of bioelectrochemical sensor: An experimental and modeling study. Science of the Total Environment, 2020, 729, 138908.	3.9	19
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