Bing-Jie Ni

List of Publications by Year
in descending order

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Version: 2024-02-01

400	20,517	8755	19749
papers	citations	75 h-index	117 g-index

406	406	406	12189
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microplastics in wastewater treatment plants: Detection, occurrence and removal. Water Research, 2019, 152, 21-37.	11.3	1,069
2	Recent advances in transition metal-based electrocatalysts for alkaline hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 14971-15005.	10.3	501
3	Dissecting microbial community structure and methane-producing pathways of a full-scale anaerobic reactor digesting activated sludge from wastewater treatment by metagenomic sequencing. Microbial Cell Factories, 2015, 14, 33.	4.0	323
4	The roles of free ammonia (FA) in biological wastewater treatment processes: A review. Environment International, 2019, 123, 10-19.	10.0	294
5	Polyvinyl Chloride Microplastics Affect Methane Production from the Anaerobic Digestion of Waste Activated Sludge through Leaching Toxic Bisphenol-A. Environmental Science & Technology, 2019, 53, 2509-2517.	10.0	279
6	Granulation of activated sludge in a pilot-scale sequencing batch reactor for the treatment of low-strength municipal wastewater. Water Research, 2009, 43, 751-761.	11.3	258
7	Challenges in the application of microbial fuel cells to wastewater treatment and energy production: A mini review. Science of the Total Environment, 2018, 639, 910-920.	8.0	225
8	Graphitic carbon nitride with different dimensionalities for energy and environmental applications. Nano Research, 2020, 13, 18-37.	10.4	214
9	Competitive adsorption of heavy metals in aqueous solution onto biochar derived from anaerobically digested sludge. Chemosphere, 2019, 219, 351-357.	8.2	212
10	Electron competition among nitrogen oxides reduction during methanol-utilizing denitrification in wastewater treatment. Water Research, 2013, 47, 3273-3281.	11.3	200
11	Revealing the Mechanisms of Polyethylene Microplastics Affecting Anaerobic Digestion of Waste Activated Sludge. Environmental Science & Technology, 2019, 53, 9604-9613.	10.0	199
12	Iridium-based nanomaterials for electrochemical water splitting. Nano Energy, 2020, 78, 105270.	16.0	192
13	N2O production rate of an enriched ammonia-oxidising bacteria culture exponentially correlates to its ammonia oxidation rate. Water Research, 2012, 46, 3409-3419.	11.3	190
14	Achieving Stable Mainstream Nitrogen Removal via the Nitrite Pathway by Sludge Treatment Using Free Ammonia. Environmental Science & Technology, 2017, 51, 9800-9807.	10.0	186
15	Soluble microbial products and their implications in mixed culture biotechnology. Trends in Biotechnology, 2011, 29, 454-463.	9.3	184
16	The underlying mechanism of calcium peroxide pretreatment enhancing methane production from anaerobic digestion of waste activated sludge. Water Research, 2019, 164, 114934.	11.3	184
17	Photocatalytic conversion of lignocellulosic biomass to valuable products. Green Chemistry, 2019, 21, 4266-4289.	9.0	180
18	Occurrence State and Molecular Structure Analysis of Extracellular Proteins with Implications on the Dewaterability of Waste-Activated Sludge. Environmental Science & Technology, 2017, 51, 9235-9243.	10.0	174

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19	Effect of pH on N2O reduction and accumulation during denitrification by methanol utilizing denitrifiers. Water Research, 2012, 46, 4832-4840.	11.3	169
20	Characterization of extracellular polymeric substances produced by mixed microorganisms in activated sludge with gel-permeating chromatography, excitationâ€“emission matrix fluorescence spectroscopy measurement and kinetic modeling. Water Research, 2009, 43, 1350-1358.	11.3	163
21	Free ammonia enhances dark fermentative hydrogen production from waste activated sludge. Water Research, 2018, 133, 272-281.	11.3	163
22	Identification and quantification of anammox bacteria in eight nitrogen removal reactors. Water Research, 2010, 44, 5014-5020.	11.3	161
23	Modeling Nitrous Oxide Production during Biological Nitrogen Removal via Nitrification and Denitrification: Extensions to the General ASM Models. Environmental Science & Technology, 2011, 45, 7768-7776.	10.0	161
24	Anaerobic membrane bioreactors for antibiotic wastewater treatment: Performance and membrane fouling issues. Bioresource Technology, 2018, 267, 714-724.	9.6	154
25	Fe(II) catalyzing sodium percarbonate facilitates the dewaterability of waste activated sludge: Performance, mechanism, and implication. Water Research, 2020, 174, 115626.	11.3	150
26	The combined effect of dissolved oxygen and nitrite on N2O production by ammonia oxidizing bacteria in an enriched nitrifying sludge. Water Research, 2015, 73, 29-36.	11.3	147
27	Defect engineering of oxide perovskites for catalysis and energy storage: synthesis of chemistry and materials science. Chemical Society Reviews, 2021, 50, 10116-10211.	38.1	140
28	Free nitrous acid promotes hydrogen production from dark fermentation of waste activated sludge. Water Research, 2018, 145, 113-124.	11.3	137
29	Calcium peroxide promotes hydrogen production from dark fermentation of waste activated sludge. Chemical Engineering Journal, 2019, 355, 22-32.	12.7	137
30	Aged refuse enhances anaerobic digestion of waste activated sludge. Water Research, 2017, 123, 724-733.	11.3	136
31	Polyethylene terephthalate microplastics affect hydrogen production from alkaline anaerobic fermentation of waste activated sludge through altering viability and activity of anaerobic microorganisms. Water Research, 2019, 163, 114881.	11.3	136
32	Catalytic reduction of nitrogen to produce ammonia by bismuth-based catalysts: state of the art and future prospects. Materials Horizons, 2020, 7, 1014-1029.	12.2	134
33	Metagenomic analysis of anammox communities in three different microbial aggregates. Environmental Microbiology, 2016, 18, 2979-2993.	3.8	133
34	Boride-based electrocatalysts: Emerging candidates for water splitting. Nano Research, 2020, 13, 293-314.	10.4	133
35	Microbial and Physicochemical Characteristics of Compact Anaerobic Ammonium-Oxidizing Granules in an Upflow Anaerobic Sludge Blanket Reactor. Applied and Environmental Microbiology, 2010, 76, 2652-2656.	3.1	131
36	Zero valent iron simultaneously enhances methane production and sulfate reduction in anaerobic granular sludge reactors. Water Research, 2015, 75, 292-300.	11.3	129

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37	Unveiling the mechanisms of medium-chain fatty acid production from waste activated sludge alkaline fermentation liquor through physiological, thermodynamic and metagenomic investigations. Water Research, 2020, 169, 115218.	11.3	124
38	The effect of dissolved oxygen on N 2 O production by ammonia-oxidizing bacteria in an enriched nitrifying sludge. Water Research, 2014, 66, 12-21.	11.3	123
39	Evaluation on the microbial interactions of anaerobic ammonium oxidizers and heterotrophs in Anammox biofilm. Water Research, 2012, 46, 4645-4652.	11.3	122
40	Fractionating soluble microbial products in the activated sludge process. Water Research, 2010, 44, 2292-2302.	11.3	120
41	Modeling Electron Competition among Nitrogen Oxides Reduction and N₂O Accumulation in Denitrification. Environmental Science & Technology, 2013, 47, 11083-11091.	10.0	119
42	Modeling of Nitrous Oxide Production by Autotrophic Ammonia-Oxidizing Bacteria with Multiple Production Pathways. Environmental Science & Technology, 2014, 48, 3916-3924.	10.0	110
43	Impacts of organics on the microbial ecology of wastewater anammox processes: Recent advances and meta-analysis. Water Research, 2021, 191, 116817.	11.3	108
44	Tuning electronic property and surface reconstruction of amorphous iron borides via W-P co-doping for highly efficient oxygen evolution. Applied Catalysis B: Environmental, 2021, 288, 120037.	20.2	108
45	Recent advances in mathematical modeling of nitrous oxides emissions from wastewater treatment processes. Water Research, 2015, 87, 336-346.	11.3	106
46	Revisiting Microplastics in Landfill Leachate: Unnoticed Tiny Microplastics and Their Fate in Treatment Works. Water Research, 2021, 190, 116784.	11.3	106
47	Emerging artificial nitrogen cycle processes through novel electrochemical and photochemical synthesis. Materials Today, 2021, 46, 212-233.	14.2	104
48	Mathematical Modeling of Nitrous Oxide (N₂O) Emissions from Full-Scale Wastewater Treatment Plants. Environmental Science & Technology, 2013, 47, 7795-7803.	10.0	102
49	Modeling a granuleâ€based anaerobic ammonium oxidizing (ANAMMOX) process. Biotechnology and Bioengineering, 2009, 103, 490-499.	3.3	101
50	Unraveling microbial structure and diversity of activated sludge in a full-scale simultaneous nitrogen and phosphorus removal plant using metagenomic sequencing. Enzyme and Microbial Technology, 2017, 102, 16-25.	3.2	100
51	Understanding the fate and impact of capsaicin in anaerobic co-digestion of food waste and waste activated sludge. Water Research, 2021, 188, 116539.	11.3	99
52	Characterization of the size-fractionated biomacromolecules: Tracking their role and fate in a membrane bioreactor. Water Research, 2011, 45, 4661-4671.	11.3	98
53	Insights into the microbial response of anaerobic granular sludge during long-term exposure to polyethylene terephthalate microplastics. Water Research, 2020, 179, 115898.	11.3	96
54	Stratified Microbial Structure and Activity in Sulfide- and Methane-Producing Anaerobic Sewer Biofilms. Applied and Environmental Microbiology, 2014, 80, 7042-7052.	3.1	95

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55	Mechanistic insights into the effect of poly ferric sulfate on anaerobic digestion of waste activated sludge. Water Research, 2021, 189, 116645.	11.3	95
56	Coagulation removal and photocatalytic degradation of microplastics in urban waters. Chemical Engineering Journal, 2021, 416, 129123.	12.7	95
57	Zerovalent Iron Effectively Enhances Medium-Chain Fatty Acids Production from Waste Activated Sludge through Improving Sludge Biodegradability and Electron Transfer Efficiency. Environmental Science & Technology, 2020, 54, 10904-10915.	10.0	94
58	Effect of poly aluminum chloride on dark fermentative hydrogen accumulation from waste activated sludge. Water Research, 2019, 153, 217-228.	11.3	93
59	Enhanced short-chain fatty acids production from waste activated sludge by sophorolipid: Performance, mechanism, and implication. Bioresource Technology, 2019, 284, 456-465.	9.6	91
60	Accelerated separation of photogenerated charge carriers and enhanced photocatalytic performance of g-C3N4 by Bi2S3 nanoparticles. Chinese Journal of Catalysis, 2020, 41, 249-258.	14.0	91
61	Improving the treatment of waste activated sludge using calcium peroxide. Water Research, 2020, 187, 116440.	11.3	90
62	Electrocatalysts for acidic oxygen evolution reaction: Achievements and perspectives. Nano Energy, 2020, 78, 105392.	16.0	86
63	Towards hydrogen production from waste activated sludge: Principles, challenges and perspectives. Renewable and Sustainable Energy Reviews, 2021, 135, 110283.	16.4	86
64	Evaluating four mathematical models for nitrous oxide production by autotrophic ammoniaâ€oxidizing bacteria. Biotechnology and Bioengineering, 2013, 110, 153-163.	3.3	85
65	Evaluation of Nitrous Oxide Emission from Sulfide- and Sulfur-Based Autotrophic Denitrification Processes. Environmental Science & Technology, 2016, 50, 9407-9415.	10.0	85
66	Free nitrous acid-based nitrifying sludge treatment in a two-sludge system enhances nutrient removal from low-carbon wastewater. Bioresource Technology, 2017, 244, 920-928.	9.6	83
67	Enhanced high-quality biomethane production from anaerobic digestion of primary sludge by corn stover biochar. Bioresource Technology, 2020, 306, 123159.	9.6	83
68	Polystyrene nanoplastics reshape the anaerobic granular sludge for recovering methane from wastewater. Water Research, 2020, 182, 116041.	11.3	83
69	Medium-Chain fatty acids and long-chain alcohols production from waste activated sludge via two-stage anaerobic fermentation. Water Research, 2020, 186, 116381.	11.3	82
70	Long-Term Effects of Polyvinyl Chloride Microplastics on Anaerobic Granular Sludge for Recovering Methane from Wastewater. Environmental Science & Technology, 2020, 54, 9662-9671.	10.0	81
71	Modeling of Simultaneous Anaerobic Methane and Ammonium Oxidation in a Membrane Biofilm Reactor. Environmental Science & Technology, 2014, 48, 9540-9547.	10.0	80
72	Free Ammonia-Based Pretreatment Promotes Short-Chain Fatty Acid Production from Waste Activated Sludge. ACS Sustainable Chemistry and Engineering, 2018, 6, 9120-9129.	6.7	79

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73	Sulfide and methane production in sewer sediments. Water Research, 2015, 70, 350-359.	11.3	78
74	Zero valent iron enhances methane production from primary sludge in anaerobic digestion. Chemical Engineering Journal, 2018, 351, 1159-1165.	12.7	78
75	Insight into greenhouse gases emissions from the two popular treatment technologies in municipal wastewater treatment processes. Science of the Total Environment, 2019, 671, 1302-1313.	8.0	78
76	New perspectives on microbial communities and biological nitrogen removal processes in wastewater treatment systems. Bioresource Technology, 2020, 297, 122491.	9.6	78
77	Evaluation of mainstream nitrogen removal by simultaneous partial nitrification, anammox and denitrification (SNAD) process in a granule-based reactor. Chemical Engineering Journal, 2017, 327, 973-981.	12.7	77
78	Improved methane production from waste activated sludge by combining free ammonia with heat pretreatment: Performance, mechanisms and applications. Bioresource Technology, 2018, 268, 230-236.	9.6	77
79	Quantifying nitrous oxide production pathways in wastewater treatment systems using isotope technology â€“ A critical review. Water Research, 2017, 122, 96-113.	11.3	76
80	Interaction between perfluorooctanoic acid and aerobic granular sludge. Water Research, 2020, 169, 115249.	11.3	75
81	Mathematical modeling of aerobic granular sludge: A review. Biotechnology Advances, 2010, 28, 895-909.	11.7	74
82	Biotransformation of pharmaceuticals by ammonia oxidizing bacteria in wastewater treatment processes. Science of the Total Environment, 2016, 566-567, 796-805.	8.0	74
83	AHL-mediated quorum sensing regulates the variations of microbial community and sludge properties of aerobic granular sludge under low organic loading. Environment International, 2019, 130, 104946.	10.0	74
84	Recent advances in electrocatalysts for halogenated organic pollutant degradation. Environmental Science: Nano, 2019, 6, 2332-2366.	4.3	74
85	Characterization of autotrophic and heterotrophic soluble microbial product (SMP) fractions from activated sludge. Water Research, 2012, 46, 6210-6217.	11.3	73
86	Approach of describing dynamic production of volatile fatty acids from sludge alkaline fermentation. Bioresource Technology, 2017, 238, 343-351.	9.6	73
87	Clarifying the Role of Free Ammonia in the Production of Short-Chain Fatty Acids from Waste Activated Sludge Anaerobic Fermentation. ACS Sustainable Chemistry and Engineering, 2018, 6, 14104-14113.	6.7	73
88	Enhanced dewaterability of anaerobically digested sludge by in-situ free nitrous acid treatment. Water Research, 2020, 169, 115264.	11.3	73
89	Modeling simultaneous autotrophic and heterotrophic growth in aerobic granules. Water Research, 2008, 42, 1583-1594.	11.3	72
90	The inhibitory impacts of nano-graphene oxide on methane production from waste activated sludge in anaerobic digestion. Science of the Total Environment, 2019, 646, 1376-1384.	8.0	72

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91	Enhanced Short-Chain Fatty Acids from Waste Activated Sludge by Heatâ€“CaO₂ Advanced Thermal Hydrolysis Pretreatment: Parameter Optimization, Mechanisms, and Implications. ACS Sustainable Chemistry and Engineering, 2019, 7, 3544-3555.	6.7	71
92	Activation of nitrite by freezing process for anaerobic digestion enhancement of waste activated sludge: Performance and mechanisms. Chemical Engineering Journal, 2020, 387, 124147.	12.7	70
93	Evaluating two concepts for the modelling of intermediates accumulation during biological denitrification in wastewater treatment. Water Research, 2015, 71, 21-31.	11.3	69
94	Insight into biological phosphate recovery from sewage. Bioresource Technology, 2016, 218, 874-881.	9.6	69
95	A new approach to simultaneous ammonium and dissolved methane removal from anaerobic digestion liquor: A model-based investigation of feasibility. Water Research, 2015, 85, 295-303.	11.3	68
96	Thermal-alkaline pretreatment of polyacrylamide flocculated waste activated sludge: Process optimization and effects on anaerobic digestion and polyacrylamide degradation. Bioresource Technology, 2019, 281, 158-167.	9.6	68
97	Microbial Products of Activated Sludge in Biological Wastewater Treatment Systems: A Critical Review. Critical Reviews in Environmental Science and Technology, 2012, 42, 187-223.	12.8	67
98	Microplastics Mitigation in Sewage Sludge through Pyrolysis: The Role of Pyrolysis Temperature. Environmental Science and Technology Letters, 2020, 7, 961-967.	8.7	67
99	Methane emission from sewers. Science of the Total Environment, 2015, 524-525, 40-51.	8.0	66
100	Emerging alternative for artificial ammonia synthesis through catalytic nitrate reduction. Journal of Materials Science and Technology, 2021, 77, 163-168.	10.7	66
101	Comparing the value of bioproducts from different stages of anaerobic membrane bioreactors. Bioresource Technology, 2016, 214, 816-825.	9.6	65
102	Heat pretreatment assists free ammonia to enhance hydrogen production from waste activated sludge. Bioresource Technology, 2019, 283, 316-325.	9.6	65
103	Impact of roxithromycin on waste activated sludge anaerobic digestion: Methane production, carbon transformation and antibiotic resistance genes. Science of the Total Environment, 2020, 703, 134899.	8.0	65
104	Appropriate Fe (II) Addition Significantly Enhances Anaerobic Ammonium Oxidation (Anammox) Activity through Improving the Bacterial Growth Rate. Scientific Reports, 2015, 5, 8204.	3.3	64
105	Mechanisms of potassium permanganate pretreatment improving anaerobic fermentation performance of waste activated sludge. Chemical Engineering Journal, 2021, 406, 126797.	12.7	64
106	Digestion liquid based alkaline pretreatment of waste activated sludge promotes methane production from anaerobic digestion. Water Research, 2021, 199, 117198.	11.3	63
107	Fabrication of CN75/NH2-MIL-53(Fe) p-n heterojunction with wide spectral response for efficiently photocatalytic Cr(VI) reduction. Journal of Alloys and Compounds, 2022, 891, 161994.	5.5	63
108	Modeling nitrogen removal with partial nitritation and anammox in one floc-based sequencing batch reactor. Water Research, 2014, 67, 321-329.	11.3	62

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109	Quantification and kinetic characterization of soluble microbial products from municipal wastewater treatment plants. Water Research, 2016, 88, 703-710.	11.3	60
110	Evaluating simultaneous chromate and nitrate reduction during microbial denitrification processes. Water Research, 2016, 89, 1-8.	11.3	60
111	Effects of nitrate dosing on sulfidogenic and methanogenic activities in sewer sediment. Water Research, 2015, 74, 155-165.	11.3	59
112	Efficient monolithic perovskite/organic tandem solar cells and their efficiency potential. Nano Energy, 2020, 78, 105238.	16.0	59
113	Coupling glucose fermentation and homoacetogenesis for elevated acetate production: Experimental and mathematical approaches. Biotechnology and Bioengineering, 2011, 108, 345-353.	3.3	58
114	A model-based assessment of nitric oxide and nitrous oxide production in membrane-aerated autotrophic nitrogen removal biofilm systems. Journal of Membrane Science, 2013, 428, 163-171.	8.2	58
115	Modeling Microbial Products in Activated Sludge under Feastâ˜'Famine Conditions. Environmental Science & Technology, 2009, 43, 2489-2497.	10.0	57
116	Bentonite-supported nano zero-valent iron composite as a green catalyst for bisphenol A degradation: Preparation, performance, and mechanism of action. Journal of Environmental Management, 2020, 260, 110105.	7.8	57
117	Synthesis of Coreâ€“Shell Magnetic Nanocomposite Fe₃O₄@ Microbial Extracellular Polymeric Substances for Simultaneous Redox Sorption and Recovery of Silver Ions as Silver Nanoparticles. ACS Sustainable Chemistry and Engineering, 2018, 6, 749-756.	6.7	56
118	Cost-effective catalysts for renewable hydrogen production via electrochemical water splitting: Recent advances. Current Opinion in Green and Sustainable Chemistry, 2021, 27, 100398.	5.9	56
119	Full-scale evaluation of aerobic/extended-idle regime inducing biological phosphorus removal and its integration with intermittent sand filter to treat domestic sewage discharged from highway rest area. Biochemical Engineering Journal, 2016, 113, 114-122.	3.6	55
120	Biodegradation of atenolol by an enriched nitrifying sludge: Products and pathways. Chemical Engineering Journal, 2017, 312, 351-359.	12.7	55
121	Surface defect-abundant one-dimensional graphitic carbon nitride nanorods boost photocatalytic nitrogen fixation. New Journal of Chemistry, 2020, 44, 20651-20658.	2.8	55
122	The entering of polyethylene terephthalate microplastics into biological wastewater treatment system affects aerobic sludge digestion differently from their direct entering into sludge treatment system. Water Research, 2021, 190, 116731.	11.3	55
123	Surface defective g-C3N4â˜'Cl with unique spongy structure by polarization effect for enhanced photocatalytic removal of organic pollutants. Journal of Hazardous Materials, 2020, 398, 122897.	12.4	55
124	Recent advances in photocatalytic nitrogen fixation and beyond. Nanoscale, 2022, 14, 2990-2997.	5.6	55
125	Bi₂O₃@Carbon Nanocomposites for Solar-Driven Photocatalytic Degradation of Chlorophenols. ACS Applied Nano Materials, 2019, 2, 2308-2316.	5.0	54
126	Hydrodynamics of upflow anaerobic sludge blanket reactors. AICHE Journal, 2009, 55, 516-528.	3.6	52

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127	Microbial fuel cell for nutrient recovery and electricity generation from municipal wastewater under different ammonium concentrations. Bioresource Technology, 2019, 292, 121992.	9.6	52
128	The anammox coupled partial-denitrification process in an integrated granular sludge and fixed-biofilm reactor developed for mainstream wastewater treatment: Performance and community structure. Water Research, 2022, 210, 117964.	11.3	52
129	Model-based evaluation of the role of Anammox on nitric oxide and nitrous oxide productions in membrane aerated biofilm reactor. Journal of Membrane Science, 2013, 446, 332-340.	8.2	51
130	Sulfide and methane production in sewer sediments: Field survey and model evaluation. Water Research, 2016, 89, 142-150.	11.3	51
131	Performance and Mechanism of Fe₃O₄ Improving Biotransformation of Waste Activated Sludge into Liquid High-Value Products. Environmental Science & Technology, 2022, 56, 3658-3668.	10.0	51
132	Evaluating the impact of operational parameters on the formation of soluble microbial products (SMP) by activated sludge. Water Research, 2013, 47, 1073-1079.	11.3	50
133	Effect of methane partial pressure on the performance of a membrane biofilm reactor coupling methane-dependent denitrification and anammox. Science of the Total Environment, 2018, 639, 278-285.	8.0	50
134	How does free ammonia-based sludge pretreatment improve methane production from anaerobic digestion of waste activated sludge. Chemosphere, 2018, 206, 491-501.	8.2	50
135	High Dissolved Oxygen Selection against Nitrospira Sublineage I in Full-Scale Activated Sludge. Environmental Science & Technology, 2019, 53, 8157-8166.	10.0	50
136	Zero Valent Iron Significantly Enhances Methane Production from Waste Activated Sludge by Improving Biochemical Methane Potential Rather Than Hydrolysis Rate. Scientific Reports, 2015, 5, 8263.	3.3	49
137	Full-Scale Modeling Explaining Large Spatial Variations of Nitrous Oxide Fluxes in a Step-Feed Plug-Flow Wastewater Treatment Reactor. Environmental Science & Technology, 2015, 49, 9176-9184.	10.0	49
138	Sulfide removal and sulfur production in a membrane aerated biofilm reactor: Model evaluation. Chemical Engineering Journal, 2017, 309, 454-462.	12.7	49
139	Growth kinetics of Candidatus â€˜Methanoperedens nitroreducensâ€™ enriched in a laboratory reactor. Science of the Total Environment, 2019, 659, 442-450.	8.0	48
140	Mitigating nitrous oxide emissions at a full-scale wastewater treatment plant. Water Research, 2020, 185, 116196.	11.3	48
141	Recycling spent water treatment adsorbents for efficient electrocatalytic water oxidation reaction. Resources, Conservation and Recycling, 2022, 178, 106037.	10.8	48
142	Heterotrophs grown on the soluble microbial products (SMP) released by autotrophs are responsible for the nitrogen loss in nitrifying granular sludge. Biotechnology and Bioengineering, 2011, 108, 2844-2852.	3.3	47
143	A novel methodology to quantify nitrous oxide emissions from full-scale wastewater treatment systems with surface aerators. Water Research, 2014, 48, 257-268.	11.3	47
144	Autotrophic nitrogen removal in membrane-aerated biofilms: Archaeal ammonia oxidation versus bacterial ammonia oxidation. Chemical Engineering Journal, 2016, 302, 535-544.	12.7	47

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145	Modelling the long-term effect of wastewater compositions on maximum sulfide and methane production rates of sewer biofilm. Water Research, 2018, 129, 58-65.	11.3	47
146	Heterogeneous Electro-Fenton catalysis with HKUST-1-derived Cu@C decorated in 3D graphene network. Chemosphere, 2020, 243, 125423.	8.2	47
147	A Critical Review on Nitrous Oxide Production by Ammonia-Oxidizing Archaea. Environmental Science & Technology, 2020, 54, 9175-9190.	10.0	47
148	Rhamnolipid pretreatment enhances methane production from two-phase anaerobic digestion of waste activated sludge. Water Research, 2021, 194, 116909.	11.3	47
149	Medium chain fatty acids production from anaerobic fermentation of waste activated sludge. Journal of Cleaner Production, 2021, 279, 123482.	9.3	46
150	Kinetic analysis on the two-step processes of AOB and NOB in aerobic nitrifying granules. Applied Microbiology and Biotechnology, 2009, 83, 1159-1169.	3.6	45
151	Enhanced separation of photogenerated charge carriers and catalytic properties of ZnO-MnO2 composites by microwave and photothermal effect. Journal of Alloys and Compounds, 2019, 786, 418-427.	5.5	45
152	Freezing in the presence of nitrite pretreatment enhances hydrogen production from dark fermentation of waste activated sludge. Journal of Cleaner Production, 2020, 248, 119305.	9.3	45
153	Long-term formation of microbial products in a sequencing batch reactor. Water Research, 2010, 44, 3787-3796.	11.3	44
154	Enhancement of short-chain fatty acids production from microalgae by potassium ferrate addition: Feasibility, mechanisms and implications. Bioresource Technology, 2020, 318, 124266.	9.6	44
155	Ferrate effectively removes antibiotic resistance genes from wastewater through combined effect of microbial DNA damage and coagulation. Water Research, 2020, 185, 116273.	11.3	44
156	Perturbation of clopyralid on bio-denitrification and nitrite accumulation: Long-term performance and biological mechanism. Environmental Science and Ecotechnology, 2022, 9, 100144.	13.5	43
157	High-performance photocatalytic decomposition of PFOA by BiOX/TiO2 heterojunctions: Self-induced inner electric fields and band alignment. Journal of Hazardous Materials, 2022, 430, 128195.	12.4	43
158	Evaluation on the Nanoscale Zero Valent Iron Based Microbial Denitrification for Nitrate Removal from Groundwater. Scientific Reports, 2015, 5, 12331.	3.3	42
159	Synergistic recycling and conversion of spent Li-ion battery leachate into highly efficient oxygen evolution catalysts. Green Chemistry, 2021, 23, 6538-6547.	9.0	42
160	Fast identification of fluorescent components in three-dimensional excitation-emission matrix fluorescence spectra via deep learning. Chemical Engineering Journal, 2022, 430, 132893.	12.7	42
161	A reusable, separation-free and biodegradable calcium alginate/g-C3N4 microsphere for sustainable photocatalytic wastewater treatment. Journal of Cleaner Production, 2021, 314, 128033.	9.3	41
162	Ultralight biodegradable 3D-g-C3N4 aerogel for advanced oxidation water treatment driven by oxygen delivery channels and triphase interfaces. Journal of Cleaner Production, 2021, 288, 125091.	9.3	40

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163	Determination of Instinct Components of Biomass on the Generation of Persistent Free Radicals (PFRs) as Critical Redox Sites in Pyrogenic Chars for Persulfate Activation. Environmental Science & Technology, 2021, 55, 7690-7701.	10.0	40
164	Upgrading biogas produced in anaerobic digestion: Biological removal and bioconversion of CO2 in biogas. Renewable and Sustainable Energy Reviews, 2021, 150, 111448.	16.4	40
165	An approach for modeling two-step denitrification in activated sludge systems. Chemical Engineering Science, 2008, 63, 1449-1459.	3.8	39
166	Evaluation of different nitrous oxide production models with four continuous long-term wastewater treatment process data series. Bioprocess and Biosystems Engineering, 2016, 39, 493-510.	3.4	39
167	Persulfate and zero valent iron combined conditioning as a sustainable technique for enhancing dewaterability of aerobically digested sludge. Chemosphere, 2019, 232, 45-53.	8.2	39
168	Enhanced dark fermentative hydrogen production from waste activated sludge by combining potassium ferrate with alkaline pretreatment. Science of the Total Environment, 2020, 707, 136105.	8.0	39
169	A simulation-based integrated approach to optimize the biological nutrient removal process in a full-scale wastewater treatment plant. Chemical Engineering Journal, 2011, 174, 635-643.	12.7	38
170	Cometabolic biodegradation of cephalexin by enriched nitrifying sludge: Process characteristics, gene expression and product biotoxicity. Science of the Total Environment, 2019, 672, 275-282.	8.0	38
171	Rapid and strong biocidal effect of ferrate on sulfidogenic and methanogenic sewer biofilms. Water Research, 2020, 169, 115208.	11.3	38
172	Mechanisms of persulfate activation on biochar derived from two different sludges: Dominance of their intrinsic compositions. Journal of Hazardous Materials, 2021, 408, 124454.	12.4	38
173	Different Pathways of Microplastics Entering the Sludge Treatment System Distinctively Affect Anaerobic Sludge Fermentation Processes. Environmental Science & Technology, 2021, 55, 11274-11283.	10.0	38
174	Hybrid Water Electrolysis: A New Sustainable Avenue for Energy-Saving Hydrogen Production. , 2022, 1, 100002.		38
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