Xiaohu Dai

List of Publications by Year
in descending order

259 papers	12,742 citations	30070 54 h-index	33894 99 g-index
259 all docs	259 docs citations	259 times ranked	8045 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	Microplastics in sewage sludge from the wastewater treatment plants in China. Water Research, 2018, 142, 75-85.	11.3	675
3	High-solid anaerobic digestion of sewage sludge under mesophilic conditions: Feasibility study. Bioresource Technology, 2012, 104, 150-156.	9.6	354
4	Critical review on dewatering of sewage sludge: Influential mechanism, conditioning technologies and implications to sludge re-utilizations. Water Research, 2020, 180, 115912.	11.3	343
5	High-solids anaerobic co-digestion of sewage sludge and food waste in comparison with mono digestions: Stability and performance. Waste Management, 2013, 33, 308-316.	7.4	322
6	Effect of Increasing Total Solids Contents on Anaerobic Digestion of Food Waste under Mesophilic Conditions: Performance and Microbial Characteristics Analysis. PLoS ONE, 2014, 9, e102548.	2.5	283
7	Effects of thermal hydrolysis on organic matter solubilization and anaerobic digestion of high solid sludge. Chemical Engineering Journal, 2015, 264, 174-180.	12.7	274
8	Enhancement in adsorption potential of microplastics in sewage sludge for metal pollutants after the wastewater treatment process. Water Research, 2019, 157, 228-237.	11.3	239
9	Revealing the Mechanisms of Polyethylene Microplastics Affecting Anaerobic Digestion of Waste Activated Sludge. Environmental Science & Technology, 2019, 53, 9604-9613.	10.0	199
10	Magnetite Triggering Enhanced Direct Interspecies Electron Transfer: A Scavenger for the Blockage of Electron Transfer in Anaerobic Digestion of High-Solids Sewage Sludge. Environmental Science & Technology, 2018, 52, 7160-7169.	10.0	198
11	Effect of different carbon sources on denitrification performance, microbial community structure and denitrification genes. Science of the Total Environment, 2018, 634, 195-204.	8.0	197
12	Changes of heavy metal speciation during high-solid anaerobic digestion of sewage sludge. Bioresource Technology, 2013, 131, 152-158.	9.6	183
13	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
14	New insight into chemical changes of dissolved organic matter during anaerobic digestion of dewatered sewage sludge using EEM-PARAFAC and two-dimensional FTIR correlation spectroscopy. Bioresource Technology, 2014, 159, 412-420.	9.6	168
15	Free-standing Ti3C2Tx MXene film as binder-free electrode in capacitive deionization with an ultrahigh desalination capacity. Chemical Engineering Journal, 2020, 384, 123329.	12.7	160
16	Perspective on enhancing the anaerobic digestion of waste activated sludge. Journal of Hazardous Materials, 2020, 389, 121847.	12.4	160
17	Simultaneous enhancement of methane production and methane content in biogas from waste activated sludge and perennial ryegrass anaerobic co-digestion: The effects of pH and C/N ratio. Bioresource Technology, 2016, 216, 323-330.	9.6	145
18	Interfacial interaction between micro/nanoplastics and typical PPCPs and nanoplastics removal via electrosorption from an aqueous solution. Water Research, 2020, 184, 116100.	11.3	137

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19	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
20	Flow of sewage sludge-borne phthalate esters (PAEs) from human release to human intake: Implication for risk assessment of sludge applied to soil. Science of the Total Environment, 2014, 476-477, 242-249.	8.0	117
21	New insights into the enhanced performance of high solid anaerobic digestion with dewatered sludge by thermal hydrolysis: Organic matter degradation and methanogenic pathways. Journal of Hazardous Materials, 2018, 342, 1-9.	12.4	115
22	Effects of Metal Nanoparticles on Methane Production from Waste-Activated Sludge and Microorganism Community Shift in Anaerobic Granular Sludge. Scientific Reports, 2016, 6, 25857.	3.3	109
23	An overview of removing heavy metals from sewage sludge: Achievements and perspectives. Environmental Pollution, 2020, 266, 115375.	7.5	107
24	Revisiting Microplastics in Landfill Leachate: Unnoticed Tiny Microplastics and Their Fate in Treatment Works. Water Research, 2021, 190, 116784.	11.3	106
25	Enhanced dewaterability of sludge during anaerobic digestion with thermal hydrolysis pretreatment: New insights through structure evolution. Water Research, 2018, 131, 177-185.	11.3	101
26	Combining Batteryâ€Type and Pseudocapacitive Charge Storage in Ag/Ti₃C₂T_x MXene Electrode for Capturing Chloride Ions with High Capacitance and Fast Ion Transport. Advanced Science, 2020, 7, 2000621.	11.2	101
27	Humification in extracellular polymeric substances (EPS) dominates methane release and EPS reconstruction during the sludge stabilization of high-solid anaerobic digestion. Water Research, 2020, 175, 115686.	11.3	99
28	Biostimulation by direct voltage to enhance anaerobic digestion of waste activated sludge. RSC Advances, 2016, 6, 1581-1588.	3.6	98
29	Impact of a high ammonia-ammonium-pH system on methane-producing archaea and sulfate-reducing bacteria in mesophilic anaerobic digestion. Bioresource Technology, 2017, 245, 598-605.	9.6	92
30	Effects of chemical pretreatments on microplastic extraction in sewage sludge and their physicochemical characteristics. Water Research, 2020, 171, 115379.	11.3	91
31	Improving the treatment of waste activated sludge using calcium peroxide. Water Research, 2020, 187, 116440.	11.3	90
32	Metagenomic characterization of the enhanced performance of anaerobic fermentation of waste activated sludge with CaO2 addition at ambient temperature: Fatty acid biosynthesis metabolic pathway and CAZymes. Water Research, 2020, 170, 115309.	11.3	88
33	Organic compounds evolution and sludge properties variation along partial nitritation and subsequent anammox processes treating reject water. Water Research, 2020, 184, 116197.	11.3	88
34	Effects of thermal hydrolysis on the metabolism of amino acids in sewage sludge in anaerobic digestion. Waste Management, 2019, 88, 309-318.	7.4	86
35	Role of redox-active biochar with distinctive electrochemical properties to promote methane production in anaerobic digestion of waste activated sludge. Journal of Cleaner Production, 2021, 278, 123212.	9.3	83
36	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

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37	The influence of organic-binding metals on the biogas conversion of sewage sludge. Water Research, 2017, 126, 329-341.	11.3	81
38	Coadsorption behavior and mechanism of ciprofloxacin and Cu(II) on graphene hydrogel wetted surface. Chemical Engineering Journal, 2020, 380, 122387.	12.7	81
39	Î²-Carrageenan/Sodium alginate double-network hydrogel with enhanced mechanical properties, anti-swelling, and adsorption capacity. Chemosphere, 2019, 237, 124417.	8.2	80
40	Mesoporous amorphous FePO4 nanosphere@Graphene as a faradic electrode in capacitive deionization for high-capacity and fast removal of NaCl from water. Chemical Engineering Journal, 2019, 370, 938-943.	12.7	80
41	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
42	Rheology evolution of sludge through high-solid anaerobic digestion. Bioresource Technology, 2014, 174, 6-10.	9.6	71
43	New insights into the effect of sludge proteins on the hydrophilic/hydrophobic properties that improve sludge dewaterability during anaerobic digestion. Water Research, 2020, 173, 115503.	11.3	68
44	Microplastics Mitigation in Sewage Sludge through Pyrolysis: The Role of Pyrolysis Temperature. Environmental Science and Technology Letters, 2020, 7, 961-967.	8.7	67
45	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
46	Biodegradation of polyacrylamide by anaerobic digestion under mesophilic condition and its performance in actual dewatered sludge system. Bioresource Technology, 2014, 153, 55-61.	9.6	63
47	Emerging Trends and Prospects for Municipal Wastewater Management in China. ACS ES&T Engineering, 2022, 2, 323-336.	7.6	63
48	Effect of the micron-sized silica particles (MSSP) on biogas conversion of sewage sludge. Water Research, 2017, 115, 220-228.	11.3	62
49	Enhancing acidogenic fermentation of waste activated sludge via isoelectric-point pretreatment: Insights from physical structure and interfacial thermodynamics. Water Research, 2020, 185, 116237.	11.3	62
50	Microbial responses and metabolic pathways reveal the recovery mechanism of an anaerobic digestion system subjected to progressive inhibition by ammonia. Chemical Engineering Journal, 2018, 350, 312-323.	12.7	61
51	Principles and advancements in improving anaerobic digestion of organic waste via direct interspecies electron transfer. Renewable and Sustainable Energy Reviews, 2021, 148, 111367.	16.4	61
52	Enhancing methanogenic fermentation of waste activated sludge via isoelectric-point pretreatment: Insights from interfacial thermodynamics, electron transfer and microbial community. Water Research, 2021, 197, 117072.	11.3	59
53	Metabolic adaptation of microbial communities to ammonium stress in a high solid anaerobic digester with dewatered sludge. Scientific Reports, 2016, 6, 28193.	3.3	58
54	Evaluation of thermal hydrolysis efficiency of mechanically dewatered sewage sludge via rheological measurement. Water Research, 2017, 116, 34-43.	11.3	57

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55	PHBV polymer supported denitrification system efficiently treated high nitrate concentration wastewater: Denitrification performance, microbial community structure evolution and key denitrifying bacteria. Chemosphere, 2018, 197, 96-104.	8.2	56
56	Effect of aromatic repolymerization of humic acid-like fraction on digestate phytotoxicity reduction during high-solid anaerobic digestion for stabilization treatment of sewage sludge. Water Research, 2018, 143, 436-444.	11.3	56
57	A new method for the simultaneous enhancement of methane yield and reduction of hydrogen sulfide production in the anaerobic digestion of waste activated sludge. Bioresource Technology, 2017, 243, 914-921.	9.6	55
58	Rotating Magnetic Field-Assisted Adsorption Mechanism of Pollutants on Mechanically Strong Sodium Alginate/Graphene/<scp>l</scp>-Cysteine Beads in Batch and Fixed-Bed Column Systems. Environmental Science & Technology, 2018, 52, 13925-13934.	10.0	55
59	Evaluation the impact of polystyrene micro and nanoplastics on the methane generation by anaerobic digestion. Ecotoxicology and Environmental Safety, 2020, 205, 111095.	6.0	53
60	Pathways in bacterial and archaeal communities dictated by ammonium stress in a high solid anaerobic digester with dewatered sludge. Bioresource Technology, 2017, 241, 95-102.	9.6	52
61	Development of nano-CaO2-coated clinoptilolite for enhanced phosphorus adsorption and simultaneous removal of COD and nitrogen from sewage. Chemical Engineering Journal, 2017, 328, 35-43.	12.7	51
62	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
63	A novel green composite conductive material enhancing anaerobic digestion of waste activated sludge via improving electron transfer and metabolic activity. Water Research, 2022, 220, 118687.	11.3	51
64	Ultrasonic-pretreated waste activated sludge hydrolysis and volatile fatty acid accumulation under alkaline conditions: Effect of temperature. Journal of Biotechnology, 2012, 159, 27-31.	3.8	49
65	Partition and fate analysis of fluoroquinolones in sewage sludge during anaerobic digestion with thermal hydrolysis pretreatment. Science of the Total Environment, 2017, 581-582, 715-721.	8.0	49
66	Reforming sewage sludge pyrolysis volatile with Fe-embedded char: Minimization of liquid product yield. Waste Management, 2018, 73, 464-475.	7.4	48
67	Particle size reduction of rice straw enhances methane production under anaerobic digestion. Bioresource Technology, 2019, 293, 122043.	9.6	48
68	Rhamnolipid pretreatment enhances methane production from two-phase anaerobic digestion of waste activated sludge. Water Research, 2021, 194, 116909.	11.3	47
69	Waste-Activated Sludge Fermentation for Polyacrylamide Biodegradation Improved by Anaerobic Hydrolysis and Key Microorganisms Involved in Biological Polyacrylamide Removal. Scientific Reports, 2015, 5, 11675.	3.3	46
70	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
71	Hydrothermal treatment of erythromycin fermentation residue: Harmless performance and bioresource properties. Resources, Conservation and Recycling, 2020, 161, 104952.	10.8	44
72	Unraveling the water states of waste-activated sludge through transverse spin-spin relaxation time of low-field NMR. Water Research, 2019, 155, 266-274.	11.3	43

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73	Nitrogen transformation during pyrolysis of oilfield sludge with high polymer content. Chemosphere, 2019, 219, 383-389.	8.2	43
74	High-solid anaerobic digestion of sewage sludge: achievements and perspectives. Frontiers of Environmental Science and Engineering, 2021, 15, 1.	6.0	43
75	Evaluation on the Nanoscale Zero Valent Iron Based Microbial Denitrification for Nitrate Removal from Groundwater. Scientific Reports, 2015, 5, 12331.	3.3	42
76	Mechanism insights into bio-floc bound water transformation based on synchrotron X-ray computed microtomography and viscoelastic acoustic response analysis. Water Research, 2018, 142, 480-489.	11.3	42
77	A review on application of single and composite conductive additives for anaerobic digestion: Advances, challenges and prospects. Resources, Conservation and Recycling, 2021, 174, 105844.	10.8	42
78	Effect of anaerobic digestion on sequential pyrolysis kinetics of organic solid wastes using thermogravimetric analysis and distributed activation energy model. Bioresource Technology, 2017, 227, 297-307.	9.6	41
79	Post-thermal hydrolysis and centrate recirculation for enhancing anaerobic digestion of sewage sludge. Waste Management, 2019, 92, 39-48.	7.4	41
80	The three-stage effect of hydrothermal treatment on sludge physical-chemical properties: Evolution of polymeric substances and their interaction with physicochemical properties. Water Research, 2022, 211, 118043.	11.3	41
81	Two-phase high solid anaerobic digestion with dewatered sludge: Improved volatile solid degradation and specific methane generation by temperature and pH regulation. Bioresource Technology, 2018, 259, 253-258.	9.6	40
82	Transcriptomics Uncovers the Response of Anammox Bacteria to Dissolved Oxygen Inhibition and the Subsequent Recovery Mechanism. Environmental Science & Technology, 2020, 54, 14674-14685.	10.0	40
83	Zinc Spinel Ferrite Nanoparticles as a Pseudocapacitive Electrode with Ultrahigh Desalination Capacity and Long-Term Stability. Environmental Science and Technology Letters, 2020, 7, 118-125.	8.7	40
84	Polybrominated diphenyl ethers (PBDEs) and dechlorane plus (DP) in a conventional wastewater treatment plant (WWTP) in Shanghai: Seasonal variations and potential sources. Science of the Total Environment, 2014, 487, 342-349.	8.0	39
85	Methanogenic population dynamics regulated by bacterial community responses to protein-rich organic wastes in a high solid anaerobic digester. Chemical Engineering Journal, 2017, 317, 444-453.	12.7	39
86	Development of montmorillonite-supported nano CaO2 for enhanced dewatering of waste-activated sludge by synergistic effects of filtration aid and peroxidation. Chemical Engineering Journal, 2017, 307, 418-426.	12.7	39
87	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
88	Nano-/Micro-confined Water in Graphene Hydrogel as Superadsorbents for Water Purification. Nano-Micro Letters, 2020, 12, 2.	27.0	39
89	Analysis on carbon dioxide emission reduction during the anaerobic synergetic digestion technology of sludge and kitchen waste: Taking kitchen waste synergetic digestion project in Zhenjiang as an example. Waste Management, 2017, 69, 360-364.	7.4	39
90	A review: factors affecting excess sludge anaerobic digestion for volatile fatty acids production. Water Science and Technology, 2015, 72, 678-688.	2.5	38

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91	Carbonization of heavy metal impregnated sewage sludge oriented towards potential co-disposal. Journal of Hazardous Materials, 2017, 321, 132-145.	12.4	38
92	Rapid and strong biocidal effect of ferrate on sulfidogenic and methanogenic sewer biofilms. Water Research, 2020, 169, 115208.	11.3	38
93	Effects of humic matter on the anaerobic digestion of sewage sludge: New insights from sludge structure. Chemosphere, 2020, 243, 125421.	8.2	38
94	Microbial production of lactic acid from food waste: Latest advances, limits, and perspectives. Bioresource Technology, 2022, 345, 126052.	9.6	38
95	Decrease the effective temperature of hydrothermal treatment for sewage sludge deep dewatering: Mechanistic of tannic acid aided. Water Research, 2022, 217, 118450.	11.3	37
96	High-solid Anaerobic Co-digestion of Sewage Sludge and Cattle Manure: The Effects of Volatile Solid Ratio and pH. Scientific Reports, 2016, 6, 35194.	3.3	36
97	Hyperthermophilic pretreatment composting to produce high quality sludge compost with superior humification degree and nitrogen retention. Chemical Engineering Journal, 2022, 429, 132247.	12.7	36
98	Characterizing the sludge moisture distribution during anaerobic digestion process through various approaches. Science of the Total Environment, 2019, 675, 184-191.	8.0	35
99	Effects of temperature variation on wastewater sludge electro-dewatering. Journal of Cleaner Production, 2019, 214, 873-880.	9.3	34
100	Influential mechanism of water occurrence states of waste-activated sludge: Potential linkage between water-holding capacity and molecular compositions of EPS. Water Research, 2022, 213, 118169.	11.3	34
101	Changes in physicochemical and leachate characteristics of microplastics during hydrothermal treatment of sewage sludge. Water Research, 2022, 222, 118876.	11.3	33
102	Exploring the potential of iTRAQ proteomics for tracking the transformation of extracellular proteins from enzyme-disintegrated waste activated sludge. Bioresource Technology, 2017, 225, 75-83.	9.6	32
103	Enhancing Anaerobic Digestion of Waste Activated Sludge by Solidâ€“Liquid Separation via Isoelectric Point Pretreatment. ACS Sustainable Chemistry and Engineering, 2018, 6, 14774-14784.	6.7	32
104	Spatial Configuration of Extracellular Organic Substances Responsible for the Biogas Conversion of Sewage Sludge. ACS Sustainable Chemistry and Engineering, 2018, 6, 8308-8316.	6.7	32
105	Cation exchange resin pretreatment enhancing methane production from anaerobic digestion of waste activated sludge. Water Research, 2022, 212, 118130.	11.3	32
106	Methane-rich biogas production from waste-activated sludge with the addition of ferric chloride under a thermophilic anaerobic digestion system. RSC Advances, 2015, 5, 38538-38546.	3.6	31
107	Ferroferric oxide promotes metabolism in Anaerolineae other than microbial syntrophy in anaerobic methanogenesis of antibiotic fermentation residue. Science of the Total Environment, 2021, 758, 143601.	8.0	31
108	Degradation of Extracellular Polymeric Substances (EPS) in Anaerobic Digestion of Dewatered Sludge. Procedia Environmental Sciences, 2013, 18, 515-521.	1.4	30

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109	Thermal analysis and 454 pyrosequencing to evaluate the performance and mechanisms for deep stabilization and reduction of high-solid anaerobically digested sludge using biodrying process. Bioresource Technology, 2015, 175, 245-253.	9.6	30
110	The potential exposure and transmission risk of SARS-CoV-2 through sludge treatment and disposal. Resources, Conservation and Recycling, 2020, 162, 105043.	10.8	30
111	Impact of application of heat-activated persulfate oxidation treated erythromycin fermentation residue as a soil amendment: Soil chemical properties and antibiotic resistance. Science of the Total Environment, 2020, 736, 139668.	8.0	30
112	Two-dimensional FTIR correlation spectroscopy reveals chemical changes in dissolved organic matter during the biodrying process of raw sludge and anaerobically digested sludge. RSC Advances, 2015, 5, 82087-82096.	3.6	29
113	Pyrolysis of the mixture of MSWI fly ash and sewage sludge for co-disposal: Effect of ferrous/ferric sulfate additives. Waste Management, 2018, 75, 340-351.	7.4	29
114	Influential mechanism of water occurrence states of waste-activated sludge: specifically focusing on the roles of EPS micro-spatial distribution and cation-dominated interfacial properties. Water Research, 2021, 202, 117461.	11.3	29
115	Thermogravimetryâ€“Fourier transform infrared spectrometryâ€“mass spectrometry technique to evaluate the effect of anaerobic digestion on gaseous products of sewage sludge sequential pyrolysis. Journal of Analytical and Applied Pyrolysis, 2017, 126, 288-297.	5.5	29
116	Alkaline thermal hydrolysis of sewage sludge to produce high-quality liquid fertilizer rich in nitrogen-containing plant-growth-promoting nutrients and biostimulants. Water Research, 2022, 211, 118036.	11.3	29
117	Polyethylene terephthalate microplastic fibers increase the release of extracellular antibiotic resistance genes during sewage sludge anaerobic digestion. Water Research, 2022, 217, 118426.	11.3	29
118	In Situ Reforming of the Volatile by Char during Sewage Sludge Pyrolysis. Energy & Fuels, 2016, 30, 10396-10403.	5.1	28
119	Biomethane production by typical straw anaerobic digestion: Deep insights of material compositions and surface properties. Bioresource Technology, 2020, 313, 123643.	9.6	28
120	Revealing the Mechanism of Biochar Enhancing the Production of Medium Chain Fatty Acids from Waste Activated Sludge Alkaline Fermentation Liquor. ACS ES&T Water, 2021, 1, 1014-1024.	4.6	28
121	Enhanced sludge dewaterability via ozonation catalyzed by sludge derived biochar loaded with MnFe2O4: Performance and mechanism investigation. Journal of Cleaner Production, 2021, 323, 129182.	9.3	28
122	Effects of stepwise thermal hydrolysis and solid-liquid separation on three different sludge organic matter solubilization and biodegradability. Bioresource Technology, 2019, 290, 121753.	9.6	27
123	Novel CaO2 beads used in the anaerobic fermentation of iron-rich sludge for simultaneous short-chain fatty acids and phosphorus recovery under ambient conditions. Bioresource Technology, 2021, 322, 124553.	9.6	27
124	The evaluation of GHG emissions from Shanghai municipal wastewater treatment plants based on IPCC and operational data integrated methods (ODIM). Science of the Total Environment, 2021, 797, 148967.	8.0	27
125	Different sizes of polystyrene microplastics induced distinct microbial responses of anaerobic granular sludge. Water Research, 2022, 220, 118607.	11.3	27
126	Earthworm eco-physiological characteristics and quantification of earthworm feeding in vermifiltration system for sewage sludge stabilization using stable isotopic natural abundance. Journal of Hazardous Materials, 2014, 276, 353-361.	12.4	26

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127	Development of sludge-derived mesoporous material with loaded nano CaO2 and doped Fe for re-utilization of dewatered waste-activated sludge as dewatering aids. Chemical Engineering Journal, 2018, 335, 161-168.	12.7	26
128	Multiple selection of resistance genes in arable soil amended with cephalosporin fermentation residue. Soil Biology and Biochemistry, 2019, 136, 107538.	8.8	26
129	Pretreatment-promoted sludge fermentation liquor improves biological nitrogen removal: Molecular insight into the role of dissolved organic matter. Bioresource Technology, 2019, 293, 122082.	9.6	26
130	Sludge age impacted the distribution, occurrence state and structure of organic compounds in activated sludge and affected the anaerobic degradability. Chemical Engineering Journal, 2020, 384, 123261.	12.7	26
131	Aging microplastics in wastewater pipeline networks and treatment processes: Physicochemical characteristics and Cd adsorption. Science of the Total Environment, 2021, 797, 148940.	8.0	26
132	Treatment of printing and dyeing wastewater using MBBR followed by membrane separation process. Desalination and Water Treatment, 2014, 52, 4562-4567.	1.0	25
133	Occurrence of hexabromocyclododecane (HBCD) in sewage sludge from Shanghai: Implications for source and environmental burden. Chemosphere, 2015, 118, 207-212.	8.2	25
134	Comparing two start up strategies and the effect of temperature fluctuations on the performance of mainstream anammox reactors. Chemosphere, 2018, 209, 632-639.	8.2	25
135	Free-conditioning dewatering of sewage sludge through in situ propane hydrate formation. Water Research, 2018, 145, 464-472.	11.3	25
136	Dosing effect of nano zero valent iron (NZVI) on the dark hydrogen fermentation performance via lake algae and food waste co-digestion. Energy Reports, 2020, 6, 3192-3199.	5.1	25
137	Assessment of Heterotrophic Growth Supported by Soluble Microbial Products in Anammox Biofilm using Multidimensional Modeling. Scientific Reports, 2016, 6, 27576.	3.3	24
138	Mechanism analysis to improve sludge dewaterability during anaerobic digestion based on moisture distribution. Chemosphere, 2019, 227, 247-255.	8.2	24
139	Variations of heavy metals, nutrients, POPs and particle size distribution during â€œsludge anaerobic digestion-solar drying-land utilization processâ€• Case study in China. Science of the Total Environment, 2021, 801, 149609.	8.0	24
140	Recognition of the key chemical constituents of sewage sludge for biogas production. RSC Advances, 2017, 7, 2033-2037.	3.6	23
141	Sustainable disposal of excess sludge: Post-thermal hydrolysis for anaerobically digested sludge. Journal of Cleaner Production, 2021, 321, 128893.	9.3	23
142	Coconut shell ash enhances short-chain fatty acids production from anaerobic algae fermentation. Bioresource Technology, 2021, 338, 125494.	9.6	23
143	Interactions between virus surrogates and sewage sludge vary by viral analyte: Recovery, persistence, and sorption. Water Research, 2022, 210, 117995.	11.3	23
144	The synthetic effect on volatile fatty acid disinhibition and methane production enhancement by dosing FeCl₃in a sludge thermophilic anaerobic digestion system. RSC Advances, 2016, 6, 21090-21098.	3.6	22

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145	Effects of free nitrous acid and nitrite on two-phase anaerobic digestion of waste activated sludge: A preliminary study. Science of the Total Environment, 2019, 654, 1064-1071.	8.0	22
146	Integrating multi-state and multi-phase treatment for anaerobic sludge digestion to enhance recovery of bio-energy. Science of the Total Environment, 2020, 698, 134196.	8.0	22
147	New insight into the effect of thermal hydrolysis on high solid sludge anaerobic digestion: Conversion pathway of volatile sulphur compounds. Chemosphere, 2020, 244, 125466.	8.2	22
148	Composting of oxytetracycline fermentation residue in combination with hydrothermal pretreatment for reducing antibiotic resistance genes enrichment. Bioresource Technology, 2020, 318, 124271.	9.6	22
149	Effect of gentamicin mycelial residues disintegration by microwave-alkaline pretreatment on methane production and gentamicin degradation during anaerobic digestion. Chemical Engineering Journal, 2021, 414, 128790.	12.7	22
150	Thermal Hydrolysis Pretreatment-Anaerobic Digestion Promotes Plant-Growth Biostimulants Production from Sewage Sludge by Upregulating Aromatic Amino Acids Transformation and Quinones Supply. Environmental Science & Technology, 2022, 56, 1938-1950.	10.0	22
151	Contributions of MOF-808 to methane production from anaerobic digestion of waste activated sludge. Water Research, 2022, 220, 118653.	11.3	22
152	Development of polymeric iron/zirconium-pillared clinoptilolite for simultaneous removal of multiple inorganic contaminants from wastewater. Chemical Engineering Journal, 2018, 347, 819-827.	12.7	21
153	Alkaline-thermal pretreatment of spectinomycin mycelial residues: Insights on anaerobic biodegradability and the fate of antibiotic resistance genes. Chemosphere, 2020, 261, 127821.	8.2	21
154	Pretreatment using UV combined with CaO2 for the anaerobic digestion of waste activated sludge: Mechanistic modeling for attenuation of trace organic contaminants. Journal of Hazardous Materials, 2021, 402, 123484.	12.4	20
155	Targeted clean extraction of phosphorus from waste activated sludge: From a new perspective of phosphorus occurrence states to an innovative approach through acidic cation exchange resin. Water Research, 2022, 215, 118190.	11.3	20
156	Electrochemical pretreatment of waste activated sludge: effect of process conditions on sludge disintegration degree and methane production. Environmental Technology (United Kingdom), 2016, 37, 2935-2944.	2.2	19
157	A new process to improve short-chain fatty acids and bio-methane generation from waste activated sludge. Journal of Environmental Sciences, 2016, 43, 159-168.	6.1	19
158	Effect of temperature on tertiary nitrogen removal from municipal wastewater in a PHBV/PLA-supported denitrification system. Environmental Science and Pollution Research, 2019, 26, 26893-26899.	5.3	19
159	Novel perspective for urban water resource management: 5R generation. Frontiers of Environmental Science and Engineering, 2021, 15, 1.	6.0	19
160	Deciphering the internal driving mechanism of microbial community for carbon conversion and nitrogen fixation during food waste composting with multifunctional microbial inoculation. Bioresource Technology, 2022, 360, 127623.	9.6	19
161	Evaluation of Biogas Performance and Process Stability from Food, Kitchen, and Fruit/Vegetable Waste by Mono-, Co-, and Tridigestion. Energy & Fuels, 2020, 34, 12734-12742.	5.1	18
162	Calcium peroxide significantly enhances volatile solids destruction in aerobic sludge digestion through improving sludge biodegradability. Bioresource Technology, 2022, 346, 126655.	9.6	18

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163	Scavenging ROS to Alleviate Acute Liver Injury by ZnOâ€NiO@COOH. Advanced Science, 2022, 9, e2103982.	11.2	18
164	Effect of Magnet-Fe3O4 composite structure on methane production during anaerobic sludge digestion: Establishment of direct interspecies electron transfer. Renewable Energy, 2022, 188, 52-60.	8.9	18
165	Hygienic treatment and energy recovery of dead animals by high solid co-digestion with vinasse under mesophilic condition: feasibility study. Journal of Hazardous Materials, 2015, 297, 320-328.	12.4	17
166	Model-based assessment of estrogen removal by nitrifying activated sludge. Chemosphere, 2018, 197, 430-437.	8.2	17
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