Shubiao Wu

List of Publications by Year
in descending order

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101	6,201	66315	71651
papers	citations	42 h-index	76 g-index

104	104	104	5613
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Development of constructed wetlands inÂperformance intensifications for wastewater treatment: A nitrogen and organic matter targeted review. Water Research, 2014, 57, 40-55.	5.3	489
2	Evaluation of slow pyrolyzed wood and rice husks biochar for adsorption of ammonium nitrogen from piggery manure anaerobic digestate slurry. Science of the Total Environment, 2015, 505, 102-112.	3.9	412
3	Humic substances developed during organic waste composting: Formation mechanisms, structural properties, and agronomic functions. Science of the Total Environment, 2019, 662, 501-510.	3.9	276
4	Phosphate removal from aqueous solution using iron oxides: Adsorption, desorption and regeneration characteristics. Journal of Colloid and Interface Science, 2018, 528, 145-155.	5.0	247
5	Batch anaerobic co-digestion of pig manure with dewatered sewage sludge under mesophilic conditions. Applied Energy, 2014, 128, 175-183.	5.1	210
6	Sanitation in constructed wetlands: A review on the removal of human pathogens and fecal indicators. Science of the Total Environment, 2016, 541, 8-22.	3.9	193
7	Treatment of anaerobic digested effluent in biochar-packed vertical flow constructed wetland columns: Role of media and tidal operation. Science of the Total Environment, 2017, 592, 197-205.	3.9	174
8	Treatment of industrial effluents in constructed wetlands: Challenges, operational strategies and overall performance. Environmental Pollution, 2015, 201, 107-120.	3.7	166
9	Application of machine learning methods for the prediction of organic solid waste treatment and recycling processes: A review. Bioresource Technology, 2021, 319, 124114.	4.8	160
10	Role of Nutrient-Enriched Biochar as a Soil Amendment during Maize Growth: Exploring Practical Alternatives to Recycle Agricultural Residuals and to Reduce Chemical Fertilizer Demand. Sustainability, 2019, 11, 3211.	1.6	155
11	Phosphorus recovery from biogas fermentation liquid by Caâ€“Mg loaded biochar. Journal of Environmental Sciences, 2015, 29, 106-114.	3.2	140
12	Evaluation of a lab-scale tidal flow constructed wetland performance: Oxygen transfer capacity, organic matter and ammonium removal. Ecological Engineering, 2011, 37, 1789-1795.	1.6	128
13	Interactions of high-rate nitrate reduction and heavy metal mitigation in iron-carbon-based constructed wetlands for purifying contaminated groundwater. Water Research, 2020, 169, 115285.	5.3	127
14	Performance of integrated household constructed wetland for domestic wastewater treatment in rural areas. Ecological Engineering, 2011, 37, 948-954.	1.6	123
15	Performance and kinetic evaluation of semi-continuously fed anaerobic digesters treating food waste: Role of trace elements. Bioresource Technology, 2015, 178, 297-305.	4.8	123
16	Sulphur transformations in constructed wetlands for wastewater treatment: A review. Ecological Engineering, 2013, 52, 278-289.	1.6	118
17	Phosphate recovery from liquid fraction of anaerobic digestate using four slow pyrolyzed biochars: Dynamics of adsorption, desorption and regeneration. Journal of Environmental Management, 2017, 201, 260-267.	3.8	108
18	Probing the efficiency of magnetically modified biomass-derived biochar for effective phosphate removal. Journal of Environmental Management, 2020, 253, 109730.	3.8	107

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19	Critical Review: Biogeochemical Networking of Iron in Constructed Wetlands for Wastewater Treatment. Environmental Science & Technology, 2019, 53, 7930-7944.	4.6	90
20	Effects of organic loading rate and effluent recirculation on the performance of two-stage anaerobic digestion of vegetable waste. Bioresource Technology, 2013, 146, 556-561.	4.8	88
21	Synergistic effect of alkaline pretreatment and Fe dosing on batch anaerobic digestion of maize straw. Applied Energy, 2015, 158, 55-64.	5.1	86
22	The performance efficiency of bioaugmentation to prevent anaerobic digestion failure from ammonia and propionate inhibition. Bioresource Technology, 2017, 231, 94-100.	4.8	85
23	How substrate influences nitrogen transformations in tidal flow constructed wetlands treating high ammonium wastewater?. Ecological Engineering, 2014, 73, 478-486.	1.6	74
24	Anaerobic digestion characteristics of pig manures depending on various growth stages and initial substrate concentrations in a scaled pig farm in Southern China. Bioresource Technology, 2014, 156, 63-69.	4.8	70
25	Intensified nitrogen and phosphorus removal in a novel electrolysis-integrated tidal flow constructed wetland system. Water Research, 2014, 59, 37-45.	5.3	70
26	Nutrient recovery from anaerobically digested chicken slurry via struvite: Performance optimization and interactions with heavy metals and pathogens. Science of the Total Environment, 2018, 635, 1-9.	3.9	70
27	Rethinking Intensification of Constructed Wetlands as a Green Eco-Technology for Wastewater Treatment. Environmental Science & Technology, 2018, 52, 1693-1694.	4.6	69
28	Nanobubble Technology in Environmental Engineering: Revolutionization Potential and Challenges. Environmental Science & Technology, 2019, 53, 7175-7176.	4.6	67
29	Formation of struvite from agricultural wastewaters and its reuse on farmlands: Status and hindrances to closing the nutrient loop. Journal of Environmental Management, 2019, 230, 1-13.	3.8	67
30	Evaluation of ammonium adsorption in biochar-fixed beds for treatment of anaerobically digested swine slurry: Experimental optimization and modeling. Science of the Total Environment, 2016, 563-564, 1095-1104.	3.9	64
31	Performance and kinetic evaluation of a semi-continuously fed anaerobic digester treating food waste: Effect of trace elements on the digester recovery and stability. Chemosphere, 2014, 117, 477-485.	4.2	62
32	Integrated approach to sustain biogas production in anaerobic digestion of chicken manure under recycled utilization of liquid digestate: Dynamics of ammonium accumulation and mitigation control. Bioresource Technology, 2016, 205, 75-81.	4.8	61
33	Treatment of anaerobic digestate supernatant in microbial fuel cell coupled constructed wetlands: Evaluation of nitrogen removal, electricity generation, and bacterial community response. Science of the Total Environment, 2017, 580, 339-346.	3.9	58
34	Exploring Utilization of Recycled Agricultural Biomass in Constructed Wetlands: Characterization of the Driving Force for High-Rate Nitrogen Removal. Environmental Science & Technology, 2019, 53, 1258-1268.	4.6	58
35	Fungal Pretreatment by Phanerochaete chrysosporium for Enhancement of Biogas Production from Corn Stover Silage. Applied Biochemistry and Biotechnology, 2014, 174, 1907-1918.	1.4	54
36	Evaluation of batch anaerobic co-digestion of palm pressed fiber and cattle manure under mesophilic conditions. Waste Management, 2014, 34, 1984-1991.	3.7	54

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37	Dynamics of organic matter, nitrogen and phosphorus removal and their interactions in a tidal operated constructed wetland. Journal of Environmental Management, 2015, 151, 310-316.	3.8	54
38	How the novel integration of electrolysis in tidal flow constructed wetlands intensifies nutrient removal and odor control. Bioresource Technology, 2014, 169, 605-613.	4.8	51
39	Optimization and evaluation of an air-recirculated stripping for ammonia removal from the anaerobic digestate of pig manure. Chemical Engineering Research and Design, 2015, 94, 350-357.	2.7	48
40	Nitrogen removal responses to biochar addition in intermittent-aerated subsurface flow constructed wetland microcosms: Enhancing role and mechanism. Ecological Engineering, 2019, 128, 57-65.	1.6	48
41	Dynamics of nitrogen transformation depending on different operational strategies in laboratory-scale tidal flow constructed wetlands. Science of the Total Environment, 2014, 487, 49-56.	3.9	46
42	Nitrogen removal in response to the varying C/N ratios in subsurface flow constructed wetland microcosms with biochar addition. Environmental Science and Pollution Research, 2019, 26, 3382-3391.	2.7	44
43	Sulfur transformations in pilot-scale constructed wetland treating high sulfate-containing contaminated groundwater: A stable isotope assessment. Water Research, 2011, 45, 6688-6698.	5.3	43
44	Synthesis of humic-like acid from biomass pretreatment liquor: Quantitative appraisal of electron transferring capacity and metal-binding potential. Journal of Cleaner Production, 2020, 255, 120243.	4.6	43
45	Performance of two-stage vegetable waste anaerobic digestion depending on varying recirculation rates. Bioresource Technology, 2014, 162, 266-272.	4.8	42
46	Innovative operation of microbial fuel cell-based biosensor for selective monitoring of acetate during anaerobic digestion. Science of the Total Environment, 2019, 655, 1439-1447.	3.9	41
47	Microbial Pretreatment of Corn Stovers by Solid-State Cultivation of Phanerochaete chrysosporium for Biogas Production. Applied Biochemistry and Biotechnology, 2014, 172, 1365-1376.	1.4	39
48	Performance enhancement of leaf vegetable waste in two-stage anaerobic systems under high organic loading rate: Role of recirculation and hydraulic retention time. Applied Energy, 2015, 147, 279-286.	5.1	39
49	Exploring stability indicators for efficient monitoring of anaerobic digestion of pig manure under perturbations. Waste Management, 2019, 91, 139-146.	3.7	39
50	Biochar seeding promotes struvite formation, but accelerates heavy metal accumulation. Science of the Total Environment, 2019, 652, 623-632.	3.9	39
51	Dynamics of nitrobenzene degradation and interactions with nitrogen transformations in laboratory-scale constructed wetlands. Bioresource Technology, 2013, 133, 529-536.	4.8	37
52	Monitoring Volatile Fatty Acids and Carbonate Alkalinity in Anaerobic Digestion: Titration Methodologies. Chemical Engineering and Technology, 2016, 39, 599-610.	0.9	37
53	Mechanisms of genuine humic acid evolution and its dynamic interaction with methane production in anaerobic digestion processes. Chemical Engineering Journal, 2021, 408, 127322.	6.6	37
54	Liquid digestate recycled utilization in anaerobic digestion of pig manure: Effect on methane production, system stability and heavy metal mobilization. Energy, 2017, 141, 1695-1704.	4.5	36

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55	Probing changes in humus chemical characteristics in response to biochar addition and varying bulking agents during composting: A holistic multi-evidence-based approach. Journal of Environmental Management, 2021, 300, 113736.	3.8	35
56	Dynamic evolution of humic acids during anaerobic digestion: Exploring an effective auxiliary agent for heavy metal remediation. Bioresource Technology, 2021, 320, 124331.	4.8	34
57	Immobilization pathways of heavy metals in composting: Interactions of microbial community and functional gene under varying C/N ratios and bulking agents. Journal of Hazardous Materials, 2022, 426, 128103.	6.5	33
58	The intensified constructed wetlands are promising for treatment of ammonia stripped effluent: Nitrogen transformations and removal pathways. Environmental Pollution, 2018, 236, 273-282.	3.7	32
59	Can we use mine waste as substrate in constructed wetlands to intensify nutrient removal? A critical assessment of key removal mechanisms and long-term environmental risks. Water Research, 2022, 210, 118009.	5.3	32
60	Impact of biochar addition on three-dimensional structural changes in aggregates associated with humus during swine manure composting. Journal of Cleaner Production, 2021, 280, 124380.	4.6	31
61	Development and validation of a simplified titration method for monitoring volatile fatty acids in anaerobic digestion. Waste Management, 2017, 67, 43-50.	3.7	29
62	Effect of vegetation in pilot-scale horizontal subsurface flow constructed wetlands treating sulphate rich groundwater contaminated with a low and high chlorinated hydrocarbon. Chemosphere, 2012, 89, 724-731.	4.2	27
63	Effect of Oil Content on Biogas Production, Process Performance and Stability of Food Waste Anaerobic Digestion. Waste and Biomass Valorization, 2018, 9, 2295-2306.	1.8	27
64	Microbial community responses to agricultural biomass addition in aerated constructed wetlands treating low carbon wastewater. Journal of Environmental Management, 2020, 270, 110912.	3.8	27
65	Revealing the link between evolution of electron transfer capacity of humic acid and key enzyme activities during anaerobic digestion. Journal of Environmental Management, 2022, 301, 113914.	3.8	27
66	The Potential of Bioelectrochemical Sensor for Monitoring of Acetate During Anaerobic Digestion: Focusing on Novel Reactor Design. Frontiers in Microbiology, 2018, 9, 3357.	1.5	24
67	Impact of engineered nanoparticles on microbial transformations of carbon, nitrogen, and phosphorus in wastewater treatment processes â€“ A review. Science of the Total Environment, 2019, 660, 1144-1154.	3.9	24
68	Incorporating Biochar into Wastewater Eco-treatment Systems: Popularity, Reality, and Complexity. Environmental Science & Technology, 2019, 53, 3345-3346.	4.6	23
69	Application of H2O2 to optimize ammonium removal from domestic wastewater. Separation and Purification Technology, 2017, 173, 357-363.	3.9	22
70	Effect of flocculation pre-treatment on membrane nutrient recovery of digested chicken slurry: Mitigating suspended solids and retaining nutrients. Chemical Engineering Journal, 2018, 352, 855-862.	6.6	22
71	Removal of organic matter, nitrogen and faecal indicators from diluted anaerobically digested slurry using tidal flow constructed wetlands. Environmental Science and Pollution Research, 2017, 24, 5486-5496.	2.7	21
72	Dynamics of Fe(II), sulphur and phosphate in pilot-scale constructed wetlands treating a sulphate-rich chlorinated hydrocarbon contaminated groundwater. Water Research, 2012, 46, 1923-1932.	5.3	20

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73	Response of a tidal operated constructed wetland to sudden organic and ammonium loading changes in treating high strength artificial wastewater. Ecological Engineering, 2015, 82, 643-648.	1.6	20
74	Treatment of Alkaline Stripped Effluent in Aerated Constructed Wetlands: Feasibility Evaluation and Performance Enhancement. Water (Switzerland), 2016, 8, 386.	1.2	20
75	Pathways of nitrobenzene degradation in horizontal subsurface flow constructed wetlands: Effect of intermittent aeration and glucose addition. Journal of Environmental Management, 2016, 166, 38-44.	3.8	20
76	Co-digestion of Laminaria digitata with cattle manure: A unimodel simulation study of both batch and continuous experiments. Bioresource Technology, 2019, 276, 361-368.	4.8	19
77	Exploring low-cost practical antifoaming strategies in the ammonia stripping process of anaerobic digested slurry. Chemical Engineering Journal, 2018, 344, 228-235.	6.6	16
78	New insights into interactions of organic substances in poultry slurry with struvite formation: An overestimated concern?. Science of the Total Environment, 2021, 751, 141789.	3.9	16
79	Optimization of high-rate TN removal in a novel constructed wetland integrated with microelectrolysis system treating high-strength digestate supernatant. Journal of Environmental Management, 2016, 178, 42-51.	3.8	15
80	Treatment of pig manure liquid digestate in horizontal flow constructed wetlands: Effect of aeration. Engineering in Life Sciences, 2016, 16, 263-271.	2.0	14
81	A Lymnaea stagnalis Embryo Test for Toxicity Bioindication of Acidification and Ammonia Pollution in Water. Water (Switzerland), 2016, 8, 295.	1.2	12
82	Innovative air-cathode bioelectrochemical sensor for monitoring of total volatile fatty acids during anaerobic digestion. Chemosphere, 2021, 273, 129660.	4.2	12
83	Mechanism and performance of algal pond assisted constructed wetlands for wastewater polishing and nutrient recovery. Science of the Total Environment, 2022, 840, 156667.	3.9	11
84	Seasonal and daily emissions of methane and carbon dioxide from a pig wastewater storage system and the use of artificial vermiculite crusts. Biosystems Engineering, 2015, 131, 15-22.	1.9	10
85	Stabilization of Preliminary Anaerobically Digested Slurry in Post-Storage: Dynamics of Chemical Characteristics and Hygienic Quality. Water, Air, and Soil Pollution, 2017, 228, 1.	1.1	9
86	Performance of two laboratoryâ€scale horizontal wetlands under varying influent loads treating artificial sewage. Engineering in Life Sciences, 2012, 12, 178-187.	2.0	8
87	Long-term performance of three mesophilic anaerobic digesters to convert animal and agro-industrial wastes into organic fertilizer. Journal of Cleaner Production, 2021, 307, 127271.	4.6	6
88	Quantitative characterization and effective inactivation of biological hazards in struvite recovered from digested poultry slurry. Water Research, 2021, 204, 117659.	5.3	6
89	Response of Removal Rates to Various Organic Carbon and Ammonium Loads in Laboratoryâ€Scale Constructed Wetlands Treating Artificial Wastewater. Water Environment Research, 2013, 85, 44-53.	1.3	5
90	Effect of Nitrate on Sulphur Transformations Depending on Carbon Load in Laboratory-Scale Wetlands Treating Artificial Sewage. Advanced Materials Research, 2012, 518-523, 1902-1912.	0.3	4

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91	Effects of Fe2+ on the Anaerobic Digestion of Chicken Manure: A Batch Study. , 2012, , .		4
92	Exploring Bioactive Compounds in Anaerobically Digested Slurry: Extraction, Characterization, and Assessment of Antifungal Activity. Waste and Biomass Valorization, 2020, 11, 1863-1872.	1.8	4
93	Use of Solid Digestate as a Growing Medium for Tomato Seedlings. Advanced Materials Research, 2013, 726-731, 3001-3006.	0.3	3
94	Ammonium Nitrogen Removal from Wastewater by Biochar Adsorption. Advanced Materials Research, 0, 726-731, 1679-1682.	0.3	3
95	Critical Review: Biogeochemical Networking of Iron, Is It Important in Constructed Wetlands for Wastewater Treatment?. Environmental Science & Technology, 2019, , .	4.6	3
96	INFLUENCE OF NITRATE LOAD ON SULFUR TRANSFORMATIONS IN THE RHIZOSPHERE OF Juncus effusus IN LABORATORY-SCALE CONSTRUCTED WETLANDS TREATING ARTIFICIAL DOMESTIC WASEWATER. Environmental Engineering and Management Journal, 2013, 12, 565-573.	0.2	3
97	Performance of Lab-Scale Tidal Flow Constructed Wetlands Treating Livestock Wastewater. Advanced Materials Research, 2012, 518-523, 2631-2639.	0.3	1
98	A Comprehensive Model for Evaluation of Carbon Footprint and Greenhouse Gages Emission in Household Biogas Plants. , 2012, , .		0
99	Comparison of One-Phase and Two-Phase Anaerobic Digestion of Swine Manure. Advanced Materials Research, 0, 726-731, 2875-2880.	0.3	0
100	Comparative Laboratory-Scale Study of Resorcinol and Nitrogen Removal in Different Treatment Wetlands. Advanced Materials Research, 0, 726-731, 1643-1653.	0.3	0
101	Nutrient Characteristics of Effluents from Manure Digesters in the U.S. and China. , 2014, , .		0