Shubiao Wu

List of Publications by Year in Descending Order

99 papers	4,128 citations	36 h-index	63 g-index
103 ext. papers	5,141 ext. citations	7.9 avg, IF	6.1 L-index

#	Paper	IF	Citations
99	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	7.9	2
98	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*, **2021**, 210, 118009	12.5	2
97	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*, **2021**, 426, 128103	12.8	3
96	Innovative air-cathode bioelectrochemical sensor for monitoring of total volatile fatty acids during anaerobic digestion. *Chemosphere*, **2021**, 273, 129660	8.4	5
95	Dynamic evolution of humic acids during anaerobic digestion: Exploring an effective auxiliary agent for heavy metal remediation. *Bioresource Technology*, **2021**, 320, 124331	11	6
94	Mechanisms of genuine humic acid evolution and its dynamic interaction with methane production in anaerobic digestion processes. *Chemical Engineering Journal*, **2021**, 408, 127322	14.7	7
93	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	10.3	15
92	New insights into interactions of organic substances in poultry slurry with struvite formation: An overestimated concern?. *Science of the Total Environment*, **2021**, 751, 141789	10.2	8
91	Application of machine learning methods for the prediction of organic solid waste treatment and recycling processes: A review. *Bioresource Technology*, **2021**, 319, 124114	11	39
90	Long-term performance of three mesophilic anaerobic digesters to convert animal and agro-industrial wastes into organic fertilizer.. *Journal of Cleaner Production*, **2021**, 307, 1-8	10.3	1
89	Quantitative characterization and effective inactivation of biological hazards in struvite recovered from digested poultry slurry. *Water Research*, **2021**, 204, 117659	12.5	1
88	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	7.9	7
87	Nutrients and Plant Hormones in Anaerobic Digestates **2020**, 231-246		
86	Microbial community responses to agricultural biomass addition in aerated constructed wetlands treating low carbon wastewater. *Journal of Environmental Management*, **2020**, 270, 110912	7.9	16
85	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	10.3	15
84	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	12.5	66
83	Exploring Bioactive Compounds in Anaerobically Digested Slurry: Extraction, Characterization, and Assessment of Antifungal Activity. *Waste and Biomass Valorization*, **2020**, 11, 1863-1872	3.2	1

82	Probing the efficiency of magnetically modified biomass-derived biochar for effective phosphate removal. *Journal of Environmental Management*, **2020**, 253, 109730	7.9	60
81	Humic substances developed during organic waste composting: Formation mechanisms, structural properties, and agronomic functions. *Science of the Total Environment*, **2019**, 662, 501-510	10.2	114
80	Nitrogen removal responses to biochar addition in intermittent-aerated subsurface flow constructed wetland microcosms: Enhancing role and mechanism. *Ecological Engineering*, **2019**, 128, 57-65	3.9	27
79	Critical Review: Biogeochemical Networking of Iron in Constructed Wetlands for Wastewater Treatment. *Environmental Science & Technology*, **2019**, 53, 7930-7944	10.3	48
78	Nanobubble Technology in Environmental Engineering: Revolutionization Potential and Challenges. *Environmental Science & Technology*, **2019**, 53, 7175-7176	10.3	31
77	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	3.6	78
76	Exploring stability indicators for efficient monitoring of anaerobic digestion of pig manure under perturbations. *Waste Management*, **2019**, 91, 139-146	8.6	23
75	Incorporating Biochar into Wastewater Eco-treatment Systems: Popularity, Reality, and Complexity. *Environmental Science & Technology*, **2019**, 53, 3345-3346	10.3	17
74	Critical Review: Biogeochemical Networking of Iron, Is It Important in Constructed Wetlands for Wastewater Treatment?. *Environmental Science & Technology*, **2019**,	10.3	2
73	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	10.2	24
72	Impact of engineered nanoparticles on microbial transformations of carbon, nitrogen, and phosphorus in wastewater treatment processes - A review. *Science of the Total Environment*, **2019**, 660, 1144-1154	10.2	13
71	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	10.3	28
70	Co-digestion of Laminaria digitata with cattle manure: A unimodel simulation study of both batch and continuous experiments. *Bioresource Technology*, **2019**, 276, 361-368	11	17
69	Biochar seeding promotes struvite formation, but accelerates heavy metal accumulation. *Science of the Total Environment*, **2019**, 652, 623-632	10.2	23
68	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	5.1	22
67	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	7.9	43
66	The Potential of Bioelectrochemical Sensor for Monitoring of Acetate During Anaerobic Digestion: Focusing on Novel Reactor Design. *Frontiers in Microbiology*, **2018**, 9, 3357	5.7	15
65	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	10.2	50

64	The intensified constructed wetlands are promising for treatment of ammonia stripped effluent: Nitrogen transformations and removal pathways. *Environmental Pollution*, **2018**, 236, 273-282	9.3	26
63	Rethinking Intensification of Constructed Wetlands as a Green Eco-Technology for Wastewater Treatment. *Environmental Science & Technology*, **2018**, 52, 1693-1694	10.3	47
62	Effect of Oil Content on Biogas Production, Process Performance and Stability of Food Waste Anaerobic Digestion. *Waste and Biomass Valorization*, **2018**, 9, 2295-2306	3.2	19
61	Exploring low-cost practical antifoaming strategies in the ammonia stripping process of anaerobic digested slurry. *Chemical Engineering Journal*, **2018**, 344, 228-235	14.7	7
60	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	14.7	15
59	Phosphate removal from aqueous solution using iron oxides: Adsorption, desorption and regeneration characteristics. *Journal of Colloid and Interface Science*, **2018**, 528, 145-155	9.3	144
58	The performance efficiency of bioaugmentation to prevent anaerobic digestion failure from ammonia and propionate inhibition. *Bioresource Technology*, **2017**, 231, 94-100	11	64
57	Development and validation of a simplified titration method for monitoring volatile fatty acids in anaerobic digestion. *Waste Management*, **2017**, 67, 43-50	8.6	21
56	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	10.2	122
55	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	10.2	33
54	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	5.1	17
53	Stabilization of Preliminary Anaerobically Digested Slurry in Post-Storage: Dynamics of Chemical Characteristics and Hygienic Quality. *Water, Air, and Soil Pollution*, **2017**, 228, 1	2.6	7
52	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	7.9	24
51	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	7.9	68
50	Application of H2O2 to optimize ammonium removal from domestic wastewater. *Separation and Purification Technology*, **2017**, 173, 357-363	8.3	15
49	Sanitation in constructed wetlands: A review on the removal of human pathogens and fecal indicators. *Science of the Total Environment*, **2016**, 541, 8-22	10.2	137
48	Monitoring Volatile Fatty Acids and Carbonate Alkalinity in Anaerobic Digestion: Titration Methodologies. *Chemical Engineering and Technology*, **2016**, 39, 599-610	2	27
47	Treatment of pig manure liquid digestate in horizontal flow constructed wetlands: Effect of aeration. *Engineering in Life Sciences*, **2016**, 16, 263-271	3.4	13

46	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	11	45
45	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	7.9	15
44	A Lymnaea stagnalis Embryo Test for Toxicity Bioindication of Acidification and Ammonia Pollution in Water. *Water (Switzerland)*, **2016**, 8, 295	3	9
43	Treatment of Alkaline Stripped Effluent in Aerated Constructed Wetlands: Feasibility Evaluation and Performance Enhancement. *Water (Switzerland)*, **2016**, 8, 386	3	10
42	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, 1095-104	10.2	42
41	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	7.9	12
40	Phosphorus recovery from biogas fermentation liquid by Ca-Mg loaded biochar. *Journal of Environmental Sciences*, **2015**, 29, 106-14	6.4	97
39	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	4.8	8
38	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	10.7	34
37	Treatment of industrial effluents in constructed wetlands: challenges, operational strategies and overall performance. *Environmental Pollution*, **2015**, 201, 107-20	9.3	133
36	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	3.9	19
35	Synergistic effect of alkaline pretreatment and Fe dosing on batch anaerobic digestion of maize straw. *Applied Energy*, **2015**, 158, 55-64	10.7	58
34	Performance and kinetic evaluation of semi-continuously fed anaerobic digesters treating food waste: role of trace elements. *Bioresource Technology*, **2015**, 178, 297-305	11	103
33	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	5.5	36
32	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, 102-12	10.2	321
31	Dynamics of organic matter, nitrogen and phosphorus removal and their interactions in a tidal operated constructed wetland. *Journal of Environmental Management*, **2015**, 151, 310-6	7.9	45
30	Microbial pretreatment of corn stovers by solid-state cultivation of Phanerochaete chrysosporium for biogas production. *Applied Biochemistry and Biotechnology*, **2014**, 172, 1365-76	3.2	33
29	Intensified nitrogen and phosphorus removal in a novel electrolysis-integrated tidal flow constructed wetland system. *Water Research*, **2014**, 59, 37-45	12.5	53

28	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	10.2	34
27	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, 477-85	8.4	47
26	Evaluation of batch anaerobic co-digestion of palm pressed fiber and cattle manure under mesophilic conditions. *Waste Management*, **2014**, 34, 1984-91	8.6	37
25	How the novel integration of electrolysis in tidal flow constructed wetlands intensifies nutrient removal and odor control. *Bioresource Technology*, **2014**, 169, 605-613	11	44
24	How substrate influences nitrogen transformations in tidal flow constructed wetlands treating high ammonium wastewater?. *Ecological Engineering*, **2014**, 73, 478-486	3.9	55
23	Performance of two-stage vegetable waste anaerobic digestion depending on varying recirculation rates. *Bioresource Technology*, **2014**, 162, 266-72	11	35
22	Batch anaerobic co-digestion of pig manure with dewatered sewage sludge under mesophilic conditions. *Applied Energy*, **2014**, 128, 175-183	10.7	178
21	Fungal pretreatment by Phanerochaete chrysosporium for enhancement of biogas production from corn stover silage. *Applied Biochemistry and Biotechnology*, **2014**, 174, 1907-18	3.2	44
20	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, 63-9	11	55
19	Development of constructed wetlands in performance intensifications for wastewater treatment: a nitrogen and organic matter targeted review. *Water Research*, **2014**, 57, 40-55	12.5	391
18	Sulphur transformations in constructed wetlands for wastewater treatment: A review. *Ecological Engineering*, **2013**, 52, 278-289	3.9	94
17	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	11	75
16	Dynamics of nitrobenzene degradation and interactions with nitrogen transformations in laboratory-scale constructed wetlands. *Bioresource Technology*, **2013**, 133, 529-36	11	31
15	Response of removal rates to various organic carbon and ammonium loads in laboratory-scale constructed wetlands treating artificial wastewater. *Water Environment Research*, **2013**, 85, 44-53	2.8	3
14	Use of Solid Digestate as a Growing Medium for Tomato Seedlings. *Advanced Materials Research*, **2013**, 726-731, 3001-3006	0.5	2
13	Comparison of One-Phase and Two-Phase Anaerobic Digestion of Swine Manure. *Advanced Materials Research*, **2013**, 726-731, 2875-2880	0.5	
12	Comparative Laboratory-Scale Study of Resorcinol and Nitrogen Removal in Different Treatment Wetlands. *Advanced Materials Research*, **2013**, 726-731, 1643-1653	0.5	
11	Ammonium Nitrogen Removal from Wastewater by Biochar Adsorption. *Advanced Materials Research*, **2013**, 726-731, 1679-1682	0.5	2

10	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	0.6	3
9	Dynamics of Fe(II), sulphur and phosphate in pilot-scale constructed wetlands treating a sulphate-rich chlorinated hydrocarbon contaminated groundwater. *Water Research*, **2012**, 46, 1923-32	12.5	18
8	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, 724-31	8.4	24
7	**2012**,		3
6	Performance of two laboratory-scale horizontal wetlands under varying influent loads treating artificial sewage. *Engineering in Life Sciences*, **2012**, 12, 178-187	3.4	6
5	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	0.5	4
4	Performance of Lab-Scale Tidal Flow Constructed Wetlands Treating Livestock Wastewater. *Advanced Materials Research*, **2012**, 518-523, 2631-2639	0.5	1
3	Evaluation of a lab-scale tidal flow constructed wetland performance: Oxygen transfer capacity, organic matter and ammonium removal. *Ecological Engineering*, **2011**, 37, 1789-1795	3.9	101
2	Sulfur transformations in pilot-scale constructed wetland treating high sulfate-containing contaminated groundwater: a stable isotope assessment. *Water Research*, **2011**, 45, 6688-98	12.5	33
1	Performance of integrated household constructed wetland for domestic wastewater treatment in rural areas. *Ecological Engineering*, **2011**, 37, 948-954	3.9	100