Yonghong Wu

List of Publications by Year
in descending order

125 papers	4,955 citations	87888 38 h-index	102487 66 g-index
128 all docs	128 docs citations	128 times ranked	4911 citing authors

#	Article	IF	Citations
1	Occurrence and Characteristics of Microplastic Pollution in Xiangxi Bay of Three Gorges Reservoir, China. Environmental Science & Technology, 2017, 51, 3794-3801.	10.0	393
2	Advanced nutrient removal from surface water by a consortium of attached microalgae and bacteria: A review. Bioresource Technology, 2017, 241, 1127-1137.	9.6	234
3	Mechanisms of removing pollutants from aqueous solutions by microorganisms and their aggregates: A review. Bioresource Technology, 2012, 107, 10-18.	9.6	228
4	Microorganisms-based methods for harmful algal blooms control: A review. Bioresource Technology, 2018, 248, 12-20.	9.6	210
5	Methylene blue adsorption onto swede rape straw (Brassica napus L.) modified by tartaric acid: Equilibrium, kinetic and adsorption mechanisms. Bioresource Technology, 2012, 125, 138-144.	9.6	150
6	Removal of pharmaceuticals and personal care products from wastewater using algae-based technologies: a review. Reviews in Environmental Science and Biotechnology, 2017, 16, 717-735.	8.1	129
7	How Microbial Aggregates Protect against Nanoparticle Toxicity. Trends in Biotechnology, 2018, 36, 1171-1182.	9.3	127
8	Sequestration and utilization of carbon dioxide by chemical and biological methods for biofuels and biomaterials by chemoautotrophs: Opportunities and challenges. Bioresource Technology, 2018, 256, 478-490.	9.6	126
9	Basic dye adsorption onto an agro-based waste material â€“ Sesame hull (Sesamum indicum L.). Bioresource Technology, 2011, 102, 10280-10285.	9.6	121
10	Phosphorus and Cu^{2+} removal by periphytic biofilm stimulated by upconversion phosphors doped with Pr^{3+}-Li^{+}. Bioresource Technology, 2018, 248, 68-74.	9.6	121
11	In situ bioremediation of surface waters by periphytons. Bioresource Technology, 2014, 151, 367-372.	9.6	117
12	Adsorption of dyestuff from aqueous solutions through oxalic acid-modified swede rape straw: Adsorption process and disposal methodology of depleted bioadsorbents. Bioresource Technology, 2013, 138, 191-197.	9.6	111
13	Recent advances of carbon-based nano zero valent iron for heavy metals remediation in soil and water: A critical review. Journal of Hazardous Materials, 2022, 426, 127993.	12.4	100
14	Allelopathic control of cyanobacterial blooms by periphyton biofilms. Environmental Microbiology, 2011, 13, 604-615.	3.8	86
15	Combined CdS nanoparticles-assisted photocatalysis and periphytic biological processes for nitrate removal. Chemical Engineering Journal, 2018, 353, 237-245.	12.7	84
16	Evaluating Adsorption and Biodegradation Mechanisms during the Removal of Microcystin-RR by Periphyton. Environmental Science & Technology, 2010, 44, 6319-6324.	10.0	82
17	Removal of nutrients and pharmaceuticals and personal care products from wastewater using periphyton photobioreactors. Bioresource Technology, 2018, 248, 113-119.	9.6	81
18	Phosphorus immobilization in water and sediment using iron-based materials: A review. Science of the Total Environment, 2021, 767, 144246.	8.0	75

#	Article	IF	Citations
19	Periphytic biofilms: A promising nutrient utilization regulator in wetlands. Bioresource Technology, 2018, 248, 44-48.	9.6	74
20	Periphytic biofilm: A buffer for phosphorus precipitation and release between sediments and water. Chemosphere, 2016, 144, 2058-2064.	8.2	73
21	Periphyton biofilms: A novel and natural biological system for the effective removal of sulphonated azo dye methyl orange by synergistic mechanism. Chemosphere, 2017, 167, 236-246.	8.2	70
22	Nutrient removal by up-scaling a hybrid floating treatment bed (HFTB) using plant and periphyton: From laboratory tank to polluted river. Bioresource Technology, 2016, 207, 142-149.	9.6	69
23	Evaluating role of immobilized periphyton in bioremediation of azo dye amaranth. Bioresource Technology, 2017, 225, 395-401.	9.6	62
24	Bismuth impregnated biochar for efficient estrone degradation: The synergistic effect between biochar and Bi/Bi2O3 for a high photocatalytic performance. Journal of Hazardous Materials, 2020, 384, 121258.	12.4	60
25	Co-contamination of Cu and Cd in paddy fields: Using periphyton to entrap heavy metals. Journal of Hazardous Materials, 2016, 304, 150-158.	12.4	58
26	Arsenic removal by periphytic biofilm and its application combined with biochar. Bioresource Technology, 2018, 248, 49-55.	9.6	57
27	Protection Mechanisms of Periphytic Biofilm to Photocatalytic Nanoparticle Exposure. Environmental Science & Technology, 2019, 53, 1585-1594.	10.0	56
28	Mitigation of nonpoint source pollution in rural areas: From control to synergies of multi ecosystem services. Science of the Total Environment, 2017, 607-608, 1376-1380.	8.0	55
29	Using Microbial Aggregates to Entrap Aqueous Phosphorus. Trends in Biotechnology, 2020, 38, 1292-1303.	9.3	54
30	Environmentally benign periphyton bioreactors for controlling cyanobacterial growth. Bioresource Technology, 2010, 101, 9681-9687.	9.6	50
31	The adsorption process during inorganic phosphorus removal by cultured periphyton. Environmental Science and Pollution Research, 2014, 21, 8782-8791.	5.3	50
32	Gas sensors based on membrane diffusion for environmental monitoring. Sensors and Actuators B: Chemical, 2017, 243, 566-578.	7.8	50
33	The removal of nutrients from non-point source wastewater by a hybrid bioreactor. Bioresource Technology, 2011, 102, 2419-2426.	9.6	49
34	Influence of light and temperature on the development and denitrification potential of periphytic biofilms. Science of the Total Environment, 2018, 613-614, 1430-1437.	8.0	48
35	Interactions between the antimicrobial agent triclosan and the bloom-forming cyanobacteria Microcystis aeruginosa. Aquatic Toxicology, 2016, 172, 103-110.	4.0	46
36	Responses of Periphyton to Fe₂O₃ Nanoparticles: A Physiological and Ecological Basis for Defending Nanotoxicity. Environmental Science & Technology, 2017, 51, 10797-10805.	10.0	46

#	Article	IF	Citations
37	Start-up of a spiral periphyton bioreactor (SPR) for removal of COD and the characteristics of the associated microbial community. Bioresource Technology, 2015, 193, 456-462.	9.6	41
38	Functional sustainability of periphytic biofilms in organic matter and Cu2+ removal during prolonged exposure to TiO2 nanoparticles. Journal of Hazardous Materials, 2019, 370, 4-12.	12.4	41
39	Physiological responses and accumulation ability of Microcystis aeruginosa to zinc and cadmium: Implications for bioremediation of heavy metal pollution. Bioresource Technology, 2020, 303, 122963.	9.6	41
40	Afforestation can lower microbial diversity and functionality in deep soil layers in a semiarid region. Global Change Biology, 2022, 28, 6086-6101.	9.5	40
41	Phosphorus released from sediment of Dianchi Lake and its effect on growth of Microcystis aeruginosa. Environmental Science and Pollution Research, 2016, 23, 16321-16328.	5.3	39
42	A New Concept of Promoting Nitrate Reduction in Surface Waters: Simultaneous Supplement of Denitrifiers, Electron Donor Pool, and Electron Mediators. Environmental Science & Technology, 2018, 52, 8617-8626.	10.0	38
43	Removal of cyanobacterial bloom from a biopondâ€"wetland system and the associated response of zoobenthic diversity. Bioresource Technology, 2010, 101, 3903-3908.	9.6	37
44	Periphyton: an important regulator in optimizing soil phosphorus bioavailability in paddy fields. Environmental Science and Pollution Research, 2016, 23, 21377-21384.	5.3	37
45	Comparison of the removal of COD by a hybrid bioreactor at low and room temperature and the associated microbial characteristics. Bioresource Technology, 2012, 108, 28-34.	9.6	34
46	Sustainable pollutant removal by periphytic biofilm via microbial composition shifts induced by uneven distribution of CeO2 nanoparticles. Bioresource Technology, 2018, 248, 75-81.	9.6	34
47	Uncovering the flocculating potential of extracellular polymeric substances produced by periphytic biofilms. Bioresource Technology, 2018, 248, 56-60.	9.6	33
48	Bioremediation of agricultural solid waste leachates with diverse species of Cu (II) and Cd (II) by periphyton. Bioresource Technology, 2016, 221, 214-221.	9.6	32
49	Eco-restoration: Simultaneous nutrient removal from soil and water in a complex residentialâ€"cropland area. Environmental Pollution, 2010, 158, 2472-2477.	7.5	31
50	Biosorption of high-concentration Cu (II) by periphytic biofilms and the development of a fiber periphyton bioreactor (FPBR). Bioresource Technology, 2018, 248, 127-134.	9.6	31
51	Redox zones stratification and the microbial community characteristics in a periphyton bioreactor. Bioresource Technology, 2016, 204, 114-121.	9.6	28
52	Carbon-nutrient stoichiometry drives phosphorus immobilization in phototrophic biofilms at the soil-water interface in paddy fields. Water Research, 2019, 167, 115129.	11.3	28
53	The decoction of Radix Astragali inhibits the growth of Microcystis aeruginosa. Ecotoxicology and Environmental Safety, 2011, 74, 1006-1010.	6.0	27
54	Phototrophic periphyton techniques combine phosphorous removal and recovery for sustainable salt-soil zone. Science of the Total Environment, 2016, 568, 838-844.	8.0	26

#	Article	IF	Citations
55	Gas-Permeable Membrane-Based Conductivity Probe Capable of In Situ Real-Time Monitoring of Ammonia in Aquatic Environments. Environmental Science & Technology, 2017, 51, 13265-13273.	10.0	26
56	Cu removal and response mechanisms of periphytic biofilms in a tubular bioreactor. Bioresource Technology, 2018, 248, 61-67.	9.6	26
57	Effects of lead and cadmium on photosynthesis in <i>Amaranthus spinosus</i> and assessment of phytoremediation potential. International Journal of Phytoremediation, 2019, 21, 1041-1049.	3.1	25
58	A multi-level bioreactor to remove organic matter and metals, together with its associated bacterial diversity. Bioresource Technology, 2011, 102, 736-741.	9.6	24
59	Kinetics simulation of Cu and Cd removal and the microbial community adaptation in a periphytic biofilm reactor. Bioresource Technology, 2019, 276, 199-203.	9.6	24
60	Hierarchical eco-restoration: A systematical approach to removal of COD andÂdissolved nutrients from an intensive agricultural area. Environmental Pollution, 2010, 158, 3123-3129.	7.5	23
61	Distinguishing the roles of different extracellular polymeric substance fractions of a periphytic biofilm in defending against Fe₂O₃nanoparticle toxicity. Environmental Science: Nano, 2017, 4, 1682-1691.	4.3	22
62	Decolorization of high concentration crystal violet by periphyton bioreactors and potential of effluent reuse for agricultural purposes. Journal of Cleaner Production, 2018, 170, 425-436.	9.3	22
63	Cadmium and mercury removal from non-point source wastewater by a hybrid bioreactor. Bioresource Technology, 2011, 102, 9927-9932.	9.6	21
64	Dual benefits of long-term ecological agricultural engineering: Mitigation of nutrient losses and improvement of soil quality. Science of the Total Environment, 2020, 721, 137848.	8.0	21
65	Responses of periphyton morphology, structure, and function to extreme nutrient loading. Environmental Pollution, 2016, 214, 878-884.	7.5	20
66	Improving Denitrification Models by Including Bacterial and Periphytic Biofilm in a Shallow Waterâ€Sediment System. Water Resources Research, 2018, 54, 8146-8159.	4.2	20
67	Removal of parabens and their chlorinated by-products by periphyton: influence of light and temperature. Environmental Science and Pollution Research, 2017, 24, 5566-5575.	5.3	19
68	Electron transport, light energy conversion and proteomic responses of periphyton in photosynthesis under exposure to AgNPs. Journal of Hazardous Materials, 2021, 401, 123809.	12.4	19
69	N-acyl-homoserine-lactones signaling as a critical control point for phosphorus entrapment by multi-species microbial aggregates. Water Research, 2021, 204, 117627.	11.3	19
70	Enhancing denitrification using a novel in situ membrane biofilm reactor (isMBfR). Water Research, 2017, 119, 234-241.	11.3	18
71	Removal of UV254nm matter and nutrients from a photobioreactor-wetland system. Journal of Hazardous Materials, 2011, 194, 1-6.	12.4	16
72	The Behavior of Organic Phosphorus under Non-Point Source Wastewater in the Presence of Phototrophic Periphyton. PLoS ONE, 2014, 9, e85910.	2.5	16

#	Article	IF	Citations
73	Effect of butyl paraben on the development and microbial composition of periphyton. Ecotoxicology, 2016, 25, 342-349.	2.4	15
74	Seasonal changes in phosphorus competition and allelopathy of a benthic microbial assembly facilitate prevention of cyanobacterial blooms. Environmental Microbiology, 2017, 19, 2483-2494.	3.8	15
75	Glucose triggers the cytotoxicity of Citrobacter sp. R1 against Microcystis aeruginosa. Science of the Total Environment, 2017, 603-604, 18-25.	8.0	15
76	The effect of periphyton on seed germination and seedling growth of rice (Oryza sativa) in paddy area. Science of the Total Environment, 2017, 578, 74-80.	8.0	15
77	Biodegradation of tetracycline using hybrid material (UCPs-TiO2) coupled with biofilms under visible light. Bioresource Technology, 2021, 323, 124638.	9.6	15
78	Interactions between periphytic biofilms and dissolved organic matter at soil-water interface and the consequent effects on soil phosphorus fraction changes. Science of the Total Environment, 2021, 801, 149708.	8.0	14
79	Cleaning and regeneration of periphyton biofilm in surface water treatment systems. Water Science and Technology, 2014, 69, 235-243.	2.5	13
80	Nutrient capture and recycling by periphyton attached to modified agrowaste carriers. Environmental Science and Pollution Research, 2016, 23, 8035-8043.	5.3	13
81	The remediation of extremely acidic and moderate pH soil leachates containing Cu (II) and Cd (II) by native periphytic biofilm. Journal of Cleaner Production, 2017, 162, 846-855.	9.3	13
82	Online Conductimetric Flow-Through Analyzer Based on Membrane Diffusion for Ammonia Control in Wastewater Treatment Process. ACS Sensors, 2019, 4, 1881-1888.	7.8	13
83	Enhanced Selenate Removal in Aqueous Phase by Copper-Coated Activated Carbon. Materials, 2020, 13, 468.	2.9	13
84	An Investigation into the Kinetics and Mechanism of the Removal of Cyanobacteria by Extract of Ephedra equisetina Root. PLoS ONE, 2012, 7, e42285.	2.5	13
85	Membrane-based conductivity probe for real-time in-situ monitoring rice field ammonia volatilization. Sensors and Actuators B: Chemical, 2019, 286, 62-68.	7.8	12
86	Characterization of extracellular phosphatase activities in periphytic biofilm from paddy field. Pedosphere, 2021, 31, 116-124.	4.0	12
87	Soil Organic Carbon Enrichment Triggers <i>In Situ</i> Nitrogen Interception by Phototrophic Biofilms at the Soilâ€"Water Interface: From Regional Scale to Microscale. Environmental Science & Technology, 2021, 55, 12704-12713.	10.0	12
88	Periphytic biofilms accumulate manganese, intercepting its emigration from paddy soil. Journal of Hazardous Materials, 2021, 411, 125172.	12.4	11
89	Contribution of periphytic biofilm of paddy soils to carbon dioxide fixation and methane emissions. Innovation(China), 2022, 3, 100192.	9.1	10
90	The application of zero-water discharge system in treating diffuse village wastewater and its benefits in community afforestation. Environmental Pollution, 2011, 159, 2968-2973.	7.5	9

#	Article	IF	Citations
91	Feedback mechanisms of periphytic biofilms to ZnO nanoparticles toxicity at different phosphorus levels. Journal of Hazardous Materials, 2021, 416, 125834.	12.4	9
92	The unexpected concentration-dependent response of periphytic biofilm during indole acetic acid removal. Bioresource Technology, 2020, 303, 122922.	9.6	8
93	Proteomic Analysis Unravels Response and Antioxidation Defense Mechanism of Rice Plants to Copper Oxide Nanoparticles: Comparison with Bulk Particles and Dissolved Cu Ions. ACS Agricultural Science and Technology, 2022, 2, 671-683.	2.3	8
94	The application of soil amendments benefits to the reduction of phosphorus depletion and the growth of cabbage and corn. Environmental Science and Pollution Research, 2015, 22, 16772-16780.	5.3	7
95	The Removal of Methyl Orange by Periphytic Biofilms. , 2017, , 367-387.		7
96	Response of periphytic biofilm in water to estrone exposure: Phenomenon and mechanism. Ecotoxicology and Environmental Safety, 2021, 207, 111513.	6.0	7
97	A novel biotechnology based on periphytic biofilms with N-acyl-homoserine-lactones stimulation and lanthanum loading for phosphorus recovery. Bioresource Technology, 2022, 347, 126421.	9.6	7
98	Comparison of the properties of periphyton attached to modified agro-waste carriers. Environmental Science and Pollution Research, 2016, 23, 3718-3726.	5.3	6
99	Sustained High Nutrient Supply As an Allelopathic Trigger between Periphytic Biofilm and Microcystis aeruginosa. Environmental Science & Technology, 2017, 51, 9614-9623.	10.0	6
100	Dam Construction as an Important Anthropogenic Activity Disturbing Soil Organic Carbon in Affected Watersheds. Environmental Science & Technology, 2020, 54, 7932-7941.	10.0	6
101	Indicators for Monitoring Aquatic Ecosystem. , 2017, , 71-106.		5
102	Functional sustainability of nutrient accumulation by periphytic biofilm under temperature fluctuations. Environmental Technology (United Kingdom), 2021, 42, 1145-1154.	2.2	5
103	Periphyton. , 2017, , 225-249.		4
104	Periphytic Biofilm and Its Functions in Aquatic Nutrient Cycling. , 2017, , 137-153.		4
105	Non-point source pollution control and aquatic ecosystem protection â€“ An introduction. Bioresource Technology, 2020, 316, 123956.	9.6	4
106	PREFACE ENPE-2017: International conference on Ecotechnologies for Controlling Non-point Source Pollution and Protecting Aquatic Ecosystem. Bioresource Technology, 2018, 248, 1-2.	9.6	3
107	Hybrid Bioreactor Based on Periphyton. , 2017, , 285-302.		2
108	Investigation of Adsorption and Absorption Mechanisms During Copper (II) Removal by Periphyton. , 2017, , 303-321.		2

#	Article	IF	Citations
109	Periphyton and Its Study Methods. , 2017, , 1-33.		2
110	Water and Wastewater Purification Using Periphyton. , 2017, , 107-135.		2
111	Periphyton Functions in Adjusting P Sinks in Sediments. , 2017, , 155-170.		2
112	The Living Environment of Periphyton. , 2017, , 35-70.		2
113	Augmenting nitrogen removal by periphytic biofilm strengthened via upconversion phosphors (UCPs). Bioresource Technology, 2019, 274, 105-112.	9.6	2
114	Microflora of Surface Layers in Aquatic Environments and Its Usage. Encyclopedia of the UN Sustainable Development Goals, 2021, , 1-9.	0.1	2
115	Photobioreactorâ€"Wetland System Removes Organic Pollutants and Nutrients. , 2017, , 269-283.		1
116	The Evaluation of Phosphorus Removal Processes and Mechanisms From Surface Water by Periphyton. , 2017, , 171-202.		1
117	The Removal of Heavy Metals by an Immobilized Periphyton Multilevel Bioreactor. , 2017, , 251-268.		1
118	Simultaneous Removal of Cu and Cd From Soil and Water inÂPaddy Fields by Native Periphyton. , 2017, , 323-349.		1
119	Algicidal activity recovery by a Li-doped up-conversion material converting visible light into UV. Science of the Total Environment, 2020, 720, 137596.	8.0	1
120	Nonâ€Linear Response of Ammonia Volatilization to Periphyton in Paddy Soils. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005870.	3.0	1
121	Removal of COD by a Spiral Periphyton Bioreactor and Its Associated Microbial Community. , 2017, , 351-366.		0
122	Periphyton. , 2017, , 203-223.		0
123	The Behavior of Organic Phosphorus Under Non-Point Source Wastewater in the Presence of Phototrophic Periphyton. , 2015, , 55-79.		0
124	Soil Health and Sustainability: Opinions from Chinese Young Soil Scientists. Soil Science Society of America Journal, 0, , .	2.2	0
125	Microflora of Surface Layers in Aquatic Environments and Its Usage. Encyclopedia of the UN Sustainable Development Goals, 2022, , 421-429.	0.1	0