

# Yonghong Wu

## List of Publications by Year in descending order

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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	Contribution of periphytic biofilm of paddy soils to carbon dioxide fixation and methane emissions. Innovation(China), 2022, 3, 100192.	9.1	10
2	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
3	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
4	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
5	Microflora of Surface Layers in Aquatic Environments and Its Usage. Encyclopedia of the UN Sustainable Development Goals, 2022, , 421-429.	0.1	0
6	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
7	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
8	Characterization of extracellular phosphatase activities in periphytic biofilm from paddy field. Pedosphere, 2021, 31, 116-124.	4.0	12
9	Response of periphytic biofilm in water to estrone exposure: Phenomenon and mechanism. Ecotoxicology and Environmental Safety, 2021, 207, 111513.	6.0	7
10	Functional sustainability of nutrient accumulation by periphytic biofilm under temperature fluctuations. Environmental Technology (United Kingdom), 2021, 42, 1145-1154.	2.2	5
11	Microflora of Surface Layers in Aquatic Environments and Its Usage. Encyclopedia of the UN Sustainable Development Goals, 2021, , 1-9.	0.1	2
12	Non-Linear Response of Ammonia Volatilization to Periphyton in Paddy Soils. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005870.	3.0	1
13	Biodegradation of tetracycline using hybrid material (UCPs-TiO <sub>2</sub> ) coupled with biofilms under visible light. Bioresource Technology, 2021, 323, 124638.	9.6	15
14	Phosphorus immobilization in water and sediment using iron-based materials: A review. Science of the Total Environment, 2021, 767, 144246.	8.0	75
15	Periphytic biofilms accumulate manganese, intercepting its emigration from paddy soil. Journal of Hazardous Materials, 2021, 411, 125172.	12.4	11
16	Feedback mechanisms of periphytic biofilms to ZnO nanoparticles toxicity at different phosphorus levels. Journal of Hazardous Materials, 2021, 416, 125834.	12.4	9
17	Soil Organic Carbon Enrichment Triggers <i>In Situ</i> Nitrogen Interception by Phototrophic Biofilms at the Soil-Water Interface: From Regional Scale to Microscale. Environmental Science & Technology, 2021, 55, 12704-12713.	10.0	12
18	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

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19	Interactions between periphytic biofilms and dissolved organic matter at soil-water interface and the consequent effects on soil phosphorus fraction changes. <i>Science of the Total Environment</i> , 2021, 801, 149708.	8.0	14
20	Bismuth impregnated biochar for efficient estrone degradation: The synergistic effect between biochar and Bi/Bi <sub>2</sub> O <sub>3</sub> for a high photocatalytic performance. <i>Journal of Hazardous Materials</i> , 2020, 384, 121258.	12.4	60
21	Non-point source pollution control and aquatic ecosystem protection – An introduction. <i>Bioresource Technology</i> , 2020, 316, 123956.	9.6	4
22	Algicidal activity recovery by a Li-doped up-conversion material converting visible light into UV. <i>Science of the Total Environment</i> , 2020, 720, 137596.	8.0	1
23	Dam Construction as an Important Anthropogenic Activity Disturbing Soil Organic Carbon in Affected Watersheds. <i>Environmental Science &amp; Technology</i> , 2020, 54, 7932-7941.	10.0	6
24	Dual benefits of long-term ecological agricultural engineering: Mitigation of nutrient losses and improvement of soil quality. <i>Science of the Total Environment</i> , 2020, 721, 137848.	8.0	21
25	The unexpected concentration-dependent response of periphytic biofilm during indole acetic acid removal. <i>Bioresource Technology</i> , 2020, 303, 122922.	9.6	8
26	Physiological responses and accumulation ability of <i>Microcystis aeruginosa</i> to zinc and cadmium: Implications for bioremediation of heavy metal pollution. <i>Bioresource Technology</i> , 2020, 303, 122963.	9.6	41
27	Enhanced Selenate Removal in Aqueous Phase by Copper-Coated Activated Carbon. <i>Materials</i> , 2020, 13, 468.	2.9	13
28	Using Microbial Aggregates to Entrap Aqueous Phosphorus. <i>Trends in Biotechnology</i> , 2020, 38, 1292-1303.	9.3	54
29	Carbon-nutrient stoichiometry drives phosphorus immobilization in phototrophic biofilms at the soil-water interface in paddy fields. <i>Water Research</i> , 2019, 167, 115129.	11.3	28
30	Membrane-based conductivity probe for real-time in-situ monitoring rice field ammonia volatilization. <i>Sensors and Actuators B: Chemical</i> , 2019, 286, 62-68.	7.8	12
31	Online Conductimetric Flow-Through Analyzer Based on Membrane Diffusion for Ammonia Control in Wastewater Treatment Process. <i>ACS Sensors</i> , 2019, 4, 1881-1888.	7.8	13
32	Effects of lead and cadmium on photosynthesis in <i>Amaranthus spinosus</i> and assessment of phytoremediation potential. <i>International Journal of Phytoremediation</i> , 2019, 21, 1041-1049.	3.1	25
33	Kinetics simulation of Cu and Cd removal and the microbial community adaptation in a periphytic biofilm reactor. <i>Bioresource Technology</i> , 2019, 276, 199-203.	9.6	24
34	Augmenting nitrogen removal by periphytic biofilm strengthened via upconversion phosphors (UCPs). <i>Bioresource Technology</i> , 2019, 274, 105-112.	9.6	2
35	Protection Mechanisms of Periphytic Biofilm to Photocatalytic Nanoparticle Exposure. <i>Environmental Science &amp; Technology</i> , 2019, 53, 1585-1594.	10.0	56
36	Functional sustainability of periphytic biofilms in organic matter and Cu <sup>2+</sup> removal during prolonged exposure to TiO <sub>2</sub> nanoparticles. <i>Journal of Hazardous Materials</i> , 2019, 370, 4-12.	12.4	41

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37	Sequestration and utilization of carbon dioxide by chemical and biological methods for biofuels and biomaterials by chemoautotrophs: Opportunities and challenges. <i>Bioresource Technology</i> , 2018, 256, 478-490.	9.6	126
38	Biosorption of high-concentration Cu (II) by periphytic biofilms and the development of a fiber periphyton bioreactor (FPBR). <i>Bioresource Technology</i> , 2018, 248, 127-134.	9.6	31
39	Cu removal and response mechanisms of periphytic biofilms in a tubular bioreactor. <i>Bioresource Technology</i> , 2018, 248, 61-67.	9.6	26
40	Arsenic removal by periphytic biofilm and its application combined with biochar. <i>Bioresource Technology</i> , 2018, 248, 49-55.	9.6	57
41	Removal of nutrients and pharmaceuticals and personal care products from wastewater using periphyton photobioreactors. <i>Bioresource Technology</i> , 2018, 248, 113-119.	9.6	81
42	Uncovering the flocculating potential of extracellular polymeric substances produced by periphytic biofilms. <i>Bioresource Technology</i> , 2018, 248, 56-60.	9.6	33
43	Influence of light and temperature on the development and denitrification potential of periphytic biofilms. <i>Science of the Total Environment</i> , 2018, 613-614, 1430-1437.	8.0	48
44	Periphytic biofilms: A promising nutrient utilization regulator in wetlands. <i>Bioresource Technology</i> , 2018, 248, 44-48.	9.6	74
45	Phosphorus and Cu <sup>2+</sup> removal by periphytic biofilm stimulated by upconversion phosphors doped with Pr <sup>3+</sup> -Li <sup>+</sup> . <i>Bioresource Technology</i> , 2018, 248, 68-74.	9.6	121
46	Sustainable pollutant removal by periphytic biofilm via microbial composition shifts induced by uneven distribution of CeO <sub>2</sub> nanoparticles. <i>Bioresource Technology</i> , 2018, 248, 75-81.	9.6	34
47	Decolorization of high concentration crystal violet by periphyton bioreactors and potential of effluent reuse for agricultural purposes. <i>Journal of Cleaner Production</i> , 2018, 170, 425-436.	9.3	22
48	PREFACE ENPE-2017: International conference on Ecotechnologies for Controlling Non-point Source Pollution and Protecting Aquatic Ecosystem. <i>Bioresource Technology</i> , 2018, 248, 1-2.	9.6	3
49	Microorganisms-based methods for harmful algal blooms control: A review. <i>Bioresource Technology</i> , 2018, 248, 12-20.	9.6	210
50	Improving Denitrification Models by Including Bacterial and Periphytic Biofilm in a Shallow Water-Sediment System. <i>Water Resources Research</i> , 2018, 54, 8146-8159.	4.2	20
51	A New Concept of Promoting Nitrate Reduction in Surface Waters: Simultaneous Supplement of Denitrifiers, Electron Donor Pool, and Electron Mediators. <i>Environmental Science &amp; Technology</i> , 2018, 52, 8617-8626.	10.0	38
52	How Microbial Aggregates Protect against Nanoparticle Toxicity. <i>Trends in Biotechnology</i> , 2018, 36, 1171-1182.	9.3	127
53	Combined CdS nanoparticles-assisted photocatalysis and periphytic biological processes for nitrate removal. <i>Chemical Engineering Journal</i> , 2018, 353, 237-245.	12.7	84
54	Enhancing denitrification using a novel in situ membrane biofilm reactor (isMBfR). <i>Water Research</i> , 2017, 119, 234-241.	11.3	18

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55	Seasonal changes in phosphorus competition and allelopathy of a benthic microbial assembly facilitate prevention of cyanobacterial blooms. <i>Environmental Microbiology</i> , 2017, 19, 2483-2494.	3.8	15
56	The remediation of extremely acidic and moderate pH soil leachates containing Cu (II) and Cd (II) by native periphytic biofilm. <i>Journal of Cleaner Production</i> , 2017, 162, 846-855.	9.3	13
57	Glucose triggers the cytotoxicity of <i>Citrobacter</i> sp. R1 against <i>Microcystis aeruginosa</i> . <i>Science of the Total Environment</i> , 2017, 603-604, 18-25.	8.0	15
58	Distinguishing the roles of different extracellular polymeric substance fractions of a periphytic biofilm in defending against Fe <sub>2</sub> O <sub>3</sub> nanoparticle toxicity. <i>Environmental Science: Nano</i> , 2017, 4, 1682-1691.	4.3	22
59	Advanced nutrient removal from surface water by a consortium of attached microalgae and bacteria: A review. <i>Bioresource Technology</i> , 2017, 241, 1127-1137.	9.6	234
60	Occurrence and Characteristics of Microplastic Pollution in Xiangxi Bay of Three Gorges Reservoir, China. <i>Environmental Science &amp; Technology</i> , 2017, 51, 3794-3801.	10.0	393
61	Gas sensors based on membrane diffusion for environmental monitoring. <i>Sensors and Actuators B: Chemical</i> , 2017, 243, 566-578.	7.8	50
62	Evaluating role of immobilized periphyton in bioremediation of azo dye amaranth. <i>Bioresource Technology</i> , 2017, 225, 395-401.	9.6	62
63	Gas-Permeable Membrane-Based Conductivity Probe Capable of In Situ Real-Time Monitoring of Ammonia in Aquatic Environments. <i>Environmental Science &amp; Technology</i> , 2017, 51, 13265-13273.	10.0	26
64	Removal of pharmaceuticals and personal care products from wastewater using algae-based technologies: a review. <i>Reviews in Environmental Science and Biotechnology</i> , 2017, 16, 717-735.	8.1	129
65	Sustained High Nutrient Supply As an Allelopathic Trigger between Periphytic Biofilm and <i>Microcystis aeruginosa</i> . <i>Environmental Science &amp; Technology</i> , 2017, 51, 9614-9623.	10.0	6
66	Mitigation of nonpoint source pollution in rural areas: From control to synergies of multi ecosystem services. <i>Science of the Total Environment</i> , 2017, 607-608, 1376-1380.	8.0	55
67	Responses of Periphyton to Fe <sub>2</sub> O <sub>3</sub> Nanoparticles: A Physiological and Ecological Basis for Defending Nanotoxicity. <i>Environmental Science &amp; Technology</i> , 2017, 51, 10797-10805.	10.0	46
68	Periphyton. , 2017, , 225-249.		4
69	Removal of parabens and their chlorinated by-products by periphyton: influence of light and temperature. <i>Environmental Science and Pollution Research</i> , 2017, 24, 5566-5575.	5.3	19
70	The effect of periphyton on seed germination and seedling growth of rice ( <i>Oryza sativa</i> ) in paddy area. <i>Science of the Total Environment</i> , 2017, 578, 74-80.	8.0	15
71	Periphyton biofilms: A novel and natural biological system for the effective removal of sulphonated azo dye methyl orange by synergistic mechanism. <i>Chemosphere</i> , 2017, 167, 236-246.	8.2	70
72	Photobioreactor“Wetland System Removes Organic Pollutants and Nutrients. , 2017, , 269-283.		1

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73	Hybrid Bioreactor Based on Periphyton. , 2017, , 285-302.		2
74	Investigation of Adsorption and Absorption Mechanisms During Copper (II) Removal by Periphyton. , 2017, , 303-321.		2
75	Removal of COD by a Spiral Periphyton Bioreactor and Its Associated Microbial Community. , 2017, , 351-366.		0
76	The Removal of Methyl Orange by Periphytic Biofilms. , 2017, , 367-387.		7
77	Indicators for Monitoring Aquatic Ecosystem. , 2017, , 71-106.		5
78	Periphyton and Its Study Methods. , 2017, , 1-33.		2
79	Water and Wastewater Purification Using Periphyton. , 2017, , 107-135.		2
80	Periphytic Biofilm and Its Functions in Aquatic Nutrient Cycling. , 2017, , 137-153.		4
81	Periphyton Functions in Adjusting P Sinks in Sediments. , 2017, , 155-170.		2
82	The Evaluation of Phosphorus Removal Processes and Mechanisms From Surface Water by Periphyton. , 2017, , 171-202.		1
83	Periphyton. , 2017, , 203-223.		0
84	The Living Environment of Periphyton. , 2017, , 35-70.		2
85	The Removal of Heavy Metals by an Immobilized Periphyton Multilevel Bioreactor. , 2017, , 251-268.		1
86	Simultaneous Removal of Cu and Cd From Soil and Water in Paddy Fields by Native Periphyton. , 2017, , 323-349.		1
87	Phosphorus released from sediment of Dianchi Lake and its effect on growth of <i>Microcystis aeruginosa</i> . Environmental Science and Pollution Research, 2016, 23, 16321-16328.	5.3	39
88	Nutrient capture and recycling by periphyton attached to modified agrowaste carriers. Environmental Science and Pollution Research, 2016, 23, 8035-8043.	5.3	13
89	Responses of periphyton morphology, structure, and function to extreme nutrient loading. Environmental Pollution, 2016, 214, 878-884.	7.5	20
90	Periphyton: an important regulator in optimizing soil phosphorus bioavailability in paddy fields. Environmental Science and Pollution Research, 2016, 23, 21377-21384.	5.3	37

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91	Bioremediation of agricultural solid waste leachates with diverse species of Cu (II) and Cd (II) by periphyton. <i>Bioresource Technology</i> , 2016, 221, 214-221.	9.6	32
92	Phototrophic periphyton techniques combine phosphorous removal and recovery for sustainable salt-soil zone. <i>Science of the Total Environment</i> , 2016, 568, 838-844.	8.0	26
93	Comparison of the properties of periphyton attached to modified agro-waste carriers. <i>Environmental Science and Pollution Research</i> , 2016, 23, 3718-3726.	5.3	6
94	Interactions between the antimicrobial agent triclosan and the bloom-forming cyanobacteria <i>Microcystis aeruginosa</i> . <i>Aquatic Toxicology</i> , 2016, 172, 103-110.	4.0	46
95	Effect of butyl paraben on the development and microbial composition of periphyton. <i>Ecotoxicology</i> , 2016, 25, 342-349.	2.4	15
96	Co-contamination of Cu and Cd in paddy fields: Using periphyton to entrap heavy metals. <i>Journal of Hazardous Materials</i> , 2016, 304, 150-158.	12.4	58
97	Nutrient removal by up-scaling a hybrid floating treatment bed (HFTB) using plant and periphyton: From laboratory tank to polluted river. <i>Bioresource Technology</i> , 2016, 207, 142-149.	9.6	69
98	Redox zones stratification and the microbial community characteristics in a periphyton bioreactor. <i>Bioresource Technology</i> , 2016, 204, 114-121.	9.6	28
99	Periphytic biofilm: A buffer for phosphorus precipitation and release between sediments and water. <i>Chemosphere</i> , 2016, 144, 2058-2064.	8.2	73
100	The application of soil amendments benefits to the reduction of phosphorus depletion and the growth of cabbage and corn. <i>Environmental Science and Pollution Research</i> , 2015, 22, 16772-16780.	5.3	7
101	Start-up of a spiral periphyton bioreactor (SPR) for removal of COD and the characteristics of the associated microbial community. <i>Bioresource Technology</i> , 2015, 193, 456-462.	9.6	41
102	The Behavior of Organic Phosphorus Under Non-Point Source Wastewater in the Presence of Phototrophic Periphyton. , 2015, , 55-79.		0
103	Cleaning and regeneration of periphyton biofilm in surface water treatment systems. <i>Water Science and Technology</i> , 2014, 69, 235-243.	2.5	13
104	In situ bioremediation of surface waters by periphytons. <i>Bioresource Technology</i> , 2014, 151, 367-372.	9.6	117
105	The adsorption process during inorganic phosphorus removal by cultured periphyton. <i>Environmental Science and Pollution Research</i> , 2014, 21, 8782-8791.	5.3	50
106	The Behavior of Organic Phosphorus under Non-Point Source Wastewater in the Presence of Phototrophic Periphyton. <i>PLoS ONE</i> , 2014, 9, e85910.	2.5	16
107	Adsorption of dyestuff from aqueous solutions through oxalic acid-modified swede rape straw: Adsorption process and disposal methodology of depleted bioadsorbents. <i>Bioresource Technology</i> , 2013, 138, 191-197.	9.6	111
108	Methylene blue adsorption onto swede rape straw ( <i>Brassica napus</i> L.) modified by tartaric acid: Equilibrium, kinetic and adsorption mechanisms. <i>Bioresource Technology</i> , 2012, 125, 138-144.	9.6	150

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109	Mechanisms of removing pollutants from aqueous solutions by microorganisms and their aggregates: A review. <i>Bioresource Technology</i> , 2012, 107, 10-18.	9.6	228
110	Comparison of the removal of COD by a hybrid bioreactor at low and room temperature and the associated microbial characteristics. <i>Bioresource Technology</i> , 2012, 108, 28-34.	9.6	34
111	An Investigation into the Kinetics and Mechanism of the Removal of Cyanobacteria by Extract of <i>Ephedra equisetina</i> Root. <i>PLoS ONE</i> , 2012, 7, e42285.	2.5	13
112	The decoction of <i>Radix Astragali</i> inhibits the growth of <i>Microcystis aeruginosa</i> . <i>Ecotoxicology and Environmental Safety</i> , 2011, 74, 1006-1010.	6.0	27
113	Allelopathic control of cyanobacterial blooms by periphyton biofilms. <i>Environmental Microbiology</i> , 2011, 13, 604-615.	3.8	86
114	Removal of UV254nm matter and nutrients from a photobioreactor-wetland system. <i>Journal of Hazardous Materials</i> , 2011, 194, 1-6.	12.4	16
115	The application of zero-water discharge system in treating diffuse village wastewater and its benefits in community afforestation. <i>Environmental Pollution</i> , 2011, 159, 2968-2973.	7.5	9
116	Cadmium and mercury removal from non-point source wastewater by a hybrid bioreactor. <i>Bioresource Technology</i> , 2011, 102, 9927-9932.	9.6	21
117	Basic dye adsorption onto an agro-based waste material “Sesame hull ( <i>Sesamum indicum</i> L.). <i>Bioresource Technology</i> , 2011, 102, 10280-10285.	9.6	121
118	The removal of nutrients from non-point source wastewater by a hybrid bioreactor. <i>Bioresource Technology</i> , 2011, 102, 2419-2426.	9.6	49
119	A multi-level bioreactor to remove organic matter and metals, together with its associated bacterial diversity. <i>Bioresource Technology</i> , 2011, 102, 736-741.	9.6	24
120	Eco-restoration: Simultaneous nutrient removal from soil and water in a complex residential “cropland area. <i>Environmental Pollution</i> , 2010, 158, 2472-2477.	7.5	31
121	Hierarchical eco-restoration: A systematical approach to removal of COD and dissolved nutrients from an intensive agricultural area. <i>Environmental Pollution</i> , 2010, 158, 3123-3129.	7.5	23
122	Environmentally benign periphyton bioreactors for controlling cyanobacterial growth. <i>Bioresource Technology</i> , 2010, 101, 9681-9687.	9.6	50
123	Removal of cyanobacterial bloom from a biopond “wetland system and the associated response of zoobenthic diversity. <i>Bioresource Technology</i> , 2010, 101, 3903-3908.	9.6	37
124	Evaluating Adsorption and Biodegradation Mechanisms during the Removal of Microcystin-RR by Periphyton. <i>Environmental Science &amp; Technology</i> , 2010, 44, 6319-6324.	10.0	82
125	Soil Health and Sustainability: Opinions from Chinese Young Soil Scientists. <i>Soil Science Society of America Journal</i> , 0, , .	2.2	0