Chuan Chen

List of Publications by Citations

122	4,196	38	61
papers	citations	h-index	g-index
136	5,152	8.6	5.83
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
122	Pyrosequencing reveals highly diverse microbial communities in microbial electrolysis cells involved in enhanced H2 production from waste activated sludge. *Water Research*, **2012**, 46, 2425-34	12.5	278
121	Microbial community structure of ethanol type fermentation in bio-hydrogen production. *Environmental Microbiology*, **2007**, 9, 1112-25	5.2	162
120	Minimization of excess sludge production by in-situ activated sludge treatment processes--a comprehensive review. *Biotechnology Advances*, **2013**, 31, 1386-96	17.8	150
119	High-efficiency removal of lead from wastewater by biochar derived from anaerobic digestion sludge. *Bioresource Technology*, **2017**, 246, 142-149	11	145
118	Hydrogen production, methanogen inhibition and microbial community structures in psychrophilic single-chamber microbial electrolysis cells. *Energy and Environmental Science*, **2011**, 4, 1329	35.4	136
117	Highly efficient adsorption of dyes by biochar derived from pigments-extracted macroalgae pyrolyzed at different temperature. *Bioresource Technology*, **2018**, 259, 104-110	11	131
116	Ethanoligenens harbinense gen. nov., sp. nov., isolated from molasses wastewater. *International Journal of Systematic and Evolutionary Microbiology*, **2006**, 56, 755-760	2.2	124
115	Characterization of methane production and microbial community shifts during waste activated sludge degradation in microbial electrolysis cells. *Bioresource Technology*, **2015**, 175, 68-74	11	113
114	Simultaneous biological removal of sulfur, nitrogen and carbon using EGSB reactor. *Applied Microbiology and Biotechnology*, **2008**, 78, 1057-63	5.7	109
113	Lead removal by a magnetic biochar derived from persulfate-ZVI treated sludge together with one-pot pyrolysis. *Bioresource Technology*, **2018**, 247, 463-470	11	99
112	Waste biorefineries - integrating anaerobic digestion and microalgae cultivation for bioenergy production. *Current Opinion in Biotechnology*, **2018**, 50, 101-110	11.4	94
111	Enhanced lipid accumulation of green microalga Scenedesmus sp. by metal ions and EDTA addition. *Bioresource Technology*, **2014**, 169, 763-767	11	92
110	High-rate denitrifying sulfide removal process in expanded granular sludge bed reactor. *Bioresource Technology*, **2009**, 100, 2316-9	11	83
109	An innovative process of simultaneous desulfurization and denitrification by Thiobacillus denitrificans. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2005**, 40, 1939-49	2.3	78
108	Transformation of dissolved organic matters in swine, cow and chicken manures during composting. *Bioresource Technology*, **2014**, 168, 222-8	11	75
107	Hydrogen and lipid production from starch wastewater by co-culture of anaerobic sludge and oleaginous microalgae with simultaneous COD, nitrogen and phosphorus removal. *Water Research*, **2015**, 85, 404-12	12.5	72
106	Phthalate metabolites in urine of Chinese young adults: Concentration, profile, exposure and cumulative risk assessment. *Science of the Total Environment*, **2016**, 543, 19-27	10.2	72

105	Production, properties, and catalytic applications of sludge derived biochar for environmental remediation. *Water Research*, **2020**, 187, 116390	12.5	70
104	Interactions of functional bacteria and their contributions to the performance in integrated autotrophic and heterotrophic denitrification. *Water Research*, **2018**, 143, 355-366	12.5	69
103	Revealing the role of adsorption in ciprofloxacin and sulfadiazine elimination routes in microalgae. *Water Research*, **2020**, 172, 115475	12.5	68
102	Multiple syntrophic interactions drive biohythane production from waste sludge in microbial electrolysis cells. *Biotechnology for Biofuels*, **2016**, 9, 162	7.8	67
101	Adaptation of microbial community of the anode biofilm in microbial fuel cells to temperature. *Bioelectrochemistry*, **2017**, 117, 29-33	5.6	62
100	Probabilistic evaluation of integrating resource recovery into wastewater treatment to improve environmental sustainability. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 1630-5	11.5	62
99	Understanding the role of extracellular polymeric substances in an enhanced biological phosphorus removal granular sludge system. *Bioresource Technology*, **2014**, 169, 307-312	11	58
98	Enhanced elementary sulfur recovery in integrated sulfate-reducing, sulfur-producing rector under micro-aerobic condition. *Bioresource Technology*, **2012**, 116, 517-21	11	58
97	Relationship between functional bacteria in a denitrification desulfurization system under autotrophic, heterotrophic, and mixotrophic conditions. *Water Research*, **2021**, 188, 116526	12.5	57
96	Autotrophic and heterotrophic denitrification by a newly isolated strain Pseudomonas sp. C27. *Bioresource Technology*, **2013**, 145, 351-6	11	55
95	Pyrosequencing reveals microbial community dynamics in integrated simultaneous desulfurization and denitrification process at different influent nitrate concentrations. *Chemosphere*, **2017**, 171, 294-301	8.4	49
94	Decabrominated Diphenyl Ethers (BDE-209) in Chinese and Global Air: Levels, Gas/Particle Partitioning, and Long-Range Transport: Is Long-Range Transport of BDE-209 Really Governed by the Movement of Particles?. *Environmental Science & Technology*, **2017**, 51, 1035-1042	10.3	45
93	Sulfate-reduction, sulfide-oxidation and elemental sulfur bioreduction process: modeling and experimental validation. *Bioresource Technology*, **2013**, 147, 202-211	11	45
92	Efficiency of an upflow anaerobic sludge blanket reactor treating potato starch processing wastewater and related process kinetics, functional microbial community and sludge morphology. *Bioresource Technology*, **2017**, 239, 105-116	11	42
91	Bioreactor performance and functional gene analysis of microbial community in a limited-oxygen fed bioreactor for co-reduction of sulfate and nitrate with high organic input. *Journal of Hazardous Materials*, **2014**, 278, 250-7	12.8	42
90	Cadmium-induced oxidative stress, histopathology, and transcriptome changes in the hepatopancreas of freshwater crayfish (Procambarus clarkii). *Science of the Total Environment*, **2019**, 666, 944-955	10.2	41
89	Enhanced energy conversion efficiency from high strength synthetic organic wastewater by sequential dark fermentative hydrogen production and algal lipid accumulation. *Bioresource Technology*, **2014**, 157, 355-9	11	41
88	Microbial degradation of N,N-dimethylformamide by Paracoccus sp. strain DMF-3 from activated sludge. *Chemical Engineering Journal*, **2018**, 343, 324-330	14.7	40

87	Performance and microbial community analysis of a microaerophilic sulfate and nitrate co-reduction system. *Chemical Engineering Journal*, **2017**, 330, 63-70	14.7	39
86	Fine-tuning key parameters of an integrated reactor system for the simultaneous removal of COD, sulfate and ammonium and elemental sulfur reclamation. *Journal of Hazardous Materials*, **2014**, 269, 56-67	12.8	38
85	Enhanced performance of denitrifying sulfide removal process under micro-aerobic condition. *Journal of Hazardous Materials*, **2010**, 179, 1147-51	12.8	38
84	Effects of cadmium on intestinal histology and microbiota in freshwater crayfish (Procambarus clarkii). *Chemosphere*, **2020**, 242, 125105	8.4	35
83	Characteristics of rumen microorganisms involved in anaerobic degradation of cellulose at various pH values. *RSC Advances*, **2017**, 7, 40303-40310	3.7	34
82	Dual purpose microalgae-based biorefinery for treating pharmaceuticals and personal care products (PPCPs) residues and biodiesel production. *Science of the Total Environment*, **2019**, 688, 253-261	10.2	33
81	Efficient regulation of elemental sulfur recovery through optimizing working height of upflow anaerobic sludge blanket reactor during denitrifying sulfide removal process. *Bioresource Technology*, **2016**, 200, 1019-23	11	33
80	Bioreactor performance and microbial community analysis of autotrophic denitrification under micro-aerobic condition. *Science of the Total Environment*, **2019**, 647, 914-922	10.2	33
79	Integrated simultaneous desulfurization and denitrification (ISDD) process at various COD/sulfate ratios. *Bioresource Technology*, **2014**, 155, 161-9	11	33
78	Thermophilic hydrogen production from sludge pretreated by thermophilic bacteria: analysis of the advantages of microbial community and metabolism. *Bioresource Technology*, **2014**, 172, 433-437	11	32
77	Rapid in vivo lipid/carbohydrate quantification of single microalgal cell by Raman spectral imaging to reveal salinity-induced starch-to-lipid shift. *Biotechnology for Biofuels*, **2017**, 10, 9	7.8	31
76	Augmentation of protein-derived acetic acid production by heat-alkaline-induced changes in protein structure and conformation. *Water Research*, **2016**, 88, 595-603	12.5	31
75	Enhanced performance of denitrifying sulfide removal process at high carbon to nitrogen ratios under micro-aerobic condition. *Bioresource Technology*, **2017**, 232, 417-422	11	30
74	Enhancement of productivity of Chlorella pyrenoidosa lipids for biodiesel using co-culture with ammonia-oxidizing bacteria in municipal wastewater. *Renewable Energy*, **2020**, 151, 598-603	8.1	30
73	Effect of temperature switchover on the degradation of antibiotic chloramphenicol by biocathode bioelectrochemical system. *Journal of Environmental Sciences*, **2014**, 26, 1689-97	6.4	29
72	Composition of extracellular polymeric substances influences the autoaggregation capability of hydrogen-producing bacterium Ethanoligenens harbinense. *Bioresource Technology*, **2009**, 100, 5109-13	11	29
71	Energy conversion analysis of microalgal lipid production under different culture modes. *Bioresource Technology*, **2014**, 166, 625-9	11	26
70	Enhancing denitrifying sulfide removal with functional strains under micro-aerobic condition. *Process Biochemistry*, **2010**, 45, 1007-1010	4.8	26

69	Pulse electromagnetic fields enhance extracellular electron transfer in magnetic bioelectrochemical systems. *Biotechnology for Biofuels*, **2017**, 10, 238	7.8	25
68	Investigation of colloidal biogenic sulfur flocculation: Optimization using response surface analysis. *Journal of Environmental Sciences*, **2016**, 42, 227-235	6.4	24
67	Bioelectrochemical system for the enhancement of methane production by anaerobic digestion of alkaline pretreated sludge. *Bioresource Technology*, **2020**, 304, 123000	11	23
66	Optimization of ultrasonic pretreatment and substrate/inoculum ratio to enhance hydrolysis and volatile fatty acid production from food waste. *RSC Advances*, **2014**, 4, 53321-53326	3.7	23
65	Sulfur-nitrogen-carbon removal of Pseudomonas sp. C27 under sulfide stress. *Enzyme and Microbial Technology*, **2013**, 53, 6-12	3.8	22
64	Heterotrophic sulfide-oxidizing nitrate-reducing bacteria enables the high performance of integrated autotrophic-heterotrophic denitrification (IAHD) process under high sulfide loading. *Water Research*, **2020**, 178, 115848	12.5	21
63	Spatial nitrifications of microbial processes during composting of swine, cow and chicken manure. *Scientific Reports*, **2015**, 5, 14932	4.9	21
62	Enhanced methane production by alleviating sulfide inhibition with a microbial electrolysis coupled anaerobic digestion reactor. *Environment International*, **2020**, 136, 105503	12.9	21
61	The screening of microalgae mutant strain Scenedesmus sp. Z-4 with a rich lipid content obtained by 60Co γ-ray mutation. *RSC Advances*, **2015**, 5, 52057-52061	3.7	20
60	Application of low frequency ultrasound to stimulate the bio-activity of activated sludge for use as an inoculum in enhanced hydrogen production. *RSC Advances*, **2013**, 3, 21848	3.7	20
59	Photo-hydrogen production by Rhodopseudomonas faecalis RLD-53 immobilized on the surface of modified activated carbon fibers. *RSC Advances*, **2012**, 2, 2225	3.7	19
58	Microbial community functional structure in response to micro-aerobic conditions in sulfate-reducing sulfur-producing bioreactor. *Journal of Environmental Sciences*, **2014**, 26, 1099-107	6.4	17
57	Reduction of produced elementary sulfur in denitrifying sulfide removal process. *Applied Microbiology and Biotechnology*, **2011**, 90, 1129-36	5.7	17
56	Simultaneous nutrient removal and reduction in sludge from sewage waste using an alternating anaerobic–anoxic–microaerobic–aerobic system combining ozone/ultrasound technology. *RSC Advances*, **2014**, 4, 52892-52897	3.7	16
55	Continuous photo-hydrogen production in anaerobic fluidized bed photo-reactor with activated carbon fiber as carrier. *RSC Advances*, **2012**, 2, 5531	3.7	16
54	The performance of simultaneous denitrification and biogas desulfurization system for the treatment of domestic sewage. *Chemical Engineering Journal*, **2020**, 399, 125855	14.7	15
53	Performance and model of a novel multi-sparger multi-stage airlift loop membrane bioreactor to treat high-strength 7-ACA pharmaceutical wastewater: effect of hydraulic retention time, temperature and pH. *Bioresource Technology*, **2014**, 167, 241-50	11	15
52	Fermentative hydrogen production from beet sugar factory wastewater treatment in a continuous stirred tank reactor using anaerobic mixed consortia. *Frontiers of Environmental Science and Engineering*, **2013**, 7, 143-150	5.8	15

51	Cloning, expression, and characterization of an acetate kinase from a high rate of biohydrogen bacterial strain Ethanoligenens sp. hit B49. *Current Microbiology*, **2007**, 55, 167-72	2.4	13
50	Continuous sulfur biotransformation in an anaerobic-anoxic sequential batch reactor involving sulfate reduction and denitrifying sulfide oxidization. *Chemosphere*, **2019**, 234, 568-578	8.4	12
49	Enhanced lipid production by Chlorella pyrenoidosa through magnetic field pretreatment of wastewater and treatment of microalgae-wastewater culture solution: Magnetic field treatment modes and conditions. *Bioresource Technology*, **2020**, 306, 123102	11	12
48	Mathematical modeling of simultaneous carbon-nitrogen-sulfur removal from industrial wastewater. *Journal of Hazardous Materials*, **2017**, 321, 371-381	12.8	12
47	Optimization of immobilization parameters of Thermoanaerobacterium thermosaccharolyticum W16 on a new carrier for enhanced hydrogen production. *RSC Advances*, **2012**, 2, 7391	3.7	12
46	The effect of PBS on methane production in combined MEC-AD system fed with alkaline pretreated sewage sludge. *Renewable Energy*, **2020**, 152, 229-236	8.1	12
45	Single molecule sequencing reveals response of manganese-oxidizing microbiome to different biofilter media in drinking water systems. *Water Research*, **2020**, 171, 115424	12.5	12
44	p-Nitrophenol degradation and microbial community structure in a biocathode bioelectrochemical system. *RSC Advances*, **2016**, 6, 89821-89826	3.7	10
43	Mitigating adverse impacts of varying sulfide/nitrate ratios on denitrifying sulfide removal process performance. *Bioresource Technology*, **2018**, 267, 782-788	11	9
42	Improvement of nitrification efficiency by bioaugmentation in sequencing batch reactors at low temperature. *Frontiers of Environmental Science and Engineering*, **2014**, 8, 937-944	5.8	9
41	GeoChip-based analysis of the microbial community functional structures in simultaneous desulfurization and denitrification process. *Journal of Environmental Sciences*, **2014**, 26, 1375-82	6.4	9
40	Why the cooperation of radical and non-radical pathways in PMS system leads to a higher efficiency than a single pathway in tetracycline degradation. *Journal of Hazardous Materials*, **2022**, 424, 127247	12.8	9
39	The microbial zonation of SRB and soNRB enhanced the performance of SR-DSR process under the micro-aerobic condition. *Environment International*, **2019**, 132, 105096	12.9	8
38	An overlooked effect induced by surface modification: different molecular response of Chlorella pyrenoidosa to graphitized and oxidized nanodiamonds. *Environmental Science: Nano*, **2020**, 7, 2302-2312	7.1	8
37	Sequential generation of hydrogen and lipids from starch by combination of dark fermentation and microalgal cultivation. *RSC Advances*, **2015**, 5, 76779-76782	3.7	8
36	Feasibility and simulation model of a pilot scale membrane bioreactor for wastewater treatment and reuse from Chinese traditional medicine. *Journal of Environmental Sciences*, **2007**, 19, 129-34	6.4	8
35	Inhibition of biofouling in membrane bioreactor by metabolic uncoupler based on controlling microorganisms accumulation and quorum sensing signals secretion. *Chemosphere*, **2020**, 245, 125363	8.4	8
34	Interaction of bacteria and archaea in a microbial fuel cell with ITO anode.. *RSC Advances*, **2018**, 8, 28487-28495	3.7	8

33	Anode biofilm communities and the performance of microbial fuel cells with different reactor configurations. *RSC Advances*, **2016**, 6, 85149-85155	3.7	7
32	Performance of a novel HABR□CFASR system for the biological treatment of mixed printing and dyeing wastewater (MPDW). *Desalination and Water Treatment*, **2014**, 52, 5553-5562		7
31	Nitrogen and sulfur metabolisms of Pseudomonas sp. C27 under mixotrophic growth condition. *Bioresource Technology*, **2019**, 293, 122169	11	7
30	Effect of temperature on treating chemical synthesis-based pharmaceutical wastewater containing 7-ACA by a novel multi-stage loop membrane bioreactor. *Journal of Chemical Technology and Biotechnology*, **2015**, 90, 1002-1012	3.5	6
29	Response of the reactor performance and microbial community to a shift of ISDD process from micro-aerobic to anoxic condition. *Chemosphere*, **2018**, 212, 837-844	8.4	6
28	Simultaneous removal of carbon dioxide, sulfur dioxide and nitric oxide in a biofilter system: Optimization operating conditions, removal efficiency and bacterial community. *Chemosphere*, **2021**, 276, 130084	8.4	6
27	Analyzing the inhibitory effect of metabolic uncoupler on bacterial initial attachment and biofilm development and the underlying mechanism. *Environmental Research*, **2020**, 185, 109390	7.9	5
26	Evaluating the effect of fenton pretreated pyridine wastewater under different biological conditions: Microbial diversity and biotransformation pathways. *Journal of Environmental Management*, **2021**, 287, 112297	7.9	5
25	The Detoxification and Degradation of Benzothiazole from the Wastewater in Microbial Electrolysis Cells. *International Journal of Environmental Research and Public Health*, **2016**, 13,	4.6	5
24	The underlying mechanism of enhanced methane production using microbial electrolysis cell assisted anaerobic digestion (MEC-AD) of proteins. *Water Research*, **2021**, 201, 117325	12.5	5
23	The stimulating metabolic mechanisms response to sulfide and oxygen in typical heterotrophic sulfide-oxidizing nitrate-reducing bacteria Pseudomonas C27. *Bioresource Technology*, **2020**, 309, 123451	11	4
22	Biological treatment of refractory pollutants in industrial wastewaters under aerobic or anaerobic condition: Batch tests and associated microbial community analysis. *Bioresource Technology Reports* , **2022**, 17, 100927	4.1	4
21	Performance of a novel IAHD-DSR process with methane and sulfide as co-electron donors. *Journal of Hazardous Materials*, **2020**, 386, 121657	12.8	4
20	Influence of microbial spatial distribution and activity in an EGSB reactor under high- and low-loading denitrification desulfurization. *Environmental Research*, **2021**, 195, 110311	7.9	4
19	The synergistic effect of potassium ferrate and peroxymonosulfate application on biogas production and shaping microbial community during anaerobic co-digestion of a cow manure-cotton straw mixture. *Bioresource Technology*, **2021**, 333, 125166	11	4
18	Revealing the role of nitrate on sulfide removal coupled with bioenergy production in Chlamydomonas sp. Tai-03: Metabolic pathways and mechanisms. *Journal of Hazardous Materials*, **2020**, 399, 123115	12.8	3
17	Inhibition Effectiveness of Laser-Cleaned Nanostructured Aluminum Alloys to Sulfate-reducing Bacteria Based on Superwetting and Ultraslippery Surfaces.. *ACS Applied Bio Materials*, **2020**, 3, 6131-6144	4.1	3
16	Hydrogen production efficiency and microbial community of ethanol-type fermentation. *Journal of Renewable and Sustainable Energy*, **2019**, 11, 013105	2.5	2

15	Microbial community structure in different wastewater treatment processes characterized by single-strand conformation polymorphism (SSCP) technique. *Frontiers of Environmental Science and Engineering in China*, **2008**, 2, 116-121		2
14	The interaction between Pseudomonas C27 and Thiobacillus denitrificans in the integrated autotrophic and heterotrophic denitrification process.. *Science of the Total Environment*, **2021**, 811, 152360	10.2	2
13	Simultaneous removal of NO and SO from flue gas in an integrated FGD-CABR system by sulfur cycling-mediated Fe(II)EDTA regeneration.. *Environmental Research*, **2021**, 205, 112541	7.9	2
12	Effective removal of methyl siloxane from water by sewage activated sludge microbes: biodegradation behavior and characteristics of microbial community. *Bioresource Technology Reports*, **2019**, 7, 100209	4.1	1
11	Production of Bioflocculant Using the Effluent from a Hydrogen-Producing Bioreactor and its Capacity of Wastewater Treatment **2008**,		1
10	Enhancement of methane production from waste activated sludge using hybrid microbial electrolysis cells-anaerobic digestion (MEC-AD) process-A review.. *Bioresource Technology*, **2021**, 346, 126641	11	1
9	Runoff control simulation and comprehensive benefit evaluation of low-impact development strategies in a typical cold climate area.. *Environmental Research*, **2021**, 112630	7.9	1
8	Cryptic Sulfur and Oxygen Cycling Potentially Reduces NO-Driven Greenhouse Warming: Underlying Revision Need of the Nitrogen Cycle.. *Environmental Science & Technology*, **2022**,	10.3	1
7	High-precision prediction of unionized hydrogen sulfide generation based on limited datasets and its impact on anaerobic digestion of sulfate-rich wastewater. *Journal of Cleaner Production*, **2022**, 341, 130875	10.3	0
6	Recent Advances in Autotrophic Biological Nitrogen Removal for Low Carbon Wastewater: A Review. *Water (Switzerland)*, **2022**, 14, 1101	3	0
5	Recent advances of algae-bacteria consortia in aquatic remediation. *Critical Reviews in Environmental Science and Technology*,1-25	11.1	0
4	A dual-chamber reactor to assess the saccharification capability of the cellulytic microflora from straw waste. *RSC Advances*, **2014**, 4, 9617	3.7	
3	Molecular characterization and fermentative hydrogen production of a wild anaerobe in clostridium genus. *Frontiers of Energy and Power Engineering in China*, **2007**, 1, 403-407		
2	Biological hydrogen production from organic wastewater with a novel strain B49 isolated from anaerobic sewage sludge. *Diqiu Huaxue*, **2006**, 25, 153-153		
1	Microbial Fuel Cell Technology for Sustainable Treatment of Organic Wastes and Electrical Energy Recovery		291-318