Quanguo Zhang

List of Publications by Citations

110 papers	2,793 citations	28 h-index	49 g-index
111 ext. papers	3,630 ext. citations	9.3 avg, IF	5.96 L-index

#	Paper	IF	Citations
110	Sludge treatment: Current research trends. *Bioresource Technology*, **2017**, 243, 1159-1172	11	182
109	Biogas from anaerobic digestion processes: Research updates. *Renewable Energy*, **2016**, 98, 108-119	8.1	180
108	Heterotrophic cultivation of microalgae for pigment production: A review. *Biotechnology Advances*, **2018**, 36, 54-67	17.8	179
107	Kraft lignin biorefinery: A perspective. *Bioresource Technology*, **2018**, 247, 1181-1183	11	123
106	Aerobic granular processes: Current research trends. *Bioresource Technology*, **2016**, 210, 74-80	11	118
105	Pretreatment of biomass using ionic liquids: Research updates. *Renewable Energy*, **2017**, 111, 77-84	8.1	103
104	Characterization of cellulose I/II hybrid fibers isolated from energycane bagasse during the delignification process: Morphology, crystallinity and percentage estimation. *Carbohydrate Polymers*, **2015**, 133, 438-47	10.3	95
103	Photo-fermentative hydrogen production from crop residue: A mini review. *Bioresource Technology*, **2017**, 229, 222-230	11	72
102	Bio-hydrogen production from apple waste by photosynthetic bacteria HAU-M1. *International Journal of Hydrogen Energy*, **2016**, 41, 13399-13407	6.7	72
101	Comparative study on bio-hydrogen production from corn stover: Photo-fermentation, dark-fermentation and dark-photo co-fermentation. *International Journal of Hydrogen Energy*, **2020**, 45, 3807-3814	6.7	71
100	Microbial fuel cells as pollutant treatment units: Research updates. *Bioresource Technology*, **2016**, 217, 121-8	11	68
99	Photo-fermentative hydrogen production from enzymatic hydrolysate of corn stalk pith with a photosynthetic consortium. *International Journal of Hydrogen Energy*, **2016**, 41, 16778-16785	6.7	63
98	Comparison of liquid hot water and alkaline pretreatments of giant reed for improved enzymatic digestibility and biogas energy production. *Bioresource Technology*, **2016**, 216, 60-8	11	58
97	Nanocellulose films with combined cellulose nanofibers and nanocrystals: tailored thermal, optical and mechanical properties. *Cellulose*, **2018**, 25, 1103-1115	5.5	57
96	Potential use and the energy conversion efficiency analysis of fermentation effluents from photo and dark fermentative bio-hydrogen production. *Bioresource Technology*, **2017**, 245, 884-889	11	55
95	Porous Carbon Nanofibers from Electrospun Biomass Tar/Polyacrylonitrile/Silver Hybrids as Antimicrobial Materials. *ACS Applied Materials & Interfaces*, **2015**, 7, 15108-16	9.5	51
94	Sequential dark and photo fermentation hydrogen production from hydrolyzed corn stover: A pilot test using 11 m reactor. *Bioresource Technology*, **2018**, 253, 382-386	11	50

93	Syngas production by chemical-looping gasification of wheat straw with Fe-based oxygen carrier. *Bioresource Technology*, **2018**, 263, 273-279	11	49
92	Influence of mixing method and hydraulic retention time on hydrogen production through photo-fermentation with mixed strains. *International Journal of Hydrogen Energy*, **2015**, 40, 6521-6529	6.7	46
91	Carbon capture and utilization of fermentation CO2: Integrated ethanol fermentation and succinic acid production as an efficient platform. *Applied Energy*, **2017**, 206, 364-371	10.7	40
90	Effect of substrate concentration on hydrogen production by photo-fermentation in the pilot-scale baffled bioreactor. *Bioresource Technology*, **2018**, 247, 1173-1176	11	38
89	Comparison of bio-hydrogen production yield capacity between asynchronous and simultaneous saccharification and fermentation processes from agricultural residue by mixed anaerobic cultures. *Bioresource Technology*, **2018**, 247, 1210-1214	11	38
88	Comparison of sodium hydroxide and calcium hydroxide pretreatments of giant reed for enhanced enzymatic digestibility and methane production. *Bioresource Technology*, **2017**, 244, 1150-1157	11	36
87	Effects of different pretreatment methods on the structural characteristics, enzymatic saccharification and photo-fermentative bio-hydrogen production performance of corn straw. *Bioresource Technology*, **2020**, 304, 122999	11	34
86	Biohydrogen production in pilot-scale fermenter: Effects of hydraulic retention time and substrate concentration. *Journal of Cleaner Production*, **2019**, 229, 751-760	10.3	32
85	Feasible use of microbial fuel cells for pollution treatment. *Renewable Energy*, **2018**, 129, 824-829	8.1	32
84	Photo-fermentative Bio-hydrogen Production from Agricultural Residue Enzymatic Hydrolyzate and the Enzyme Reuse. *BioResources*, **2014**, 9,	1.3	32
83	Photo-fermentative hydrogen production in a 4m baffled reactor: Effects of hydraulic retention time. *Bioresource Technology*, **2017**, 239, 533-537	11	31
82	Structure and thermal properties of tar from gasification of agricultural crop residue. *Journal of Thermal Analysis and Calorimetry*, **2015**, 119, 27-35	4.1	28
81	Evaluation of hydrogen yield potential from Chlorella by photo-fermentation under diverse substrate concentration and enzyme loading. *Bioresource Technology*, **2020**, 303, 122956	11	28
80	Analysis of shaking effect on photo-fermentative hydrogen production under different concentrations of corn stover powder. *International Journal of Hydrogen Energy*, **2018**, 43, 20465-20473	6.7	27
79	Investigation of the interaction between lighting and mixing applied during the photo-fermentation biohydrogen production process from agricultural waste. *Bioresource Technology*, **2020**, 312, 123570	11	26
78	Chemical-looping gasification of corn straw with Fe-based oxygen carrier: Thermogravimetric analysis. *Bioresource Technology*, **2020**, 303, 122904	11	25
77	Effect of alkaline pretreatment on photo-fermentative hydrogen production from giant reed: Comparison of NaOH and Ca(OH). *Bioresource Technology*, **2020**, 304, 123001	11	24
76	Biohydrogen production through active saccharification and photo-fermentation from alfalfa. *Bioresource Technology*, **2020**, 304, 123007	11	23

75	Enhanced buffer capacity of fermentation broth and biohydrogen production from corn stalk with NaHPO/NaHPO. *Bioresource Technology*, **2020**, 313, 123783	11	21
74	Photosynthetic hydrogen production from enzyme-hydrolyzed micro-grinded maize straws. *International Journal of Hydrogen Energy*, **2016**, 41, 21665-21669	6.7	21
73	Enhancement of the biohydrogen production performance from mixed substrate by photo-fermentation: Effects of initial pH and inoculation volume ratio. *Bioresource Technology*, **2021**, 319, 124153	11	21
72	Photosynthetic hydrogen production by alginate immobilized bacterial consortium. *Bioresource Technology*, **2017**, 236, 44-48	11	20
71	Syngas production from biomass using Fe-based oxygen carrier: Optimization. *Bioresource Technology*, **2019**, 280, 183-187	11	20
70	Grid columnar flat panel photobioreactor with immobilized photosynthetic bacteria for continuous photofermentative hydrogen production. *Bioresource Technology*, **2019**, 291, 121806	11	19
69	Integrated gasification and catalytic reforming syngas production from corn straw with mitigated greenhouse gas emission potential. *Bioresource Technology*, **2019**, 280, 371-377	11	19
68	Recycling of shrub landscaping waste: Exploration of bio-hydrogen production potential and optimization of photo-fermentation bio-hydrogen production process. *Bioresource Technology*, **2021**, 331, 125048	11	19
67	A comparison between simultaneous saccharification and separate hydrolysis for photofermentative hydrogen production with mixed consortium of photosynthetic bacteria using corn stover. *International Journal of Hydrogen Energy*, **2017**, 42, 30613-30620	6.7	18
66	Enhancement of bio-hydrogen yield and pH stability in photo fermentation process using dark fermentation effluent as succedaneum. *Bioresource Technology*, **2020**, 297, 122504	11	18
65	Modifying crystallinity, and thermo-optical characteristics of Paulownia biomass through ultrafine grinding and evaluation of biohydrogen production potential. *Journal of Cleaner Production*, **2020**, 269, 122386	10.3	17
64	Effects of mass transfer and light intensity on substrate biological degradation by immobilized photosynthetic bacteria within an annular fiber-illuminating biofilm reactor. *Journal of Photochemistry and Photobiology B: Biology*, **2014**, 131, 113-9	6.7	17
63	An automated control system for pilot-scale biohydrogen production: Design, operation and validation. *International Journal of Hydrogen Energy*, **2020**, 45, 3795-3806	6.7	17
62	Rheological properties of corn stover hydrolysate and photo-fermentation bio-hydrogen producing capacity under intermittent stirring. *International Journal of Hydrogen Energy*, **2020**, 45, 3721-3728	6.7	17
61	Synergistic effect of mixing wheat straw and lignite in co-pyrolysis and steam co-gasification. *Bioresource Technology*, **2020**, 302, 122876	11	16
60	Enhancement of pH values stability and photo-fermentation biohydrogen production by phosphate buffer. *Bioengineered*, **2020**, 11, 291-300	5.7	15
59	Ethanol production by modified polyvinyl alcohol-immobilized Zymomonas mobilis and in situ membrane distillation under very high gravity condition. *Applied Energy*, **2017**, 202, 1-5	10.7	14
58	Effect of enzymolysis time on biohydrogen production from photo-fermentation by using various energy grasses as substrates. *Bioresource Technology*, **2020**, 305, 123062	11	14

57	Fast corn stalk pyrolysis and the influence of catalysts on product distribution. *Bioresource Technology*, **2020**, 301, 122739	11	14
56	Ammonium bicarbonate pretreatment of corn stalk for improved methane production via anaerobic digestion: Kinetic modeling. *Bioresource Technology*, **2019**, 292, 122052	11	12
55	Photo-fermentation biohydrogen production and electrons distribution from dark fermentation effluents under batch, semi-continuous and continuous modes. *Bioresource Technology*, **2020**, 311, 123549	11	12
54	A syntrophic co-fermentation model for bio-hydrogen production. *Journal of Cleaner Production*, **2021**, 317, 128288	10.3	12
53	Enhancement of converting corn stalk into reducing sugar by ultrasonic-assisted ammonium bicarbonate pretreatment. *Bioresource Technology*, **2020**, 302, 122878	11	10
52	Cohesive strategy and energy conversion efficiency analysis of bio-hythane production from corncob powder by two-stage anaerobic digestion process. *Bioresource Technology*, **2020**, 300, 122746	11	10
51	Insights into correlation between hydrogen yield improvement and glycerol addition in photo-fermentation of Arundo donax L. *Bioresource Technology*, **2021**, 321, 124467	11	10
50	Enhancing photo-fermentation biohydrogen production by strengthening the beneficial metabolic products with catalysts. *Journal of Cleaner Production*, **2021**, 317, 128437	10.3	10
49	Biological Hydrogen Production From Renewable Resources by Photofermentation. *Advances in Bioenergy*, **2018**, 137-160	3.9	9
48	Optimization of photo fermentation in corn stalk through phosphate additive. *Bioresource Technology Reports*, **2019**, 7, 100278	4.1	9
47	Optimization of Biohydrogen Production from Cornstalk Through Surface Response Methodology. *Journal of Biobased Materials and Bioenergy*, **2019**, 13, 830-839	1.4	9
46	Study of the interrelationship between nano-TiO addition and photo-fermentative bio-hydrogen production of corn straw. *Bioresource Technology*, **2021**, 338, 125549	11	9
45	Photo-fermentative biohydrogen production from corncob treated by microwave irradiation. *Bioresource Technology*, **2021**, 340, 125460	11	9
44	Effect of zinc ion on photo-fermentative hydrogen production performance, kinetics and electronic distribution in biohydrogen production by HAU-M1. *Bioresource Technology*, **2021**, 324, 124680	11	8
43	Drying and recovery of aerobic granules. *Bioresource Technology*, **2016**, 218, 397-401	11	8
42	Role of surfactant in affecting photo-fermentative bio-hydrogen production performance from corncob. *Bioresource Technology*, **2021**, 333, 125173	11	8
41	Synergistic effect of the cotton stalk and high-ash coal on gas production during co-pyrolysis/gasification. *Bioresource Technology*, **2021**, 336, 125336	11	8
40	Effect of Substrate Concentration on Photo-Fermentation Bio-Hydrogen Production Process from Starch-Rich Agricultural Leftovers under Oscillation. *Sustainability*, **2020**, 12, 2700	3.6	7

39	Defect engineering in SnO2 nanomaterials: Pathway to enhance the biohydrogen production from agricultural residue of corn stover. *Applied Materials Today*, **2020**, 21, 100850	6.6	7
38	Enhancement strategies for photo-fermentative biohydrogen production: A review. *Bioresource Technology*, **2021**, 340, 125601	11	7
37	Application of calcium oxide/ferric oxide composite oxygen carrier for corn straw chemical looping gasification. *Bioresource Technology*, **2021**, 330, 125011	11	6
36	A strategy for successive feedstock reuse to maximize photo-fermentative hydrogen production of Arundo donax L. *Bioresource Technology*, **2021**, 329, 124878	11	6
35	Tolerance of photo-fermentative biohydrogen production system amended with biochar and nanoscale zero-valent iron to acidic environment. *Bioresource Technology*, **2021**, 338, 125512	11	6
34	Gasification and catalytic reforming of corn straw in closed-loop reactor. *Bioresource Technology*, **2019**, 282, 530-533	11	5
33	Optimization of hydrogen production performance of Chlorella vulgaris under different hydrolase and inoculation amount. *Journal of Cleaner Production*, **2021**, 310, 127293	10.3	5
32	Activated char supported Fe-Ni catalyst for syngas production from catalytic gasification of pine wood. *Bioresource Technology*, **2021**, 340, 125600	11	5
31	Statistical optimization of simultaneous saccharification fermentative hydrogen production from corn stover. *Bioengineered*, **2020**, 11, 428-438	5.7	4
30	Enhancing photo-fermentation biohydrogen production from corn stalk by iron ion. *Bioresource Technology*, **2021**, 345, 126457	11	4
29	Enhancement of methane production by anaerobic digestion of corn straw with hydrogen-nanobubble water. *Bioresource Technology*, **2022**, 344, 126220	11	4
28	Mesophilic and thermophilic photo-hydrogen production from micro-grinded, enzyme-hydrolyzed maize straws. *International Journal of Hydrogen Energy*, **2017**, 42, 27618-27622	6.7	4
27	Effect of Mixing Intensity on Bio-Hydrogen Yield Through Photo-Fermentation by Photosynthetic Bacteria HAU-M1. *Journal of Biobased Materials and Bioenergy*, **2019**, 13, 418-423	1.4	3
26	Analysis of the characteristics of paulownia lignocellulose and hydrogen production potential via photo fermentation. *Bioresource Technology*, **2022**, 344, 126361	11	3
25	Potentials of bio-hydrogen and bio-methane production from diseased swines. *International Journal of Hydrogen Energy*, **2020**, 45, 34473-34482	6.7	3
24	Experimental study on optimization of initial pH for photo-fermentation bio-hydrogen under different enzymatic hydrolysis of chlorella vulgaris. *Bioresource Technology*, **2021**, 338, 125571	11	3
23	Enhanced biohydrogen production from corn straw by basalt fiber addition. *Bioresource Technology* , **2021**, 338, 125528	11	3
22	Characteristics of Anaerobic Fermentation with Different Parts of Corn Stalks at Low Concentrations. *International Journal of Green Energy*, **2015**, 12, 1018-1024	3	2

21	Performance evaluation of bio-hydrogen and bio-methane cogeneration from corn stover over a range of initial pH and temperature. *International Journal of Hydrogen Energy*, **2020**, 45, 21157-21165	6.7	2
20	Lignin removal, reducing sugar yield and photo-fermentative biohydrogen production capability of corn stover: Effects of different pretreatments. *Bioresource Technology*, **2021**, 126437	11	2
19	Comparison of three ionic liquids pretreatment of Arundo donax L. For enhanced photo-fermentative hydrogen production. *Bioresource Technology*, **2022**, 343, 126088	11	2
18	Sustainable additives for the regulation of NH concentration and emissions during the production of biomethane and biohydrogen: a review.. *Bioresource Technology*, **2021**, 126596	11	1
17	Effect of citrate buffer on hydrogen production by photosynthetic bacteria.. *Bioresource Technology*, **2021**, 126636	11	1
16	A review on biological recycling in agricultural waste-based biohydrogen production: recent developments.. *Bioresource Technology*, **2021**, 126595	11	1
15	Towards high light conversion efficiency from photo-fermentative hydrogen production of Arundo donax L. By light-dark duration alternation strategy. *Bioresource Technology*, **2022**, 344, 126302	11	1
14	Enhancing photo-fermentative biohydrogen production using different zinc salt additives.. *Bioresource Technology*, **2021**, 345, 126561	11	1
13	Preparation of Slow-Release Insecticides from Biogas Slurry: Effectiveness of Ion Exchange Resin in the Adsorption and Release of Ammonia Nitrogen. *Processes*, **2021**, 9, 1461	2.9	1
12	Continuous dark and photo biohydrogen production in a baffled bioreactor and electrons distribution analysis. *Bioresource Technology*, **2021**, 337, 125440	11	1
11	Effects of enzymatic hydrolysis and alkalization pretreatment on biohydrogen production by chlorella photosynthesis.. *Bioresource Technology*, **2022**, 349, 126859	11	1
10	Enhancement effect of defoamer additives on photo-fermentation biohydrogen production process.. *Bioresource Technology*, **2022**, 352, 127070	11	1
9	Pretreatment of corn stover by torrefaction for improving reducing sugar and biohydrogen production.. *Bioresource Technology*, **2022**, 351, 126905	11	1
8	Enhancing biohydrogen production from lignocellulosic biomass of Paulownia waste by charge facilitation in Zn doped SnO nanocatalysts.. *Bioresource Technology*, **2022**, 355, 127299	11	1
7	Effect of 5-HMF and furfural additives on bio-hydrogen production by photo-fermentation from giant reed.. *Bioresource Technology*, **2022**, 347, 126743	11	0
6	Forecasting of reducing sugar yield from corncob after ultrafine grinding pretreatment based on GM(1,N) method and evaluation of biohydrogen production potential.. *Bioresource Technology*, **2022**, 126836	11	0
5	Study on Comparisons of Bio-Hydrogen Yield Potential and Energy Conversion Efficiency between Stem and Leaf of Sweet Potato by Photo-Fermentation. *Fermentation*, **2022**, 8, 165	4.7	0
4	Enhancement of anaerobic fermentation with corn straw by pig bone-derived biochar.. *Science of the Total Environment*, **2022**, 154326	10.2	0

3	Surfactant assisted microwave irradiation pretreatment of corncob: Effect on hydrogen production capacity, energy consumption and physiochemical structure.. *Bioresource Technology*, **2022**, 127302	11	0
2	Integrated technologies for biohydrogen production **2022**, 141-159		
1	Experimental study on the relationship between the mineral production capability and the physiochemical properties in the coproduction of Q phase-3CaO□3Al2O3□CaSO4 cement clinker. *PLoS ONE*, **2018**, 13, e0195505	3.7	