Zhenya Zhang

List of Publications by Year
in descending order

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106	3,750	116194	169272
papers	citations	36 h-index	56 g-index

106	106	106	3710
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Combined effect of zero valent iron and magnetite on semi-dry anaerobic digestion of swine manure. Bioresource Technology, 2022, 346, 126438.	4.8	30
2	Simultaneous recovery of phosphorus and alginate-like exopolysaccharides from two types of aerobic granular sludge. Bioresource Technology, 2022, 346, 126411.	4.8	16
3	Conversion of biomass waste to solid fuel via hydrothermal co-carbonization of distillers grains and sewage sludge. Bioresource Technology, 2022, 345, 126545.	4.8	25
4	Effect of stepwise or one-time illumination strategy on the development of algal-bacterial aerobic granular sludge in sequencing batch reactor. Bioresource Technology Reports, 2022, 17, 100931.	1.5	5
5	Design and synthesis of proton-dopable organic semiconductors. RSC Advances, 2022, 12, 6748-6754.	1.7	2
6	Insight into aerobic phosphorus removal from wastewater in algal-bacterial aerobic granular sludge system. Bioresource Technology, 2022, 352, 127104.	4.8	16
7	Biogranulation process facilitates cost-efficient resources recovery from microalgae-based wastewater treatment systems and the creation of a circular bioeconomy. Science of the Total Environment, 2022, 828, 154471.	3.9	9
8	Changes of distribution and chemical speciation of metals in hexavalent chromium loaded algal-bacterial aerobic granular sludge before and after hydrothermal treatment. Bioresource Technology, 2022, 355, 127229.	4.8	8
9	A comparative study on simultaneous recovery of phosphorus and alginate-like exopolymers from bacterial and algal-bacterial aerobic granular sludges: Effects of organic loading rate. Bioresource Technology, 2022, 357, 127343.	4.8	15
10	Zero-valent iron is not always effective in enhancing anaerobic digestion performance. Chemosphere, 2022, 306, 135544.	4.2	3
11	Ionic response of algal-bacterial granular sludge system during biological phosphorus removal from wastewater. Chemosphere, 2021, 264, 128534.	4.2	41
12	Enhanced energy recovery via separate hydrogen and methane production from two-stage anaerobic digestion of food waste with nanobubble water supplementation. Science of the Total Environment, 2021, 761, 143234.	3.9	27
13	Response and recovery of mature algal-bacterial aerobic granular sludge to sudden salinity disturbance in influent wastewater: Granule characteristics and nutrients removal/accumulation. Bioresource Technology, 2021, 321, 124492.	4.8	30
14	Novel insight into enhanced recoverability of acidic inhibition to anaerobic digestion with nano-bubble water supplementation. Bioresource Technology, 2021, 326, 124782.	4.8	13
15	Selective Adsorption of Potassium in Seawater by CoHCF Thin Film Electrode and Its Electrochemical Desorption/Regeneration. Materials, 2021, 14, 3592.	1.3	1
16	Recent advancements in nanobubble water technology and its application in energy recovery from organic solid wastes towards a greater environmental friendliness of anaerobic digestion system. Renewable and Sustainable Energy Reviews, 2021, 145, 111074.	8.2	15
17	Insight into Cr(VI) biosorption onto algal-bacterial granular sludge: Cr(VI) bioreduction and its intracellular accumulation in addition to the effects of environmental factors. Journal of Hazardous Materials, 2021, 414, 125479.	6.5	34
18	Alleviation of ammonia inhibition via nano-bubble water supplementation during anaerobic digestion of ammonia-rich swine manure: Buffering capacity promotion and methane production enhancement. Bioresource Technology, 2021, 333, 125131.	4.8	21

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19	Effect of Salinity on Cr(VI) Bioremediation by Algal-Bacterial Aerobic Granular Sludge Treating Synthetic Wastewater. Processes, 2021, 9, 1400.	1.3	10
20	Insight into the rapid biogranulation for suspended single-cell microalgae harvesting in wastewater treatment systems: Focus on the role of extracellular polymeric substances. Chemical Engineering Journal, 2021, , 132631.	6.6	6
21	Addition of air-nanobubble water to mitigate the inhibition of high salinity on co-production of hydrogen and methane from two-stage anaerobic digestion of food waste. Journal of Cleaner Production, 2021, 314, 127942.	4.6	20
22	Cr(VI) bioremediation by active algal-bacterial aerobic granular sludge: Importance of microbial viability, contribution of microalgae and fractionation of loaded Cr. Journal of Hazardous Materials, 2021, 418, 126342.	6.5	26
23	Application of aerobic granules-continuous flow reactor for saline wastewater treatment: Granular stability, lipid production and symbiotic relationship between bacteria and algae. Bioresource Technology, 2020, 295, 122291.	4.8	78
24	Construction of a nanocavity structure with a carrier-selective layer for enhancement of photocatalytic hydrogen production performance. Sustainable Energy and Fuels, 2020, 4, 2164-2173.	2.5	6
25	Rapid establishment and stable performance of a new algal-bacterial granule system from conventional bacterial aerobic granular sludge and preliminary analysis of mechanisms involved. Journal of Water Process Engineering, 2020, 34, 101073.	2.6	41
26	Enhanced hydrolysis and acidification of cellulose at high loading for methane production via anaerobic digestion supplemented with high mobility nanobubble water. Bioresource Technology, 2020, 297, 122499.	4.8	38
27	Enhanced solubilization of solid organics and methane production by anaerobic digestion of swine manure under nano-bubble water addition. Bioresource Technology, 2020, 299, 122512.	4.8	20
28	Unique adsorption and desorption behaviour of ammonia gas at heating temperature using the Prussian blue analogue Zn3[Co(CN)6]2. Inorganica Chimica Acta, 2020, 501, 119273.	1.2	5
29	Behavior of algal-bacterial granular sludge in a novel closed photo-sequencing batch reactor under no external O2 supply. Bioresource Technology, 2020, 318, 124190.	4.8	36
30	Insight into efficient phosphorus removal/recovery from enhanced methane production of waste activated sludge with chitosan-Fe supplementation. Water Research, 2020, 187, 116427.	5.3	29
31	Development of fractal-like Clark model in a fixed-bed column. Separation and Purification Technology, 2020, 251, 117396.	3.9	14
32	Anaerobic co-digestion of hydrolysate from anaerobically digested sludge with raw waste activated sludge: Feasibility assessment of a new sewage sludge management strategy in the context of a local wastewater treatment plant. Bioresource Technology, 2020, 314, 123748.	4.8	15
33	Effect of nano-bubble water on high solid anaerobic digestion of pig manure: Focus on digestion stability, methanogenesis performance and related mechanisms. Bioresource Technology, 2020, 315, 123793.	4.8	22
34	Enhanced biosorption of Cr(VI) from synthetic wastewater using algal-bacterial aerobic granular sludge: Batch experiments, kinetics and mechanisms. Separation and Purification Technology, 2020, 251, 117323.	3.9	40
35	Metagenomic insights into the effects of nanobubble water on the composition of gut microbiota in mice. Food and Function, 2020, 11, 7175-7182.	2.1	10
36	Effect of nanobubble water on anaerobic methane production from lignin. Research on Chemical Intermediates, 2020, 46, 4767-4780.	1.3	6

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37	Effects of nanobubble water supplementation on biomass accumulation during mycelium cultivation of Cordyceps militaris and the antioxidant activities of extracted polysaccharides. Bioresource Technology Reports, 2020, 12, 100600.	1.5	8
38	Comment on â€œBreakthrough curve analysis by simplistic models of fixed bed adsorption: In defense of the century-old Bohartâ€“Adams modelâ€• Chemical Engineering Journal, 2020, 394, 124511.	6.6	11
39	Improved methane production from corn straw using anaerobically digested sludge pre-augmented by nanobubble water. Bioresource Technology, 2020, 311, 123479.	4.8	21
40	Hydrothermal treatment of sewage sludge to produce solid biofuel: Focus on fuel characteristics. Bioresource Technology Reports, 2020, 11, 100453.	1.5	10
41	Supplementation of O2-containing gas nanobubble water to enhance methane production from anaerobic digestion of cellulose. Chemical Engineering Journal, 2020, 398, 125652.	6.6	42
42	Fast cultivation and harvesting of oil-producing microalgae Ankistrodesmus falcatus var. acicularis fed with anaerobic digestion liquor via biogranulation in addition to nutrients removal. Science of the Total Environment, 2020, 741, 140183.	3.9	26
43	Simultaneous enhancement on lignin degradation and methane production from anaerobic co-digestion of waste activated sludge and alkaline lignin supplemented with N2-nanobubble water. Bioresource Technology Reports, 2020, 11, 100470.	1.5	10
44	Enhanced methane production from anaerobic digestion of rice straw pretreated by Fe3+/CaO2 catalyzed Fenton-like process. Bioresource Technology Reports, 2020, 11, 100472.	1.5	5
45	Supplementation with nanobubble water alleviates obesity-associated markers through modulation of gut microbiota in high-fat diet fed mice. Journal of Functional Foods, 2020, 67, 103820.	1.6	10
46	Achieving partial nitrification and high lipid production in an algal-bacterial granule system when treating low COD/NH4â€“N wastewater. Chemosphere, 2020, 248, 126106.	4.2	46
47	Comment on â€³Exponential and logistic functions: The two faces of the Bohartâ€“Adams modelâ€³. Journal of Hazardous Materials, 2020, 394, 122508.	6.5	5
48	Zein films with porous polylactic acid coatings via cold plasma pre-treatment. Industrial Crops and Products, 2020, 150, 112382.	2.5	44
49	Performance and Stability of Algal-Bacterial Aerobic Granular Sludge in Batch Column and Tubular Reactors. Environmental Science and Engineering, 2020, , 321-331.	0.1	0
50	Enhanced hydrolysis of waste activated sludge for methane production via anaerobic digestion under N2-nanobubble water addition. Science of the Total Environment, 2019, 693, 133524.	3.9	44
51	Enhancing hydrogenotrophic activities by zero-valent iron addition as an effective method to improve sulfadiazine removal during anaerobic digestion of swine manure. Bioresource Technology, 2019, 294, 122178.	4.8	29
52	Isolation of microalgal strain from algal-bacterial aerobic granular sludge and examination on its contribution to granulation process during wastewater treatment in respect of nutrients removal, auto-aggregation capability and EPS excretion. Bioresource Technology Reports, 2019, 8, 100330.	1.5	10
53	Adventitious root cultures from leaf explants of Helicteres angustifolia L. as a novel source for production of natural bioactive compounds. Acta Physiologiae Plantarum, 2019, 41, 1.	1.0	1
54	Effects of three macroelement cations on P mobility and speciation in sewage sludge derived hydrochar by using hydrothermal treatment. Bioresource Technology Reports, 2019, 7, 100231.	1.5	9

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55	Algal-bacterial aerobic granule based continuous-flow reactor with effluent recirculation instead of air bubbling: Stability and energy consumption analysis. Bioresource Technology Reports, 2019, 7, 100215.	1.5	8
56	Enhancement of high solid anaerobic co-digestion of swine manure with rice straw pretreated by microwave and alkaline. Bioresource Technology Reports, 2019, 7, 100208.	1.5	15
57	Effect of salinity on granulation, performance and lipid accumulation of algal-bacterial granular sludge. Bioresource Technology Reports, 2019, 7, 100228.	1.5	13
58	Effects of levofloxacin exposure on sequencing batch reactor (SBR) behavior and microbial community changes. Science of the Total Environment, 2019, 672, 227-238.	3.9	29
59	Weak magnetic field significantly enhances methane production from a digester supplemented with zero valent iron. Bioresource Technology, 2019, 282, 202-210.	4.8	47
60	Distribution characteristics of poly-brominated diphenyl ethers between water and dissolved organic carbon from anaerobic digestate: Effects of digestion conditions. Chemosphere, 2019, 223, 358-365.	4.2	3
61	Anaerobic degradation of deca-brominated diphenyl ether contaminated in products: Effect of temperature on degradation characteristics. Bioresource Technology, 2019, 283, 28-35.	4.8	11
62	Granulation of activated sludge using butyrate and valerate as additional carbon source and granular phosphorus removal capacity during wastewater treatment. Bioresource Technology, 2019, 282, 269-274.	4.8	38
63	Comparative study on hydrothermal treatment as pre- and post-treatment of anaerobic digestion of primary sludge: Focus on energy balance, resources transformation and sludge dewaterability. Applied Energy, 2019, 239, 171-180.	5.1	82
64	Stability and performance of algal-bacterial granular sludge in shaking photo-sequencing batch reactors with special focus on phosphorus accumulation. Bioresource Technology, 2019, 280, 497-501.	4.8	54
65	Interpretation of the Role of Composition on the Inclusion Efficiency of Monovalent Cations into Cobalt Hexacyanoferrate. Chemistry - A European Journal, 2019, 25, 5950-5958.	1.7	6
66	Efficient phosphate removal from wastewater by MgAl-LDHs modified hydrochar derived from tobacco stalk. Bioresource Technology Reports, 2019, 8, 100348.	1.5	31
67	Effects of nanobubble water on the growth ofLactobacillus acidophilus1028 and its lactic acid production. RSC Advances, 2019, 9, 30760-30767.	1.7	31
68	Algae granulation for nutrients uptake and algae harvesting during wastewater treatment. Chemosphere, 2019, 214, 55-59.	4.2	76
69	Fractal-like kinetics of adsorption on heterogeneous surfaces in the fixed-bed column. Chemical Engineering Journal, 2019, 358, 1471-1478.	6.6	59
70	Effects of light intensity on oxygen distribution, lipid production and biological community of algal-bacterial granules in photo-sequencing batch reactors. Bioresource Technology, 2019, 272, 473-481.	4.8	122
71	Characteristics of ultra-fine bubble water and its trials on enhanced methane production from waste activated sludge. Bioresource Technology, 2019, 273, 63-69.	4.8	56
72	Influence of ferrous iron dosing strategy on aerobic granulation of activated sludge and bioavailability of phosphorus accumulated in granules. Bioresource Technology Reports, 2018, 2, 7-14.	1.5	49

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73	High-capacity and selective ammonium removal from water using sodium cobalt hexacyanoferrate. RSC Advances, 2018, 8, 34573-34581.	1.7	18
74	High performance sorption and desorption behaviours at high working temperatures of ammonia gas in a cobalt-substituted Prussian blue analogue. Chemical Communications, 2018, 54, 11961-11964.	2.2	22
75	Enhanced anaerobic digestion of ammonia-rich swine manure by zero-valent iron: With special focus on the enhancement effect on hydrogenotrophic methanogenesis activity. Bioresource Technology, 2018, 270, 172-179.	4.8	83
76	Hydrothermal carbonization of anaerobic granular sludge: Effect of process temperature on nutrients availability and energy gain from produced hydrochar. Applied Energy, 2018, 229, 88-95.	5.1	57
77	Enhanced bioconversion of hydrogen and carbon dioxide to methane using a micro-nano sparger system: mass balance and energy consumption. RSC Advances, 2018, 8, 26488-26496.	1.7	5
78	Response of algal-bacterial granular system to low carbon wastewater: Focus on granular stability, nutrients removal and accumulation. Bioresource Technology, 2018, 268, 221-229.	4.8	71
79	Adsorption for phosphate by crosslinked/non-crosslinked-chitosan-Fe(III) complex sorbents: Characteristic and mechanism. Chemical Engineering Journal, 2018, 353, 361-372.	6.6	144
80	Biomethanation of blast furnace gas using anaerobic granular sludgeviaaddition of hydrogen. RSC Advances, 2018, 8, 26399-26406.	1.7	5
81	Low-temperature hydrothermal pretreatment followed by dry anaerobic digestion: A sustainable strategy for manure waste management regarding energy recovery and nutrients availability. Waste Management, 2017, 70, 255-262.	3.7	31
82	Energy Recovery from Rice Straw through Hydrothermal Pretreatment and Subsequent Biomethane Production. Energy & Fuels, 2017, 31, 10850-10857.	2.5	35
83	Simultaneous phosphorus and nitrogen recovery from anaerobically digested sludge using a hybrid system coupling hydrothermal pretreatment with MAP precipitation. Bioresource Technology, 2017, 243, 634-640.	4.8	70
84	Stability of algal-bacterial granules in continuous-flow reactors to treat varying strength domestic wastewater. Bioresource Technology, 2017, 244, 225-233.	4.8	77
85	Acetate favors more phosphorus accumulation into aerobic granular sludge than propionate during the treatment of synthetic fermentation liquor. Bioresource Technology, 2016, 214, 596-603.	4.8	31
86	Bioactivity Evaluation of Crude Polysaccharide from Rice Bran Fermented by Preussia Aemulans and the Changes in its Nutritional Contents. Journal of Food Biochemistry, 2016, 40, 664-672.	1.2	8
87	Coupling Hydrothermal Treatment with Stripping Technology for Fast Ammonia Release and Effective Nitrogen Recovery from Chicken Manure. ACS Sustainable Chemistry and Engineering, 2016, 4, 3704-3711.	3.2	28
88	Antidiabetic activity of Helicteres angustifolia root. Pharmaceutical Biology, 2016, 54, 938-944.	1.3	17
89	Volatile fatty acids (VFAs) production from swine manure through short-term dry anaerobic digestion and its separation from nitrogen and phosphorus resources in the digestate. Water Research, 2016, 90, 344-353.	5.3	66
90	Optimum Fermentation Condition of Soybean Curd Residue and Rice Bran by Preussia aemulans using Solid-State Fermentation Method. International Journal of Biology, 2015, 7, .	0.1	4

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91	Effect of algae growth on aerobic granulation and nutrients removal from synthetic wastewater by using sequencing batch reactors. Bioresource Technology, 2015, 179, 187-192.	4.8	191
92	Species and distribution of inorganic and organic phosphorus in enhanced phosphorus removal aerobic granular sludge. Bioresource Technology, 2015, 193, 549-552.	4.8	79
93	Effect of TiO 2 nanoparticles on aerobic granulation of algalâ€“bacterial symbiosis system and nutrients removal from synthetic wastewater. Bioresource Technology, 2015, 187, 214-220.	4.8	54
94	Contribution of precipitates formed in fermentation liquor to the enhanced biogasification of ammonia-rich swine manure by wheat-rice-stone addition. Bioresource Technology, 2015, 175, 486-493.	4.8	16
95	Identification of inorganic and organic species of phosphorus and its bio-availability in nitrifying aerobic granular sludge. Water Research, 2015, 68, 423-431.	5.3	116
96	Fucoxanthin induces growth arrest and apoptosis in human bladder cancer T24 cells by up-regulation of p21 and down-regulation of mortalin. Acta Biochimica Et Biophysica Sinica, 2014, 46, 877-884.	0.9	42
97	Use low direct current electric field to augment nitrification and structural stability of aerobic granular sludge when treating low COD/NH4-N wastewater. Bioresource Technology, 2014, 171, 139-144.	4.8	37
98	Co-composting of livestock manure with rice straw: Characterization and establishment of maturity evaluation system. Waste Management, 2014, 34, 530-535.	3.7	152
99	Effect of ultrasonic extraction conditions on antioxidative and immunomodulatory activities of a Ganoderma lucidum polysaccharide originated from fermented soybean curd residue. Food Chemistry, 2014, 155, 50-56.	4.2	61
100	Evaluation of Solid-State Fermentation by Ganoderma lucidum Using Soybean Curd Residue. Food and Bioprocess Technology, 2013, 6, 1856-1867.	2.6	17
101	Bioactivity of the crude polysaccharides from fermented soybean curd residue by Flammulina velutipes. Carbohydrate Polymers, 2012, 89, 1268-1276.	5.1	61
102	Optimum Condition of Ecologic Feed Fermentation by Pleurotus ostreatus Using Soybean Curd Residue as Raw Materials. International Journal of Biology, 2011, 3, .	0.1	9
103	Methane production from rice straw with acclimated anaerobic sludge: Effect of phosphate supplementation. Bioresource Technology, 2010, 101, 4343-4348.	4.8	147
104	Comparative study of antioxidant activity and antiproliferative effect of hot water and ethanol extracts from the mushroom Inonotus obliquus. Journal of Bioscience and Bioengineering, 2009, 107, 42-48.	1.1	82
105	Potential chemoprevention effect of dietary fucoxanthin on urinary bladder cancer EJ-1 cell line. Oncology Reports, 2008, 20, 1099-103.	1.2	48
106	Uptake and mass balance of trace metals for methane producing bacteria. Biomass and Bioenergy, 2003, 25, 427-433.	2.9	72