

Xiong Zheng

List of Publications by Year in descending order

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69
papers

4,592
citations

94433

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docs citations

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times ranked

3473
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#	ARTICLE	IF	CITATIONS
1	Enhancement of Waste Activated Sludge Protein Conversion and Volatile Fatty Acids Accumulation during Waste Activated Sludge Anaerobic Fermentation by Carbohydrate Substrate Addition: The Effect of pH. <i>Environmental Science & Technology</i> , 2009, 43, 4373-4380.	10.0	391
2	Effects of ZnO Nanoparticles on Wastewater Biological Nitrogen and Phosphorus Removal. <i>Environmental Science & Technology</i> , 2011, 45, 2826-2832.	10.0	356
3	Long-Term Effects of Titanium Dioxide Nanoparticles on Nitrogen and Phosphorus Removal from Wastewater and Bacterial Community Shift in Activated Sludge. <i>Environmental Science & Technology</i> , 2011, 45, 7284-7290.	10.0	205
4	Pyrosequencing Reveals the Key Microorganisms Involved in Sludge Alkaline Fermentation for Efficient Short-Chain Fatty Acids Production. <i>Environmental Science & Technology</i> , 2013, 47, 4262-4268.	10.0	199
5	Response of Anaerobic Granular Sludge to a Shock Load of Zinc Oxide Nanoparticles during Biological Wastewater Treatment. <i>Environmental Science & Technology</i> , 2012, 46, 5997-6003.	10.0	188
6	Effect of CO ₂ on Microbial Denitrification via Inhibiting Electron Transport and Consumption. <i>Environmental Science & Technology</i> , 2016, 50, 9915-9922.	10.0	186
7	Effect of Humic Acids with Different Characteristics on Fermentative Short-Chain Fatty Acids Production from Waste Activated Sludge. <i>Environmental Science & Technology</i> , 2015, 49, 4929-4936.	10.0	159
8	Zinc Oxide Nanoparticles Cause Inhibition of Microbial Denitrification by Affecting Transcriptional Regulation and Enzyme Activity. <i>Environmental Science & Technology</i> , 2014, 48, 13800-13807.	10.0	148
9	Efficient Polyhydroxyalkanoates Production from a Waste-Activated Sludge Alkaline Fermentation Liquid by Activated Sludge Submitted to the Aerobic Feeding and Discharge Process. <i>Environmental Science & Technology</i> , 2009, 43, 7734-7741.	10.0	143
10	Long-Term Effects of Copper Nanoparticles on Wastewater Biological Nutrient Removal and N ₂ O Generation in the Activated Sludge Process. <i>Environmental Science & Technology</i> , 2012, 46, 12452-12458.	10.0	143
11	The effects of fulvic acid on microbial denitrification: promotion of NADH generation, electron transfer, and consumption. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 5607-5618.	3.6	120
12	Efficient production of optically pure L-lactic acid from food waste at ambient temperature by regulating key enzyme activity. <i>Water Research</i> , 2015, 70, 148-157.	11.3	116
13	Distribution of tetracycline resistance genes in anaerobic treatment of waste sludge: The role of pH in regulating tetracycline resistant bacteria and horizontal gene transfer. <i>Bioresource Technology</i> , 2016, 218, 1284-1289.	9.6	110
14	Understanding Short-Chain Fatty Acids Accumulation Enhanced in Waste Activated Sludge Alkaline Fermentation: Kinetics and Microbiology. <i>Environmental Science & Technology</i> , 2010, 44, 9343-9348.	10.0	99
15	Enhancement of denitrification performance with reduction of nitrite accumulation and N ₂ O emission by <i>Shewanella oneidensis</i> MR-1 in microbial denitrifying process. <i>Water Research</i> , 2020, 169, 115242.	11.3	98
16	Alteration of intracellular protein expressions as a key mechanism of the deterioration of bacterial denitrification caused by copper oxide nanoparticles. <i>Scientific Reports</i> , 2015, 5, 15824.	3.3	94
17	Short-Chain Fatty Acid Production from Different Biological Phosphorus Removal Sludges: The Influences of PHA and Gram-Staining Bacteria. <i>Environmental Science & Technology</i> , 2013, 47, 2688-2695.	10.0	89
18	Alumina nanoparticles-induced effects on wastewater nitrogen and phosphorus removal after short-term and long-term exposure. <i>Water Research</i> , 2012, 46, 4379-4386.	11.3	88

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19	The impacts of silver nanoparticles and silver ions on wastewater biological phosphorous removal and the mechanisms. <i>Journal of Hazardous Materials</i> , 2012, 239-240, 88-94.	12.4	81
20	Enhancement of propionic acid fraction in volatile fatty acids produced from sludge fermentation by the use of food waste and <i>Propionibacterium acidipropionici</i> . <i>Water Research</i> , 2013, 47, 615-622.	11.3	74
21	Increasing municipal wastewater BNR by using the preferred carbon source derived from kitchen wastewater to enhance phosphorus uptake and short-cut nitrification-denitrification. <i>Chemical Engineering Journal</i> , 2018, 344, 556-564.	12.7	74
22	Hydroxyl functionalization of single-walled carbon nanotubes causes inhibition to the bacterial denitrification process. <i>Chemical Engineering Journal</i> , 2015, 279, 47-55.	12.7	72
23	Tetrabromobisphenol A (TBBPA) inhibits denitrification via regulating carbon metabolism to decrease electron donation and bacterial population. <i>Water Research</i> , 2019, 162, 190-199.	11.3	70
24	Bio-denitrification performance enhanced by graphene-facilitated iron acquisition. <i>Water Research</i> , 2020, 180, 115916.	11.3	70
25	CuO and ZnO nanoparticles drive the propagation of antibiotic resistance genes during sludge anaerobic digestion: possible role of stimulated signal transduction. <i>Environmental Science: Nano</i> , 2019, 6, 528-539.	4.3	69
26	Acute and Chronic Responses of Activated Sludge Viability and Performance to Silica Nanoparticles. <i>Environmental Science & Technology</i> , 2012, 46, 7182-7188.	10.0	66
27	Alkaline fermentation of waste sludge causes a significant reduction of antibiotic resistance genes in anaerobic reactors. <i>Science of the Total Environment</i> , 2017, 580, 380-387.	8.0	65
28	Continuous bioproduction of short-chain fatty acids from sludge enhanced by the combined use of surfactant and alkaline pH. <i>Bioresource Technology</i> , 2013, 140, 97-102.	9.6	61
29	Comprehensive analysis of transcriptional and proteomic profiling reveals silver nanoparticles-induced toxicity to bacterial denitrification. <i>Journal of Hazardous Materials</i> , 2018, 344, 291-298.	12.4	58
30	New method for enhancement of bioenergy production from municipal organic wastes via regulation of anaerobic fermentation process. <i>Applied Energy</i> , 2017, 196, 190-198.	10.1	51
31	Lactic acid accumulation from sludge and food waste to improve the yield of propionic acid-enriched VFA. <i>Biochemical Engineering Journal</i> , 2014, 84, 28-35.	3.6	48
32	Low-level free nitrous acid efficiently inhibits the conjugative transfer of antibiotic resistance by altering intracellular ions and disabling transfer apparatus. <i>Water Research</i> , 2019, 158, 383-391.	11.3	48
33	The investigation of effect of organic carbon sources addition in anaerobic-aerobic (low dissolved) Tj ETQq1 1 0.784314 rgBT /Overlo 2009, 100, 2515-2520.	9.6	43
34	How does the entering of copper nanoparticles into biological wastewater treatment system affect sludge treatment for VFA production. <i>Water Research</i> , 2014, 63, 125-134.	11.3	40
35	Effect of CO ₂ on NADH production of denitrifying microbes via inhibiting carbon source transport and its metabolism. <i>Science of the Total Environment</i> , 2018, 627, 896-904.	8.0	40
36	Influence of Copper Nanoparticles on the Physical-Chemical Properties of Activated Sludge. <i>PLoS ONE</i> , 2014, 9, e92871.	2.5	38

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37	Biological nutrient removal with low nitrous oxide generation by cancelling the anaerobic phase and extending the idle phase in a sequencing batch reactor. <i>Chemosphere</i> , 2014, 109, 56-63.	8.2	38
38	Carboxyl-modified single-walled carbon nanotubes negatively affect bacterial growth and denitrification activity. <i>Scientific Reports</i> , 2014, 4, 5653.	3.3	38
39	Effect of fulvic acids with different characteristics on biological denitrification. <i>RSC Advances</i> , 2016, 6, 14993-15001.	3.6	36
40	Tetracycline-induced effects on the nitrogen transformations in sediments: Roles of adsorption behavior and bacterial activity. <i>Science of the Total Environment</i> , 2019, 695, 133811.	8.0	35
41	Long-term performance of enhanced biological phosphorus removal with increasing concentrations of silver nanoparticles and ions. <i>RSC Advances</i> , 2013, 3, 9835.	3.6	31
42	More than sulfidation: Roles of biogenic sulfide in attenuating the impacts of CuO nanoparticle on antibiotic resistance genes during sludge anaerobic digestion. <i>Water Research</i> , 2019, 158, 1-10.	11.3	28
43	Using sludge fermentation liquid to reduce the inhibitory effect of copper oxide nanoparticles on municipal wastewater biological nutrient removal. <i>Water Research</i> , 2016, 99, 216-224.	11.3	27
44	H ₂ -Based Membrane Catalyst-Film Reactor (H ₂ -MCFR) Loaded with Palladium for Removing Oxidized Contaminants in Water. <i>Environmental Science & Technology</i> , 2021, 55, 7082-7093.	10.0	27
45	Anaerobic fermentation metabolism of <i>Moorella thermoacetica</i> inhibited by copper nanoparticles: Comprehensive analyses of transcriptional response and enzyme activity. <i>Water Research</i> , 2021, 197, 117081.	11.3	27
46	Global transcriptional responses of denitrifying bacteria to functionalized single-walled carbon nanotubes revealed by weighted gene-coexpression network analysis. <i>Science of the Total Environment</i> , 2018, 613-614, 1240-1249.	8.0	26
47	The effects of carbon nanotubes on nitrogen and phosphorus removal from real wastewater in the activated sludge system. <i>RSC Advances</i> , 2014, 4, 45953-45959.	3.6	25
48	Long-term effects of engineered nanoparticles on enzyme activity and functional bacteria in wastewater treatment plants. <i>Water Science and Technology</i> , 2015, 72, 99-105.	2.5	20
49	Using Mixed Sludge-derived Short-chain Fatty Acids Enhances Power Generation of Microbial Fuel Cells. <i>Energy Procedia</i> , 2017, 105, 1282-1288.	1.8	20
50	Nitric Oxide: A Neglected Driver for the Conjugative Transfer of Antibiotic Resistance Genes among Wastewater Microbiota. <i>Environmental Science & Technology</i> , 2022, 56, 6466-6478.	10.0	20
51	Joint effects of carbon nanotubes and copper oxide nanoparticles on fermentation metabolism towards <i>Saccharofermentans acetigenes</i> : Enhancing environmental adaptability and transcriptional expression. <i>Bioresource Technology</i> , 2021, 336, 125318.	9.6	19
52	Insight into a direct carbon dioxide effect on denitrification and denitrifying bacterial communities in estuarine sediment. <i>Science of the Total Environment</i> , 2018, 643, 1074-1083.	8.0	18
53	Using cassava distiller's dried grains as carbon and microbe sources to enhance denitrification of nitrate-contaminated groundwater. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 2839-2847.	3.6	17
54	Evaluation of Zinc Oxide Nanoparticles-Induced Effects on Nitrogen and Phosphorus Removal from Real and Synthetic Municipal Wastewater. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 7929-7936.	3.7	16

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55	Production of propionic acid-enriched volatile fatty acids from co-fermentation liquid of sewage sludge and food waste using <i>Propionibacterium acidipropionici</i> . <i>Water Science and Technology</i> , 2013, 68, 2061-2066.	2.5	15
56	Chronic Response of Waste Activated Sludge Fermentation to Titanium Dioxide Nanoparticles. <i>Chinese Journal of Chemical Engineering</i> , 2014, 22, 1162-1167.	3.5	14
57	Fate of sulfonamide resistance genes during sludge anaerobic fermentation: Roles of sludge components and fermentation pHs. <i>Bioresource Technology</i> , 2019, 289, 121636.	9.6	14
58	Anaerobic biodegradation of catechol by sediment microorganisms: Interactive roles of N reduction and S cycling. <i>Journal of Cleaner Production</i> , 2019, 230, 80-89.	9.3	14
59	Carbon nanotubes affect the toxicity of CuO nanoparticles to denitrification in marine sediments by altering cellular internalization of nanoparticle. <i>Scientific Reports</i> , 2016, 6, 27748.	3.3	11
60	Long-term effects of copper nanoparticles on volatile fatty acids production from sludge fermentation: Roles of copper species and bacterial community structure. <i>Bioresource Technology</i> , 2022, 348, 126789.	9.6	10
61	Carbon nanotubes mitigate copper-oxide nanoparticles-induced inhibition to acidogenic metabolism of <i>Propionibacterium acidipropionici</i> by regulating carbon source utilization. <i>Bioresource Technology</i> , 2021, 330, 125003.	9.6	9
62	Ionic copper strengthens the toxicity of tetrabromobisphenol A (TBBPA) to denitrification by decreasing substrate transport and electron transfer. <i>Journal of Hazardous Materials</i> , 2021, 416, 126203.	12.4	8
63	Identification of CO ₂ induces oxidative stress to change bacterial surface properties. <i>Chemosphere</i> , 2021, 277, 130336.	8.2	7
64	Extracellular DNA plays a key role in the structural stability of sulfide-based denitrifying biofilms. <i>Science of the Total Environment</i> , 2022, 838, 155822.	8.0	6
65	Efficient recovery of carbon, nitrogen, and phosphorus from waste activated sludge. <i>Water Science and Technology</i> , 2013, 68, 916-922.	2.5	5
66	Short- and long-term effects of decabromodiphenyl ether (BDE-209) on sediment denitrification using a semi-continuous microcosm. <i>Environmental Pollution</i> , 2022, 293, 118589.	7.5	5
67	<i>Shewanella oneidensis</i> MR-1 improving denitrification performance via influencing electron competition and distribution. <i>Bioresource Technology Reports</i> , 2020, 10, 100381.	2.7	3
68	Effects of titanium dioxide and zinc oxide nanoparticles on methane production from anaerobic co-digestion of primary and excess sludge. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2015, 50, 913-21.	1.7	3
69	Long-term exposure to zinc oxide nanoparticles improves PAOs function in enhanced biological phosphorus removal. <i>Environmental Technology (United Kingdom)</i> , 2022, , 1-21.	2.2	0