Ren-Cun Jin

List of Publications by Year
in descending order

73 papers	3,399 citations	136740 32 h-index	149479 56 g-index
73 all docs	73 docs citations	73 times ranked	1806 citing authors

#	Article	IF	Citations
1	The inhibition of the Anammox process: A review. Chemical Engineering Journal, 2012, 197, 67-79.	6.6	692
2	The effect of sulfide inhibition on the ANAMMOX process. Water Research, 2013, 47, 1459-1469.	5.3	208
3	Short-term impacts of Cu, CuO, ZnO and Ag nanoparticles (NPs) on anammox sludge: CuNPs make a difference. Bioresource Technology, 2017, 235, 281-291.	4.8	106
4	Evaluation of the inhibitory effects of heavy metals on anammox activity: A batch test study. Bioresource Technology, 2016, 200, 208-216.	4.8	87
5	Enhancement of anammox performance by Cu(II), Ni(II) and Fe(III) supplementation. Chemosphere, 2014, 117, 610-616.	4.2	83
6	Towards simultaneously removing nitrogen and sulfur by a novel process: Anammox and autotrophic desulfurizationâ€“denitrification (AADD). Chemical Engineering Journal, 2016, 297, 207-216.	6.6	82
7	The effect of Cu(II) stress on the activity, performance and recovery on the Anaerobic Ammonium-Oxidizing (Anammox) process. Chemical Engineering Journal, 2013, 226, 39-45.	6.6	75
8	Long-term effects of oxytetracycline (OTC) on the granule-based anammox: Process performance and occurrence of antibiotic resistance genes. Biochemical Engineering Journal, 2017, 127, 110-118.	1.8	73
9	Anaerobic ammonium-oxidizing bacteria gain antibiotic resistance during long-term acclimatization. Bioresource Technology, 2015, 192, 756-764.	4.8	68
10	Behavior and fate of copper ions in an anammox granular sludge reactor and strategies for remediation. Journal of Hazardous Materials, 2015, 300, 838-846.	6.5	66
11	Deciphering the evolution characteristics of extracellular microbial products from autotrophic and mixotrophic anammox consortia in response to nitrogen loading variations. Environment International, 2019, 124, 501-510.	4.8	65
12	Transient disturbance of engineered ZnO nanoparticles enhances the resistance and resilience of anammox process in wastewater treatment. Science of the Total Environment, 2018, 622-623, 402-409.	3.9	64
13	Insight into the short- and long-term effects of inorganic phosphate on anammox granule property. Bioresource Technology, 2016, 208, 161-169.	4.8	61
14	The occurrence, maintenance, and proliferation of antibiotic resistance genes (ARGs) in the environment: influencing factors, mechanisms, and elimination strategies. Applied Microbiology and Biotechnology, 2018, 102, 8261-8274.	1.7	61
15	Microbial community evolution and fate of antibiotic resistance genes in anammox process under oxytetracycline and sulfamethoxazole stresses. Bioresource Technology, 2019, 293, 122096.	4.8	61
16	Inhibition of wastewater pollutants on the anammox process: A review. Science of the Total Environment, 2022, 803, 150009.	3.9	60
17	Combined impacts of nanoparticles on anammox granules and the roles of EDTA and S 2â˜ in attenuation. Journal of Hazardous Materials, 2017, 334, 49-58.	6.5	59
18	The influences of temperature, salt and calcium concentration on the performance of anaerobic ammonium oxidation (anammox) process. Chemical Engineering Journal, 2015, 265, 58-66.	6.6	56

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19	The revolution of performance, sludge characteristics and microbial community of anammox biogranules under long-term NiO NPs exposure. Science of the Total Environment, 2019, 649, 440-447.	3.9	49
20	Unraveling the impact of nanoscale zero-valent iron on the nitrogen removal performance and microbial community of anammox sludge. Bioresource Technology, 2017, 243, 883-892.	4.8	47
21	Insights into the effects of bio-augmentation on the granule-based anammox process under continuous oxytetracycline stress: Performance and microflora structure. Chemical Engineering Journal, 2018, 348, 503-513.	6.6	47
22	Anaerobic ammonium oxidation (anammox) under realistic seasonal temperature variations: Characteristics of biogranules and process performance. Bioresource Technology, 2015, 192, 765-773.	4.8	46
23	Long-term effects of heavy metals and antibiotics on granule-based anammox process: granule property and performance evolution. Applied Microbiology and Biotechnology, 2016, 100, 2417-2427.	1.7	45
24	A spectra metrology insight into the binding characteristics of Cu2+ onto anammox extracellular polymeric substances. Chemical Engineering Journal, 2020, 393, 124800.	6.6	45
25	Roles of EDTA washing and Ca 2+ regulation on the restoration of anammox granules inhibited by copper(II). Journal of Hazardous Materials, 2016, 301, 92-99.	6.5	41
26	A novel strategy for accelerating the recovery of an anammox reactor inhibited by copper(II): EDTA washing combined with biostimulation via low-intensity ultrasound. Chemical Engineering Journal, 2015, 279, 912-920.	6.6	39
27	Anammox Granules Acclimatized to Mainstream Conditions Can Achieve a Volumetric Nitrogen Removal Rate Comparable to Sidestream Systems. Environmental Science & Technology, 2020, 54, 12959-12966.	4.6	39
28	Variation in the performance and sludge characteristics of anaerobic ammonium oxidation inhibited by copper. Separation and Purification Technology, 2015, 142, 108-115.	3.9	38
29	Anammox granules show strong resistance to engineered silver nanoparticles during long-term exposure. Bioresource Technology, 2018, 259, 10-17.	4.8	38
30	Mass transfer characteristics, rheological behavior and fractal dimension of anammox granules: The roles of upflow velocity and temperature. Bioresource Technology, 2017, 244, 117-124.	4.8	37
31	The robustness of ANAMMOX process under the transient oxytetracycline (OTC) shock. Bioresource Technology, 2014, 153, 39-46.	4.8	36
32	Performance and robustness of an ANAMMOX anaerobic baffled reactor subjected to transient shock loads. Bioresource Technology, 2012, 114, 126-136.	4.8	35
33	Analyzing the revolution of anaerobic ammonium oxidation (anammox) performance and sludge characteristics under zinc inhibition. Applied Microbiology and Biotechnology, 2015, 99, 3221-3232.	1.7	35
34	Effects of thiocyanate on granule-based anammox process and implications for regulation. Journal of Hazardous Materials, 2017, 321, 81-91.	6.5	34
35	Deciphering the response of anammox process to heavy metal and antibiotic stress: Arsenic enhances the permeability of extracellular polymeric substance and aggravates the inhibition of sulfamethoxazole. Chemical Engineering Journal, 2021, 426, 130815.	6.6	34
36	Molecular Insight into the Binding Property and Mechanism of Sulfamethoxazole to Extracellular Proteins of Anammox Sludge. Environmental Science & Technology, 2021, 55, 16627-16635.	4.6	34

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37	Advances and challenges of mainstream nitrogen removal from municipal wastewater with anammoxâ€based processes. Water Environment Research, 2020, 92, 1899-1909.	1.3	33
38	Decoding the interspecies interaction in anammox process with inorganic feeding through metagenomic and metatranscriptomic analysis. Journal of Cleaner Production, 2021, 288, 125691.	4.6	33
39	Achieving completely anaerobic ammonium removal over nitrite (CAARON) in one single UASB reactor: Synchronous and asynchronous feeding regimes of organic carbon make a difference. Science of the Total Environment, 2019, 653, 342-350.	3.9	31
40	The short- and long-term effects of Mn2+ on biogranule-based anaerobic ammonium oxidation (anammox). Bioresource Technology, 2017, 241, 750-759.	4.8	30
41	Susceptibility, resistance and resilience of anammox biomass to nanoscale copper stress. Bioresource Technology, 2017, 241, 35-43.	4.8	29
42	Enhanced effects of maghemite nanoparticles on the flocculent sludge wasted from a high-rate anammox reactor: Performance, microbial community and sludge characteristics. Bioresource Technology, 2018, 250, 265-272.	4.8	28
43	Long-term effects of Fe3O4 NPs on the granule-based anaerobic ammonium oxidation process: Performance, sludge characteristics and microbial community. Journal of Hazardous Materials, 2020, 398, 122965.	6.5	27
44	Resistance of anammox granular sludge to copper nanoparticles and oxytetracycline and restoration of performance. Bioresource Technology, 2020, 307, 123264.	4.8	27
45	Discrepant effects of metal and metal oxide nanoparticles on anammox sludge properties: A comparison between Cu and CuO nanoparticles. Bioresource Technology, 2018, 266, 507-515.	4.8	25
46	Evaluating the effects of metal oxide nanoparticles (TiO2, Al2O3, SiO2 and CeO2) on anammox process: Performance, microflora and sludge properties. Bioresource Technology, 2018, 266, 11-18.	4.8	25
47	Roles of MnO2 on performance, sludge characteristics and microbial community in anammox system. Science of the Total Environment, 2018, 633, 848-856.	3.9	24
48	Recent advances regarding the impacts of engineered nanomaterials on the anaerobic ammonium oxidation process: performances and mechanisms. Environmental Science: Nano, 2019, 6, 3501-3512.	2.2	24
49	Start-up of granule-based denitrifying reactors with multiple magnesium supplementation strategies. Journal of Environmental Management, 2015, 155, 204-211.	3.8	23
50	The performance and microbial community in response to MnO2 nanoparticles in anammox granular sludge. Chemosphere, 2019, 233, 625-632.	4.2	23
51	How anammox process resists the multi-antibiotic stress: Resistance gene accumulation and microbial community evolution. Science of the Total Environment, 2022, 807, 150784.	3.9	23
52	Evolution of microbial community and antibiotic resistance genes in anammox process stressed by oxytetracycline and copper. Bioresource Technology, 2021, 319, 124106.	4.8	22
53	Insight into the evolution of microbial community and antibiotic resistance genes in anammox process induced by copper after recovery from oxytetracycline stress. Bioresource Technology, 2021, 330, 124945.	4.8	22
54	Effect of divalent nickel on the anammox process in a UASB reactor. Chemosphere, 2019, 226, 934-944.	4.2	20

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55	Determination of the response characteristics of anaerobic ammonium oxidation bioreactor disturbed by temperature change with the spectral fingerprint. Science of the Total Environment, 2020, 719, 137513.	3.9	20
56	Extracellular polymeric substances excreted by anammox sludge act as a barrier for As(III) invasion: Binding property and interaction mechanism. Chemosphere, 2021, 278, 130414.	4.2	18
57	The Application of Low-Intensity Ultrasound Irradiation in Biological Wastewater Treatment: A Review. Critical Reviews in Environmental Science and Technology, 2015, 45, 2728-2761.	6.6	17
58	Universal Method to Fabricate Transition Metal Single-Atom-Anchored Carbon with Excellent Oxygen Reduction Reaction Activity. ACS Applied Materials & Interfaces, 2021, 13, 13534-13540.	4.0	14
59	Comparison of the dynamic responses of different anammox granules to copper nanoparticle stress: Antibiotic exposure history made a difference. Bioresource Technology, 2021, 333, 125186.	4.8	13
60	Removal of extracellular deoxyribonucleic acid increases the permeability and mass transfer of anammox granular sludge with different sizes. Chemosphere, 2022, 302, 134898.	4.2	12
61	Linear anionic surfactant (SDBS) destabilized anammox process through sludge disaggregation and metabolic inhibition. Journal of Hazardous Materials, 2021, 403, 123641.	6.5	11
62	Comprehensive evaluation of the long-term effect of Cu2+ on denitrifying granular sludge and feasibility of in situ recovery by phosphate. Journal of Hazardous Materials, 2022, 422, 126901.	6.5	11
63	What's the variation in anammox reactor performance after single and joint temperature based shocks?. Science of the Total Environment, 2020, 713, 136609.	3.9	10
64	Intracellular and extracellular protective mechanisms of the anammox consortia against exogenous sulfadimidine. Journal of Hazardous Materials, 2022, 434, 128817.	6.5	10
65	Microbial and genetic responses of anammox process to the successive exposure of different antibiotics. Chemical Engineering Journal, 2021, 420, 127576.	6.6	9
66	Coagulation enhanced high-rate contact-stabilization process for pretreatment of municipal wastewater: Simultaneous organic capture and phosphorus removal. Separation and Purification Technology, 2022, 298, 121669.	3.9	9
67	Anammox sludge preservation: Preservative agents, temperature and substrate. Journal of Environmental Management, 2022, 311, 114860.	3.8	8
68	A review on characterizing the metabolite property of anammox sludge by spectroscopy. Science of the Total Environment, 2022, 817, 153065.	3.9	7
69	Sulfidation attenuates the adverse impacts of metallic nanoparticles on anammox from the perspective of chronic exposure. Environmental Science: Nano, 2020, 7, 1681-1691.	2.2	5
70	The inhibitory effect of fluoride on anaerobic ammonium oxidation (anammox). Journal of Chemical Technology and Biotechnology, 2016, 91, 640-646.	1.6	4
71	Adding exogenous protein relieves the toxicity of nanoparticles to anammox granular sludge by adsorption and the formation of eco-coronas. Environmental Science: Nano, 0, , .	2.2	3
72	Molecular spectroscopy and docking simulation revealed the binding mechanism of phenol onto anammox sludge extracellular polymeric substances. Science of the Total Environment, 2022, 830, 154733.	3.9	3

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73	The response of anaerobic ammonium oxidation process to bisphenol-A: Linking reactor performance to microbial community and functional gene. Science of the Total Environment, 2022, , 156030.	3.9	0