Jin Rencun

List of Publications by Year
in descending order

111 papers	4,925 citations	87723 38 h-index	114278 63 g-index
114 all docs	114 docs citations	114 times ranked	2142 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	Impacts of transient salinity shock loads on Anammox process performance. Bioresource Technology, 2012, 112, 124-130.	4.8	150
4	Successful start-up of the anammox process: Influence of the seeding strategy on performance and granule properties. Bioresource Technology, 2016, 211, 594-602.	4.8	112
5	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
6	Evaluation of the inhibitory effects of heavy metals on anammox activity: A batch test study. Bioresource Technology, 2016, 200, 208-216.	4.8	87
7	Performance of an Anammox UASB reactor at high load and low ambient temperature. Chemical Engineering Journal, 2013, 232, 17-25.	6.6	84
8	Enhancement of anammox performance by Cu(II), Ni(II) and Fe(III) supplementation. Chemosphere, 2014, 117, 610-616.	4.2	83
9	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
10	Changes in the nitrogen removal performance and the properties of granular sludge in an Anammox system under oxytetracycline (OTC) stress. Bioresource Technology, 2013, 129, 65-71.	4.8	78
11	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
12	Enrichment of anammox bacteria from three sludge sources for the startup of monosodium glutamate industrial wastewater treatment system. Journal of Hazardous Materials, 2012, 199-200, 193-199.	6.5	73
13	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
14	The joint inhibitory effects of phenol, copper (II), oxytetracycline (OTC) and sulfide on Anammox activity. Bioresource Technology, 2012, 126, 187-192.	4.8	71
15	Anaerobic ammonium-oxidizing bacteria gain antibiotic resistance during long-term acclimatization. Bioresource Technology, 2015, 192, 756-764.	4.8	68
16	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
17	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
18	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

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19	Insight into the short- and long-term effects of inorganic phosphate on anammox granule property. Bioresource Technology, 2016, 208, 161-169.	4.8	61
20	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
21	Inhibition of wastewater pollutants on the anammox process: A review. Science of the Total Environment, 2022, 803, 150009.	3.9	60
22	Anammox in a UASB reactor treating saline wastewater. Chemical Engineering Research and Design, 2011, 89, 342-348.	2.7	59
23	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
24	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
25	Resistance genes and extracellular proteins relieve antibiotic stress on the anammox process. Water Research, 2021, 202, 117453.	5.3	56
26	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
27	Osmotic stress on nitrification in an airlift bioreactor. Journal of Hazardous Materials, 2007, 146, 148-154.	6.5	48
28	Advances and challenges of sulfur-driven autotrophic denitrification (SDAD) for nitrogen removal. Chinese Chemical Letters, 2020, 31, 2567-2574.	4.8	48
29	Deciphering the microbial community and functional genes response of anammox sludge to sulfide stress. Bioresource Technology, 2020, 302, 122885.	4.8	48
30	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
31	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
32	Quantitative comparison of stability of ANAMMOX process in different reactor configurations. Bioresource Technology, 2008, 99, 1603-1609.	4.8	45
33	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
34	Role and application of quorum sensing in anaerobic ammonium oxidation (anammox) process: A review. Critical Reviews in Environmental Science and Technology, 2021, 51, 626-648.	6.6	45
35	A spectra metrology insight into the binding characteristics of Cu2+ onto anammox extracellular polymeric substances. Chemical Engineering Journal, 2020, 393, 124800.	6.6	45
36	Co-inhibition of salinity and Ni(II) in the anammox-UASB reactor. Science of the Total Environment, 2019, 669, 70-82.	3.9	44

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37	Influence of effluent recirculation on the performance of Anammox process. Chemical Engineering Journal, 2012, 200-202, 176-185.	6.6	43
38	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
39	Expression of the nirS, hzsA, and hdh genes and antibiotic resistance genes in response to recovery of anammox process inhibited by oxytetracycline. Science of the Total Environment, 2019, 681, 56-65.	3.9	41
40	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
41	Factors influencing Candidatus Microthrix parvicella growth and specific filamentous bulking control: A review. Chemosphere, 2020, 244, 125371.	4.2	39
42	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
43	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
44	Anammox granules show strong resistance to engineered silver nanoparticles during long-term exposure. Bioresource Technology, 2018, 259, 10-17.	4.8	38
45	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
46	Inhibitory effects of heavy metals and antibiotics on nitrifying bacterial activities in mature partial nitritation. Chemosphere, 2018, 200, 437-445.	4.2	37
47	The robustness of ANAMMOX process under the transient oxytetracycline (OTC) shock. Bioresource Technology, 2014, 153, 39-46.	4.8	36
48	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
49	Inhibition of the partial nitritation by roxithromycin and Cu(II). Bioresource Technology, 2016, 214, 253-258.	4.8	34
50	Effects of thiocyanate on granule-based anammox process and implications for regulation. Journal of Hazardous Materials, 2017, 321, 81-91.	6.5	34
51	Effect of chromium on granule-based anammox processes. Bioresource Technology, 2018, 260, 1-8.	4.8	34
52	Multiple electron acceptor-mediated sulfur autotrophic denitrification: Nitrogen source competition, long-term performance and microbial community evolution. Bioresource Technology, 2021, 329, 124918.	4.8	34
53	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
54	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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55	Advances and challenges of mainstream nitrogen removal from municipal wastewater with anammoxâ€based processes. Water Environment Research, 2020, 92, 1899-1909.	1.3	33
56	Build the expressway for the salt-tolerant anammox process: Acclimation strategy tells the story. Journal of Cleaner Production, 2021, 278, 123921.	4.6	32
57	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
58	Effects of inorganic phosphate on a high-rate anammox system: Performance and microbial community. Ecological Engineering, 2017, 101, 201-210.	1.6	30
59	The short- and long-term effects of Mn2+ on biogranule-based anaerobic ammonium oxidation (anammox). Bioresource Technology, 2017, 241, 750-759.	4.8	30
60	Inhibitory effects of sulfamethoxazole on denitrifying granule properties: Short- and long-term tests. Bioresource Technology, 2017, 233, 391-398.	4.8	29
61	Summary of the preservation techniques and the evolution of the anammox bacteria characteristics during preservation. Applied Microbiology and Biotechnology, 2017, 101, 4349-4362.	1.7	29
62	Susceptibility, resistance and resilience of anammox biomass to nanoscale copper stress. Bioresource Technology, 2017, 241, 35-43.	4.8	29
63	Estimating the recovery of ANAMMOX performance from inhibition by copper (II) and oxytetracycline (OTC). Separation and Purification Technology, 2013, 113, 90-103.	3.9	28
64	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
65	Long-term effects of copper nanoparticles on granule-based denitrification systems: Performance, microbial communities, functional genes and sludge properties. Bioresource Technology, 2019, 289, 121707.	4.8	27
66	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
67	Resistance of anammox granular sludge to copper nanoparticles and oxytetracycline and restoration of performance. Bioresource Technology, 2020, 307, 123264.	4.8	27
68	Enhancement of ANAMMOX activity by low-intensity ultrasound irradiation at ambient temperature. Bioresource Technology, 2013, 142, 693-696.	4.8	25
69	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
70	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
71	Merely inoculating anammox sludge to achieve the start-up of anammox and autotrophic desulfurization-denitrification process. Science of the Total Environment, 2019, 682, 374-381.	3.9	25
72	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

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73	Adaption and restoration of anammox biomass to Cd(II) stress: Performance, extracellular polymeric substance and microbial community. Bioresource Technology, 2019, 290, 121766.	4.8	24
74	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
75	A review of heavy metals inhibitory effects in the process of anaerobic ammonium oxidation. Journal of Hazardous Materials, 2022, 429, 128362.	6.5	24
76	Performance and stability of the partial nitrification process for nitrogen removal from monosodium glutamate wastewater. Separation and Purification Technology, 2013, 103, 195-202.	3.9	23
77	Start-up of granule-based denitrifying reactors with multiple magnesium supplementation strategies. Journal of Environmental Management, 2015, 155, 204-211.	3.8	23
78	The performance and microbial community in response to MnO2 nanoparticles in anammox granular sludge. Chemosphere, 2019, 233, 625-632.	4.2	23
79	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
80	Evolution of microbial community and antibiotic resistance genes in anammox process stressed by oxytetracycline and copper. Bioresource Technology, 2021, 319, 124106.	4.8	22
81	How anammox responds to the emerging contaminants: Status and mechanisms. Journal of Environmental Management, 2021, 293, 112906.	3.8	22
82	Increased salinity improves the thermotolerance of mesophilic anammox consortia. Science of the Total Environment, 2018, 644, 710-716.	3.9	20
83	Effects of ZnO nanoparticles on high-rate denitrifying granular sludge and the role of phosphate in toxicity attenuation. Environmental Pollution, 2019, 251, 166-174.	3.7	20
84	Effect of divalent nickel on the anammox process in a UASB reactor. Chemosphere, 2019, 226, 934-944.	4.2	20
85	Evaluating the effects of Zn(II) on high-rate biogranule-based denitrification: Performance, microbial community and sludge characteristics. Bioresource Technology, 2019, 279, 393-397.	4.8	20
86	The ANAMMOX reactor under transient-state conditions: Process stability with fluctuations of the nitrogen concentration, inflow rate, pH and sodium chloride addition. Bioresource Technology, 2012, 119, 166-173.	4.8	19
87	Short-term effects of nanoscale Zero-Valent Iron (nZVI) and hydraulic shock during high-rate anammox wastewater treatment. Journal of Environmental Management, 2018, 215, 248-257.	3.8	19
88	Anammox granule as new inoculum for start-up of anaerobic sulfide oxidation (ASO) process and its reverse start-up. Chemosphere, 2019, 217, 279-288.	4.2	19
89	Response of anammox granules to the simultaneous exposure to macrolide and aminoglycoside antibiotics: Linking performance to mechanism. Journal of Environmental Management, 2021, 286, 112267.	3.8	18
90	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

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91	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
92	Insight into the short- and long-term effects of quinoline on anammox granules: Inhibition and acclimatization. Science of the Total Environment, 2019, 651, 1294-1301.	3.9	17
93	Start-up and stable operation of partial nitritation prior to ANAMMOX in an internal-loop airlift reactor. Separation and Purification Technology, 2013, 120, 458-466.	3.9	16
94	Hydrodynamic characteristics of airlift nitrifying reactor using carrier-induced granular sludge. Journal of Hazardous Materials, 2008, 157, 367-373.	6.5	15
95	Insight into the microbial and genetic responses of anammox granules to spiramycin: Comparison between two different dosing strategies. Journal of Cleaner Production, 2020, 258, 120993.	4.6	14
96	Polyphenol-metal network derived nanocomposite to catalyze peroxymonosulfate decomposition for dye degradation. Chemosphere, 2020, 244, 125577.	4.2	13
97	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
98	Insight into the short- and long-term effects of Cu(II) on denitrifying biogranules. Journal of Hazardous Materials, 2016, 304, 448-456.	6.5	12
99	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
100	Linear anionic surfactant (SDBS) destabilized anammox process through sludge disaggregation and metabolic inhibition. Journal of Hazardous Materials, 2021, 403, 123641.	6.5	11
101	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
102	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
103	Mechanisms of ultrasound irradiation for enhancing the ANAMMOX process. Separation and Purification Technology, 2014, 130, 141-146.	3.9	9
104	Microbial and genetic responses of anammox process to the successive exposure of different antibiotics. Chemical Engineering Journal, 2021, 420, 127576.	6.6	9
105	A novel strategy for anammox consortia preservation: Transformation into anoxic sulfide oxidation consortia. Science of the Total Environment, 2020, 723, 138094.	3.9	8
106	Anammox sludge preservation: Preservative agents, temperature and substrate. Journal of Environmental Management, 2022, 311, 114860.	3.8	8
107	A review on characterizing the metabolite property of anammox sludge by spectroscopy. Science of the Total Environment, 2022, 817, 153065.	3.9	7
108	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

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109	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
110	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
111	Whether glycine betaine improves the thermotolerance of mesophilic anammox consortia. Environmental Technology (United Kingdom), 2020, 41, 3309-3317.	1.2	0