## Yongzhen Peng

List of Publications by Year in descending order

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127 papers

8,471 citations

41344 49 h-index 88 g-index

127 all docs

127 docs citations

127 times ranked

3435 citing authors

#	Article	IF	CITATIONS
1	Biological nitrogen removal from sewage via anammox: Recent advances. Bioresource Technology, 2016, 200, 981-990.	9.6	533
2	Stratification of Extracellular Polymeric Substances (EPS) for Aggregated Anammox Microorganisms. Environmental Science & Envi	10.0	389
3	Nitrogen Removal via Nitrite from Municipal Wastewater at Low Temperatures using Real-Time Control to Optimize Nitrifying Communities. Environmental Science & Enp; Technology, 2007, 41, 8159-8164.	10.0	293
4	Quantify the contribution of anammox for enhanced nitrogen removal through metagenomic analysis and mass balance in an anoxic moving bed biofilm reactor. Water Research, 2019, 160, 178-187.	11.3	268
5	Hotspots of anaerobic ammonium oxidation at land–freshwater interfaces. Nature Geoscience, 2013, 6, 103-107.	12.9	260
6	Partial denitrification providing nitrite: Opportunities of extending application for anammox. Environment International, 2019, 131, 105001.	10.0	252
7	Nitrite accumulation under constant temperature in anoxic denitrification process: The effects of carbon sources and COD/NO3-N. Bioresource Technology, 2012, 114, 137-143.	9.6	235
8	Achieving Mainstream Nitrogen Removal through Coupling Anammox with Denitratation. Environmental Science & Environmental Scien	10.0	222
9	A critical review of one-stage anammox processes for treating industrial wastewater: Optimization strategies based on key functional microorganisms. Bioresource Technology, 2018, 265, 498-505.	9.6	206
10	Achieving nitrogen removal via nitrite in a pilot-scale continuous pre-denitrification plant. Water Research, 2009, 43, 563-572.	11.3	190
11	Complete nitrogen removal from municipal wastewater via partial nitrification by appropriately alternating anoxic/aerobic conditions in a continuous plug-flow step feed process. Water Research, 2014, 55, 95-105.	11.3	186
12	Mechanisms and microbial structure of partial denitrification with high nitrite accumulation. Applied Microbiology and Biotechnology, 2016, 100, 2011-2021.	3.6	172
13	Achieving partial denitrification with sludge fermentation liquid as carbon source: The effect of seeding sludge. Bioresource Technology, 2013, 149, 570-574.	9.6	171
14	Anaerobic ammonium oxidation in traditional municipal wastewater treatment plants with low-strength ammonium loading: Widespread but overlooked. Water Research, 2015, 84, 66-75.	11.3	168
15	Advanced nitrogen removal from wastewater by combining anammox with partial denitrification. Bioresource Technology, 2015, 179, 497-504.	9.6	156
16	Long-term effect of pH on denitrification: High pH benefits achieving partial-denitrification. Bioresource Technology, 2019, 278, 444-449.	9.6	153
17	Nitrite production in a partial denitrifying upflow sludge bed (USB) reactor equipped with gas automatic circulation (GAC). Water Research, 2016, 90, 309-316.	11.3	141
18	Insight into the impacts of organics on anammox and their potential linking to system performance of sewage partial nitrification-anammox (PN/A): A critical review. Bioresource Technology, 2020, 300, 122655.	9.6	135

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19	Metagenomic analysis of anammox communities in three different microbial aggregates. Environmental Microbiology, 2016, 18, 2979-2993.	3.8	133
20	Performance of heterotrophic partial denitrification under feast-famine condition of electron donor: A case study using acetate as external carbon source. Bioresource Technology, 2013, 133, 263-269.	9.6	116
21	Achieving advanced nitrogen removal from low C/N wastewater by combining endogenous partial denitrification with anammox in mainstream treatment. Bioresource Technology, 2018, 270, 570-579.	9.6	115
22	A novel partial nitrification-synchronous anammox and endogenous partial denitrification (PN-SAEPD) process for advanced nitrogen removal from municipal wastewater at ambient temperatures. Water Research, 2020, 175, 115690.	11.3	105
23	Start up partial nitrification at low temperature with a real-time control strategy based on blower frequency and pH. Bioresource Technology, 2012, 112, 34-41.	9.6	98
24	The feasibility of using a two-stage autotrophic nitrogen removal process to treat sewage. Bioresource Technology, 2011, 102, 8331-8334.	9.6	97
25	Rapid Achievement of Nitritation Using Aerobic Starvation. Environmental Science & Emp; Technology, 2017, 51, 4001-4008.	10.0	91
26	Synergistic Partial-Denitrification, Anammox, and in-situ Fermentation (SPDAF) Process for Advanced Nitrogen Removal from Domestic and Nitrate-Containing Wastewater. Environmental Science & Emp; Technology, 2020, 54, 3702-3713.	10.0	91
27	Nitritation and denitritation of domestic wastewater using a continuous anaerobic–anoxic–aerobic (A2O) process at ambient temperatures. Bioresource Technology, 2010, 101, 8074-8082.	9.6	89
28	Highly enriched anammox within anoxic biofilms by reducing suspended sludge biomass in a real-sewage A2/O process. Water Research, 2021, 194, 116906.	11.3	89
29	Characteristics and removal of microplastics in rural domestic wastewater treatment facilities of China. Science of the Total Environment, 2020, 739, 139935.	8.0	85
30	Feasibility of partial-denitrification/ anammox for pharmaceutical wastewater treatment in a hybrid biofilm reactor. Water Research, 2022, 208, 117856.	11.3	85
31	A novel SNPR process for advanced nitrogen and phosphorus removal from mainstream wastewater based on anammox, endogenous partial-denitrification and denitrifying dephosphatation. Water Research, 2020, 170, 115363.	11.3	84
32	Cultivating aerobic granular sludge in a developed continuous-flow reactor with two-zone sedimentation tank treating real and low-strength wastewater. Bioresource Technology, 2018, 247, 776-783.	9.6	83
33	Recent advances in controlling denitritation for achieving denitratation/anammox in mainstream wastewater treatment plants. Bioresource Technology, 2020, 299, 122697.	9.6	83
34	Integrated anaerobic ammonium oxidization with partial denitrification process for advanced nitrogen removal from high-strength wastewater. Bioresource Technology, 2016, 221, 37-46.	9.6	80
35	Effective nitrogen removal in a granule-based partial-denitrification/anammox reactor treating low C/N sewage. Bioresource Technology, 2020, 297, 122467.	9.6	79
36	Effects of salinity build-up on the performance and microbial community of partial-denitrification granular sludge with high nitrite accumulation. Chemosphere, 2018, 209, 53-60.	8.2	77

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37	Rapid aerobic granulation in an SBR treating piggery wastewater by seeding sludge from a municipal WWTP. Journal of Environmental Sciences, 2017, 51, 332-341.	6.1	73
38	Achieving partial denitrification using carbon sources in domestic wastewater with waste-activated sludge as inoculum. Bioresource Technology, 2019, 283, 18-27.	9.6	72
39	Suspended sludge and biofilm shaped different anammox communities in two pilot-scale one-stage anammox reactors. Bioresource Technology, 2016, 211, 273-279.	9.6	62
40	High-efficient nitrogen removal from municipal wastewater via two-stage nitritation/anammox process: Long-term stability assessment and mechanism analysis. Bioresource Technology, 2019, 271, 150-158.	9.6	62
41	Enhanced nitrogen removal assisted by mainstream partial-anammox from real sewage in a continuous flow A2/O reactor. Chemical Engineering Journal, 2020, 400, 125893.	12.7	61
42	Organic substrate transformation and sludge characteristics in the integrated anaerobic anoxic oxic–biological contact oxidation (A2/O–BCO) system treating wastewater with low carbon/nitrogen ratio. Chemical Engineering Journal, 2016, 283, 47-57.	12.7	60
43	Rapid enrichment of anammox bacteria linked to floc aggregates in a single-stage partial nitritation-anammox process: Providing the initial carrier and anaerobic microenvironment. Water Research, 2021, 191, 116807.	11.3	60
44	A novel partial-denitrification strategy for post-anammox to effectively remove nitrogen from landfill leachate. Science of the Total Environment, 2018, 633, 745-751.	8.0	59
45	Enhanced nutrient removal of simultaneous partial nitrification, denitrification and phosphorus removal (SPNDPR) in a single-stage anaerobic/micro-aerobic sequencing batch reactor for treating real sewage with low carbon/nitrogen. Chemosphere, 2020, 257, 127097.	8.2	59
46	Nitrite Accumulation during the Denitrification Process in SBR for the Treatment of Pre-treated Landfill Leachate. Chinese Journal of Chemical Engineering, 2009, 17, 1027-1031.	3 <b>.</b> 5	58
47	Characteristic of nitrous oxide production in partial denitrification process with high nitrite accumulation. Bioresource Technology, 2016, 203, 341-347.	9.6	58
48	Nitrogen removal from low COD/TIN real municipal sewage by coupling partial denitrification with anammox in mainstream. Chemical Engineering Journal, 2021, 410, 128221.	12.7	57
49	Rapid control of activated sludge bulking and simultaneous acceleration of aerobic granulation by adding intact aerobic granular sludge. Science of the Total Environment, 2019, 674, 105-113.	8.0	55
50	Improving Efficiency and Stability of Anammox through Sequentially Coupling Nitritation and Denitritation in a Single-Stage Bioreactor. Environmental Science & Environmental Science, 2020, 54, 10859-10867.	10.0	55
51	NOB suppression in partial nitritation-anammox (PNA) process by discharging aged flocs: Performance and microbial community dynamics. Chemosphere, 2019, 227, 26-33.	8.2	49
52	In situ enrichment of anammox bacteria in anoxic biofilms are possible due to the stable and long-term accumulation of nitrite during denitrification. Bioresource Technology, 2020, 300, 122668.	9.6	49
53	Enhancing the digestion of waste activated sludge through nitrite addition: insight on mechanism through profiles of extracellular polymeric substances (EPS) and microbial communities. Journal of Hazardous Materials, 2019, 369, 164-170.	12.4	47
54	Application of intermittent aeration in nitrogen removal process: development, advantages and mechanisms. Chemical Engineering Journal, 2022, 430, 133184.	12.7	47

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55	Reducing carbon source consumption through a novel denitratation/anammox biofilter to remove nitrate from synthetic secondary effluent. Bioresource Technology, 2020, 309, 123377.	9.6	46
56	Dynamics of microbial activities and community structures in activated sludge under aerobic starvation. Bioresource Technology, 2017, 244, 588-596.	9.6	45
57	Pilot-scale evaluation of partial denitrification/anammox on nitrogen removal from low COD/N real sewage based on a modified process. Bioresource Technology, 2021, 338, 125580.	9.6	45
58	A continuous-flow combined process based on partial nitrification-Anammox and partial denitrification-Anammox (PN/AÂ+ÂPD/A) for enhanced nitrogen removal from mature landfill leachate. Bioresource Technology, 2020, 297, 122483.	9.6	44
59	Rapid achieving partial nitrification in domestic wastewater: Controlling aeration time to selectively enrich ammonium oxidizing bacteria (AOB) after simultaneously eliminating AOB and nitrite oxidizing bacteria (NOB). Bioresource Technology, 2021, 328, 124810.	9.6	44
60	Low energy treatment of landfill leachate using simultaneous partial nitrification and partial denitrification with anaerobic ammonia oxidation. Environment International, 2019, 127, 452-461.	10.0	42
61	Optimizing sludge dewatering with a combined conditioner of Fenton's reagent and cationic surfactant. Journal of Environmental Sciences, 2020, 88, 21-30.	6.1	41
62	Nitrite accumulation in comammox-dominated nitrification-denitrification reactors: Effects of DO concentration and hydroxylamine addition. Journal of Hazardous Materials, 2020, 384, 121375.	12.4	41
63	Effect of adding alum sludge from water treatment plant on sewage sludge dewatering. Journal of Environmental Chemical Engineering, 2016, 4, 746-752.	6.7	39
64	Successful granulation and microbial differentiation of activated sludge in anaerobic/anoxic/aerobic (A2O) reactor with two-zone sedimentation tank treating municipal sewage. Water Research, 2020, 178, 115825.	11.3	39
65	Strengthening the reactivity of Fe0/(Fe/Cu) by premagnetization: Implications for nitrate reduction rate and selectivity. Chemical Engineering Journal, 2017, 330, 813-822.	12.7	38
66	Analysis of bacterial, fungal and archaeal populations from a municipal wastewater treatment plant developing an innovative aerobic granular sludge process. World Journal of Microbiology and Biotechnology, 2017, 33, 14.	3.6	36
67	Fate of dissolved organic nitrogen during the Anammox process using ultra-high resolution mass spectrometry. Environment International, 2019, 131, 105042.	10.0	36
68	Rapid aerobic sludge granulation in an integrated oxidation ditch with two-zone clarifiers. Water Research, 2020, 175, 115704.	11.3	36
69	Multiple roles of complex organics in polishing THP-AD filtrate with double-line anammox: Inhibitory relief and bacterial selection. Water Research, 2022, 216, 118373.	11.3	36
70	Stable partial nitrification of domestic sewage achieved through activated sludge on exposure to nitrite. Bioresource Technology, 2019, 278, 435-439.	9.6	35
71	Coupling of Fe-C and aerobic granular sludge to treat refractory wastewater from a membrane manufacturer in a pilot-scale system. Water Research, 2020, 186, 116331.	11.3	35
72	Aerobic sludge granulation in a Reverse Flow Baffled Reactor (RFBR) operated in continuous-flow mode for wastewater treatment. Separation and Purification Technology, 2015, 149, 437-444.	7.9	34

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73	Multiple electron acceptor-mediated sulfur autotrophic denitrification: Nitrogen source competition, long-term performance and microbial community evolution. Bioresource Technology, 2021, 329, 124918.	9.6	34
74	A novel partial denitrification, anammox-biological phosphorus removal, fermentation and partial nitrification (PDA-PFPN) process for real domestic wastewater and waste activated sludge treatment. Water Research, 2022, 217, 118376.	11.3	34
75	Nitrifying aerobic granular sludge fermentation for releases of carbon source and phosphorus: The role of fermentation pH. Bioresource Technology, 2018, 260, 30-37.	9.6	33
76	Successful establishment of partial denitrification by introducing hydrolytic acidification of slowly biodegradable organic matter. Bioresource Technology, 2020, 315, 123887.	9.6	33
77	Enrichment and retention of key functional bacteria of partial denitrification-Anammox (PD/A) process via cell immobilization: A novel strategy for fast PD/A application. Bioresource Technology, 2021, 326, 124744.	9.6	33
78	Treatment of recalcitrant organic silicone wastewater by fluidized-bed Fenton process. Separation and Purification Technology, 2014, 132, 16-22.	7.9	29
79	Roles of bacterial and epistylis populations in aerobic granular SBRs treating domestic and synthetic wastewaters. Chemical Engineering Journal, 2018, 351, 952-958.	12.7	29
80	Metagenomic prediction analysis of microbial aggregation in anammoxâ€dominated community. Water Environment Research, 2021, 93, 2549-2558.	2.7	29
81	Accelerating Aerobic Sludge Granulation by Adding Dry Sewage Sludge Micropowder in Sequencing Batch Reactors. International Journal of Environmental Research and Public Health, 2015, 12, 10056-10065.	2.6	28
82	Rapid start-up of an aerobic granular sludge system for nitrogen and phosphorus removal through seeding chitosan-based sludge aggregates. Science of the Total Environment, 2021, 762, 144171.	8.0	27
83	Role of adding dried sludge micropowder in aerobic granular sludge reactor with extended filamentous bacteria. Bioresource Technology Reports, 2019, 5, 51-58.	2.7	26
84	Achieving stable mainstream nitrogen and phosphorus removal assisted by hydroxylamine addition in a continuous partial nitritation/anammox process from real sewage. Science of the Total Environment, 2021, 794, 148478.	8.0	25
85	In-situ fermentation coupling with partial-denitrification/anammox process for enhanced nitrogen removal in an integrated three-stage anoxic/oxic (A/O) biofilm reactor treating low COD/N real wastewater. Bioresource Technology, 2022, 344, 126267.	9.6	25
86	Enhanced dewatering of activated sludge by acid assisted Heat–CaO2 treatment: Simultaneously removing heavy metals and mitigating antibiotic resistance genes. Journal of Hazardous Materials, 2021, 418, 126248.	12.4	24
87	Achieving partial nitrification, enhanced biological phosphorus removal and in-situ fermentation (PNPRF) in continuous-flow system and mechanism analysis at transcriptional level. Chemical Engineering Journal, 2022, 428, 131098.	12.7	24
88	An Innovative Process for Mature Landfill Leachate and Waste Activated Sludge Simultaneous Treatment Based on Partial Nitrification, In Situ Fermentation, and Anammox (PNFA). Environmental Science & Echnology, 2022, 56, 1310-1320.	10.0	24
89	Aerobic granulation in a modified oxidation ditch with an adjustable volume intraclarifier. Bioresource Technology, 2014, 157, 351-354.	9.6	22
90	Insights into the occurrence, elimination efficiency and ecological risk of antibiotics in rural domestic wastewater treatment facilities along the Yangtze River Basin, China. Science of the Total Environment, 2022, 837, 155824.	8.0	22

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91	Modeling optimization and evaluation of tightly bound extracellular polymeric substances extraction by sonication. Applied Microbiology and Biotechnology, 2016, 100, 8485-8494.	3.6	21
92	Microplastic Pollution in China, an Invisible Threat Exacerbated by Food Delivery Services. Bulletin of Environmental Contamination and Toxicology, 2021, 107, 778-785.	2.7	20
93	Highly efficient and synchronous nitrogen removal from ammonia-rich wastewater and domestic wastewater via a novel anammox coupled with double-nitrite-shunt process at low temperature. Chemical Engineering Journal, 2021, 425, 131449.	12.7	20
94	Advanced nitrogen removal from landfill leachate via a two-stage combined process of partial nitrification-Anammox (PNA) and partial denitrification-Anammox (PDA). Science of the Total Environment, 2022, 810, 151186.	8.0	20
95	Effect of Sludge Retention Time on Nitrite Accumulation in Real-time Control Biological Nitrogen Removal Sequencing Batch Reactor. Chinese Journal of Chemical Engineering, 2011, 19, 512-517.	3.5	19
96	Achieving enhanced biological phosphorus removal utilizing waste activated sludge as sole carbon source and simultaneous sludge reduction in sequencing batch reactor. Science of the Total Environment, 2021, 799, 149291.	8.0	19
97	Identification of partial denitrification granulation enhanced by low C/N ratio in the aspect of metabolomics and quorum sensing. Chemosphere, 2022, 286, 131895.	8.2	19
98	Enhancing nitrogen removal from low carbon to nitrogen ratio wastewater by using a novel sequencing batch biofilm reactor. Journal of Environmental Sciences, 2016, 50, 32-37.	6.1	17
99	Adding waste iron shavings in reactor to develop aerobic granular sludge and enhance removal of nitrogen and phosphorus. Journal of Environmental Chemical Engineering, 2021, 9, 106620.	6.7	17
100	The nitrification recovery capacity is the key to enhancing nitrogen removal in the AOA system at low temperatures. Science of the Total Environment, 2022, 818, 151674.	8.0	17
101	Initial nitrite concentration promote nitrite-oxidizing bacteria activity recovery from transient anoxia: Experimental and modeling investigations. Bioresource Technology, 2019, 289, 121711.	9.6	16
102	Achieving nitritation by treating sludge with free nitrous acid: The effect of starvation. Bioresource Technology, 2019, 271, 159-165.	9.6	16
103	Improving aerobic sludge granulation in sequential batch reactor by natural drying: Effluent sludge recovery and feeding back into reactor. Chemosphere, 2020, 242, 125159.	8.2	15
104	Individual and combined effect of humic acid and fulvic acid on distinct anammox-based systems: Inhibition and resistance. Chemical Engineering Journal, 2022, 444, 136547.	12.7	15
105	Free nitrous acid pretreatment of sludge to achieve nitritation: The effect of sludge concentration. Bioresource Technology, 2019, 285, 121358.	9.6	13
106	Microbial community at transcription level in the synergy of GAOs and Candidatus Accumulibacter for saving carbon source in wastewater treatment. Bioresource Technology, 2020, 297, 122454.	9.6	13
107	Rapid granulation of aerobic sludge in a continuous-flow reactor with a two-zone sedimentation tank by the addition of dewatered sludge. Journal of Water Process Engineering, 2021, 41, 101941.	5.6	13
108	The combination of external conditioning and Ca2+ addition prior to the reintroduction of effluent sludge into SBR sharply accelerates the formation of aerobic granules. Journal of Water Process Engineering, 2020, 36, 101269.	5.6	12

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109	Simultaneous anammox-denitrification process and its emerging extensions. Chemical Engineering Journal, 2021, 415, 128380.	12.7	10
110	Impact of starvation conditions on the nitrifying performance and sludge properties in SBR system with a limited filamentous bulking state. Science of the Total Environment, 2021, 797, 148997.	8.0	10
111	Structure Analysis of Aerobic Granule from a Sequencing Batch Reactor for Organic Matter and Ammonia Nitrogen Removal. International Journal of Environmental Research and Public Health, 2014, 11, 2427-2436.	2.6	8
112	Molecular-level characterization of stratified extracellular polymeric substances of anammox sludge and its adsorption preference to refractory dissolved organic matter. Energy, 2020, 213, 118818.	8.8	8
113	Transcriptional responses of Candidatus Accumulibacter clades to environmental dynamics in enhanced biological phosphorus removal. Bioresource Technology, 2020, 306, 123108.	9.6	8
114	Biofilm phenotypes and internal community succession determines distinct growth of anammox bacteria in functional anammox biofilms. Bioresource Technology, 2022, 349, 126893.	9.6	8
115	Enhanced Nitrogen Removal from Domestic Wastewater by Partial-Denitrification/Anammox in an Anoxic/Oxic Biofilm Reactor. Processes, 2022, 10, 109.	2.8	7
116	A novel control strategy to strengthen nitrogen removal from domestic wastewater through eliminating nitrite oxidizing bacteria in a plug-flow process. Bioresource Technology, 2022, 350, 126856.	9.6	7
117	Centrifugal dewatering of blended sludge from drinking water treatment plant and wastewater treatment plant. Journal of Material Cycles and Waste Management, 2018, 20, 421-430.	3.0	6
118	Analyzing the roles of cyclic dimeric guanosine monophosphate (c-di-GMP) on the formation of autotrophic granules and autotrophic biofilm in integrated fixed-film activated sludge (IFAS) reactor. Environmental Technology and Innovation, 2022, 26, 102304.	6.1	6
119	Mutual boost of granulation and enrichment of anammox bacteria in an anaerobic/oxic/anoxic system as the temperature decreases when treating municipal wastewater. Bioresource Technology, 2022, 357, 127336.	9.6	6
120	Molecular characterization of dissolved organic nitrogen during anoxic/oxic and anammox processes using ESI FT–ICR MS. Water Environment Research, 2021, 93, 2107-2121.	2.7	5
121	Simultaneous removal of ammonia nitrogen and sulfide by coupled anammox and sulfur autotrophic denitrification process from industrial wastewater. Cleaner Engineering and Technology, 2022, 8, 100469.	4.0	4
122	Advanced nitrogen and phosphorus removal from municipal wastewater via simultaneous enhanced biological phosphorus removal and semi-nitritation (EBPR-SN) combined with anammox. Bioprocess and Biosystems Engineering, 2020, 43, 2039-2052.	3.4	3
123	Copper Corrosion Products Catalyzed Reduction of $\langle i \rangle N \langle i \rangle$ -Nitrosodimethylamine with Iron. Environmental Science & Envi	10.0	2
124	A Bioreactor Designed for Restricting Oversize of Aerobic Granular Sludge. Processes, 2021, 9, 374.	2.8	2
125	Analysis of nitrite oxidation process and nitrification performance by nitrogen and oxygen isotope fractionation effect. Science of the Total Environment, 2022, 814, 152511.	8.0	1
126	Insight into the characteristics of microbial communities in a single-stage anammox reactor under different oxygen conditions. Environmental Science: Water Research and Technology, 2022, 8, 419-428.	2.4	1

 #	Article	lF	CITATIONS
127	Segregation of effect between granules and flocs in PN/A system treating acrylic fiber wastewater: Performance and mechanism. Chemosphere, 2022, 304, 135344.	8.2	1