

Susanne Lackner

List of Publications by Year in descending order

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66
papers

4,146
citations

186265

28
h-index

118850

62
g-index

72
all docs

72
docs citations

72
times ranked

2846
citing authors

#	ARTICLE	IF	CITATIONS
1	Full-scale partial nitrification/anammox experiences – An application survey. <i>Water Research</i> , 2014, 55, 292-303.	11.3	1,401
2	Low Temperature Partial Nitrification/Anammox in a Moving Bed Biofilm Reactor Treating Low Strength Wastewater. <i>Environmental Science & Technology</i> , 2014, 48, 8784-8792.	10.0	319
3	Comparing different reactor configurations for Partial Nitrification/Anammox at low temperatures. <i>Water Research</i> , 2015, 81, 92-100.	11.3	214
4	Heterotrophic activity compromises autotrophic nitrogen removal in membrane-aerated biofilms: Results of a modeling study. <i>Water Research</i> , 2008, 42, 1102-1112.	11.3	175
5	Response of Different <i>Nitrospira</i> Species To Anoxic Periods Depends on Operational DO. <i>Environmental Science & Technology</i> , 2014, 48, 2934-2941.	10.0	139
6	Success of mainstream partial nitrification/anammox demands integration of engineering, microbiome and modeling insights. <i>Current Opinion in Biotechnology</i> , 2018, 50, 214-221.	6.6	123
7	Sequential Aeration of Membrane-Aerated Biofilm Reactors for High-Rate Autotrophic Nitrogen Removal: Experimental Demonstration. <i>Environmental Science & Technology</i> , 2010, 44, 7628-7634.	10.0	109
8	Long-term monitoring of SARS-CoV-2 RNA in wastewater of the Frankfurt metropolitan area in Southern Germany. <i>Scientific Reports</i> , 2021, 11, 5372.	3.3	108
9	Redox-stratification controlled biofilm (ReSCoBi) for completely autotrophic nitrogen removal: The effect of co- versus counter-diffusion on reactor performance. <i>Biotechnology and Bioengineering</i> , 2007, 97, 40-51.	3.3	84
10	Nitrification performance in membrane-aerated biofilm reactors differs from conventional biofilm systems. <i>Water Research</i> , 2010, 44, 6073-6084.	11.3	70
11	Modeling of Biofilm Systems: A Review. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2014, 146, 53-76.	1.1	65
12	Evaluating operation strategies and process stability of a single stage nitrification–anammox SBR by use of the oxidation–reduction potential (ORP). <i>Bioresource Technology</i> , 2012, 107, 70-77.	9.6	61
13	Enhancing the formation and shear resistance of nitrifying biofilms on membranes by surface modification. <i>Water Research</i> , 2009, 43, 3469-3478.	11.3	60
14	Inoculum effects on community composition and nitrification performance of autotrophic nitrifying biofilm reactors with counter–diffusion geometry. <i>Environmental Microbiology</i> , 2010, 12, 2858-2872.	3.8	59
15	High-resolution mapping and modeling of anammox recovery from recurrent oxygen exposure. <i>Water Research</i> , 2018, 144, 522-531.	11.3	52
16	Nitrification performance and biofilm development of co- and counter-diffusion biofilm reactors: Modeling and experimental comparison. <i>Water Research</i> , 2009, 43, 2699-2709.	11.3	51
17	Membrane aerated biofilm reactors for mainstream partial nitrification/anammox: Experiences using real municipal wastewater. <i>Water Research X</i> , 2020, 9, 100066.	6.1	48
18	Influence of seasonal temperature fluctuations on two different partial nitrification-anammox reactors treating mainstream municipal wastewater. <i>Water Science and Technology</i> , 2015, 72, 1358-1363.	2.5	46

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19	First quantification of semi-crystalline microplastics in industrial wastewaters. <i>Chemosphere</i> , 2020, 258, 127388.	8.2	46
20	Microbial activity catalyzes oxygen transfer in membrane-aerated nitrifying biofilm reactors. <i>Journal of Membrane Science</i> , 2013, 446, 465-471.	8.2	45
21	Prevalence and circulation patterns of SARS-CoV-2 variants in European sewage mirror clinical data of 54 European cities. <i>Water Research</i> , 2022, 214, 118162.	11.3	45
22	Implications of biological activated carbon filters for micropollutant removal in wastewater treatment. <i>Water Research</i> , 2021, 189, 116588.	11.3	44
23	Comparing the performance and operation stability of an SBR and MBBR for single-stage nitrification-anammox treating wastewater with high organic load. <i>Environmental Technology (United Kingdom)</i> 11(10):1149-1161 / Over	11.3	41
24	Swinging ORP™ as operation strategy for stable reject water treatment by nitrification-anammox in sequencing batch reactors. <i>Chemical Engineering Journal</i> , 2012, 180, 190-196.	12.7	41
25	Empty bed contact time: The key for micropollutant removal in activated carbon filters. <i>Water Research</i> , 2021, 191, 116765.	11.3	37
26	Start-up of a full-scale deammonification SBR-treating effluent from digested sludge dewatering. <i>Water Science and Technology</i> , 2015, 71, 553-559.	2.5	33
27	Interaction between wastewater microorganisms and geopolymer or cementitious materials: Biofilm characterization and deterioration characteristics of mortars. <i>International Biodeterioration and Biodegradation</i> , 2018, 134, 58-67.	3.9	33
28	Investigating biofilm structure developing on carriers from lab-scale moving bed biofilm reactors based on light microscopy and optical coherence tomography. <i>Bioresource Technology</i> , 2016, 200, 128-136.	9.6	32
29	The role of inoculum and reactor configuration for microbial community composition and dynamics in mainstream partial nitrification anammox reactors. <i>MicrobiologyOpen</i> , 2017, 6, e00456.	3.0	32
30	Fast and easy quantification of semi-crystalline microplastics in exemplary environmental matrices by differential scanning calorimetry (DSC). <i>Chemical Engineering Journal</i> , 2021, 423, 129941.	12.7	32
31	Characterisation and application of ultra-high spin clusters as magnetic resonance relaxation agents. <i>Dalton Transactions</i> , 2015, 44, 5032-5040.	3.3	29
32	Assessing the influence of biofilm surface roughness on mass transfer by combining optical coherence tomography and two-dimensional modeling. <i>Biotechnology and Bioengineering</i> , 2016, 113, 989-1000.	3.3	29
33	On resolving ambiguities in microbial community analysis of partial nitrification anammox reactors. <i>Scientific Reports</i> , 2019, 9, 6954.	3.3	29
34	Microbial activity of suspended biomass from a nitrification-anammox SBR in dependence of operational condition and size fraction. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 8795-8804.	3.6	24
35	Determining the flow regime in a biofilm carrier by means of magnetic resonance imaging. <i>Biotechnology and Bioengineering</i> , 2015, 112, 1023-1032.	3.3	24
36	Genome Sequencing of Wastewater Confirms the Arrival of the SARS-CoV-2 Omicron Variant at Frankfurt Airport but Limited Spread in the City of Frankfurt, Germany, in November 2021. <i>Microbiology Resource Announcements</i> , 2022, 11, e0122921.	0.6	24

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37	Metatranscriptomic Analysis Reveals SARS-CoV-2 Mutations in Wastewater of the Frankfurt Metropolitan Area in Southern Germany. <i>Microbiology Resource Announcements</i> , 2021, 10, .	0.6	23
38	Combination of ¹⁵ N Tracer and Microbial Analyses Discloses N ₂ O Sink Potential of the Anammox Community. <i>Environmental Science & Technology</i> , 2021, 55, 9231-9242.	10.0	23
39	NMR investigation of water diffusion in different biofilm structures. <i>Biotechnology and Bioengineering</i> , 2017, 114, 2857-2867.	3.3	21
40	Effect of the kinetics of ammonium and nitrite oxidation on nitrification success or failure for different biofilm reactor geometries. <i>Biochemical Engineering Journal</i> , 2012, 69, 123-129.	3.6	20
41	ADM1 modeling of UASB treating domestic wastewater in Nepal. <i>Renewable Energy</i> , 2016, 95, 263-268.	8.9	20
42	Elevated levels of antibiotic resistance in groundwater during treated wastewater irrigation associated with infiltration and accumulation of antibiotic residues. <i>Journal of Hazardous Materials</i> , 2022, 423, 127155.	12.4	20
43	Short and long term biosorption of silica-coated iron oxide nanoparticles in heterotrophic biofilms. <i>Science of the Total Environment</i> , 2016, 544, 722-729.	8.0	19
44	Membrane Aerated Biofilm Reactors – How longitudinal gradients influence nitrogen removal – A conceptual study. <i>Water Research</i> , 2019, 166, 115060.	11.3	18
45	Determining uncertainties in PICRUSt analysis – An easy approach for autotrophic nitrogen removal. <i>Biochemical Engineering Journal</i> , 2019, 152, 107328.	3.6	16
46	The role of interactions of effective biofilm surface area and mass transfer in nitrogen removal efficiency of an integrated fixed-film activated sludge system. <i>Chemical Engineering Journal</i> , 2018, 350, 992-999.	12.7	14
47	Direct surface visualization of biofilms with high spin coordination clusters using Magnetic Resonance Imaging. <i>Acta Biomaterialia</i> , 2016, 31, 167-177.	8.3	13
48	Low biosorption of PVA coated engineered magnetic nanoparticles in granular sludge assessed by magnetic susceptibility. <i>Science of the Total Environment</i> , 2015, 537, 43-50.	8.0	10
49	Assuring water quality along multi-barrier treatment systems for agricultural water reuse. <i>Journal of Water Reuse and Desalination</i> , 2020, 10, 332-346.	2.3	10
50	Targeted metagenomics reveals extensive diversity of the denitrifying community in partial nitrification anammox and activated sludge systems. <i>Biotechnology and Bioengineering</i> , 2021, 118, 433-441.	3.3	10
51	Recent NMR/MRI studies of biofilm structures and dynamics. <i>Annual Reports on NMR Spectroscopy</i> , 2019, 97, 163-213.	1.5	9
52	A multi-component model for granular activated carbon filters combining biofilm and adsorption kinetics. <i>Water Research</i> , 2021, 197, 117079.	11.3	9
53	Tertiary phosphorus removal to extremely low levels by coagulation-flocculation and cloth-filtration. <i>Water Science and Technology</i> , 2020, 82, 131-143.	2.5	8
54	High-throughput profiling of antibiotic resistance genes in wastewater: comparison between a pond system in Namibia and an activated sludge treatment in Germany. <i>Journal of Water and Health</i> , 2020, 18, 867-878.	2.6	8

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55	Time to act“ assessing variations in qPCR analyses in biological nitrogen removal with examples from partial nitrification/anammox systems. <i>Water Research</i> , 2021, 190, 116604.	11.3	8
56	Quantification of particulate matter attached to the bulk-biofilm interface and its influence on local mass transfer. <i>Separation and Purification Technology</i> , 2018, 197, 86-94.	7.9	6
57	Exploration and enrichment of methane-oxidizing bacteria derived from a rice paddy field emitting highly concentrated methane. <i>Journal of Bioscience and Bioengineering</i> , 2020, 130, 311-318.	2.2	6
58	Identification of a Metagenome-Assembled Genome of an Uncultured <i>Methyloceanibacter</i> sp. Strain Acquired from an Activated Sludge System Used for Landfill Leachate Treatment. <i>Microbiology Resource Announcements</i> , 2020, 9, .	0.6	4
59	Identifying technical synergy effects for organic micro-pollutants removal. <i>Water Practice and Technology</i> , 2018, 13, 346-354.	2.0	3
60	Lost in translation: the quest for <i>Nitrosomonas</i> cluster 7-specific <i>amoA</i> primers and TaqMan probes. <i>Microbial Biotechnology</i> , 2020, 13, 2069-2076.	4.2	3
61	Characterization and evaluation of waste stabilization pond systems in Namibia. <i>H2Open Journal</i> , 2022, 5, 365-378.	1.7	3
62	Enhancement of overloaded waste stabilization ponds using different pretreatment technologies: a comparative study from Namibia. <i>Journal of Water Reuse and Desalination</i> , 2020, 10, 500-512.	2.3	2
63	Metagenomic Insights Into Functional and Taxonomic Compositions of an Activated Sludge Microbial Community Treating Leachate of a Completed Landfill: A Pathway-Based Analysis. <i>Frontiers in Microbiology</i> , 2021, 12, 640848.	3.5	2
64	Looking deeper “ exploring hidden patterns in reactor data of N-removal systems through clustering analysis. <i>Water Science and Technology</i> , 2020, 81, 1569-1577.	2.5	2
65	Are “Strategists Yield“ Strategists in disguise? An example from autotrophic nitrogen removal. <i>Biotechnology and Bioengineering</i> , 2022, , .	3.3	1
66	Model Prediction of Completely Autotrophic Nitrogen Removal under Different Reactor Configurations. <i>Proceedings of the Water Environment Federation</i> , 2008, 2008, 3082-3100.	0.0	0