

# David Gregory Weissbrodt

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

3,242  
citations

201385

27  
h-index

197535

49  
g-index

67  
all docs

67  
docs citations

67  
times ranked

3044  
citing authors

#	ARTICLE	IF	CITATIONS
1	Monitoring SARS-CoV-2 in sewage: Toward sentinels with analytical accuracy. <i>Science of the Total Environment</i> , 2022, 804, 150244.	3.9	13
2	Monitoring antibiotic resistance genes in wastewater environments: The challenges of filling a gap in the One-Health cycle. <i>Journal of Hazardous Materials</i> , 2022, 424, 127407.	6.5	60
3	Catabolism of sialic acids in an environmental microbial community. <i>FEMS Microbiology Ecology</i> , 2022, 98, .	1.3	5
4	Metagenomic profiling and transfer dynamics of antibiotic resistance determinants in a full-scale granular sludge wastewater treatment plant. <i>Water Research</i> , 2022, 219, 118571.	5.3	34
5	Free-floating extracellular DNA: Systematic profiling of mobile genetic elements and antibiotic resistance from wastewater. <i>Water Research</i> , 2021, 189, 116592.	5.3	67
6	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.	5.3	8
7	Annual dynamics of antimicrobials and resistance determinants in flocculent and aerobic granular sludge treatment systems. <i>Water Research</i> , 2021, 190, 116752.	5.3	35
8	Plant-wide systems microbiology for the wastewater industry. <i>Environmental Science: Water Research and Technology</i> , 2021, 7, 1687-1706.	1.2	7
9	Production of nonulosonic acids in the extracellular polymeric substances of <i>Candidatus Accumulibacter phosphatis</i> . <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 3327-3338.	1.7	14
10	Effects of micro-aeration on microbial niches and antimicrobial resistances in blackwater anaerobic digesters. <i>Water Research</i> , 2021, 196, 117035.	5.3	39
11	Operational Strategies to Selectively Produce Purple Bacteria for Microbial Protein in Raceway Reactors. <i>Environmental Science &amp; Technology</i> , 2021, 55, 8278-8286.	4.6	28
12	Upgrading residues from wastewater and drinking water treatment plants as low-cost adsorbents to remove extracellular DNA and microorganisms carrying antibiotic resistance genes from treated effluents. <i>Science of the Total Environment</i> , 2021, 778, 146364.	3.9	28
13	Temperature and Nutrient Limitations Decrease Transfer of Conjugative IncP-1 Plasmid pJK5 to Wild <i>Escherichia coli</i> Strains. <i>Frontiers in Microbiology</i> , 2021, 12, 656250.	1.5	20
14	Elucidating performance failures in use of granular sludge for nutrient removal from domestic wastewater in a warm coastal climate region. <i>Environmental Technology (United Kingdom)</i> , 2020, 41, 1896-1911.	1.2	22
15	Enrichment and Aggregation of Purple Non-sulfur Bacteria in a Mixed-Culture Sequencing-Batch Photobioreactor for Biological Nutrient Removal From Wastewater. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 557234.	2.0	30
16	Responsible science, engineering and education for water resource recovery and circularity. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 1952-1966.	1.2	15
17	Selecting for lactic acid producing and utilising bacteria in anaerobic enrichment cultures. <i>Biotechnology and Bioengineering</i> , 2020, 117, 1281-1293.	1.7	45
18	Anticipating Xenogenic Pollution at the Source: Impact of Sterilizations on DNA Release From Microbial Cultures. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 171.	2.0	11

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19	The impact of mixtures of xylose and glucose on the microbial diversity and fermentative metabolism of sequencing-batch or continuous enrichment cultures. <i>FEMS Microbiology Ecology</i> , 2019, 95, .	1.3	5
20	Common principles and best practices for engineering microbiomes. <i>Nature Reviews Microbiology</i> , 2019, 17, 725-741.	13.6	324
21	Biomass segregation between biofilm and flocs improves the control of nitrite-oxidizing bacteria in mainstream partial nitrification and anammox processes. <i>Water Research</i> , 2019, 154, 104-116.	5.3	191
22	Determinants of presence and removal of antibiotic resistance genes during WWTP treatment: A cross-sectional study. <i>Water Research</i> , 2019, 161, 319-328.	5.3	131
23	“Candidatus <i>Accumulibacter delftensis</i> ”: A clade IC novel polyphosphate-accumulating organism without denitrifying activity on nitrate. <i>Water Research</i> , 2019, 161, 136-151.	5.3	74
24	Drivers of bioaggregation from flocs to biofilms and granular sludge. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 2072-2089.	1.2	50
25	Diversity and metabolism of xylose and glucose fermenting microbial communities in sequencing batch or continuous culturing. <i>FEMS Microbiology Ecology</i> , 2019, 95, .	1.3	23
26	An integrative review of granular sludge for the biological removal of nutrients and recalcitrant organic matter from wastewater. <i>Chemical Engineering Journal</i> , 2018, 336, 489-502.	6.6	178
27	Modeling hydraulic transport and anaerobic uptake by PAOs and GAOs during wastewater feeding in EBPR granular sludge reactors. <i>Biotechnology and Bioengineering</i> , 2017, 114, 1688-1702.	1.7	23
28	Growth of <i>Nitrosococcus</i> -Related Ammonia Oxidizing Bacteria Coincides with Extremely Low pH Values in Wastewater with High Ammonia Content. <i>Environmental Science &amp; Technology</i> , 2017, 51, 6857-6866.	4.6	64
29	Long-Term Bacterial Dynamics in a Full-Scale Drinking Water Distribution System. <i>PLoS ONE</i> , 2016, 11, e0164445.	1.1	68
30	Influence of Different Sewer Biofilms on Transformation Rates of Drugs. <i>Environmental Science &amp; Technology</i> , 2016, 50, 13351-13360.	4.6	58
31	Effect of short term external perturbations on bacterial ecology and activities in a partial nitrification and anammox reactor. <i>Bioresource Technology</i> , 2016, 219, 527-535.	4.8	48
32	Mainstream partial nitrification and anammox: long-term process stability and effluent quality at low temperatures. <i>Water Research</i> , 2016, 101, 628-639.	5.3	420
33	Hospital-Use Pharmaceuticals in Swiss Waters Modeled at High Spatial Resolution. <i>Environmental Science &amp; Technology</i> , 2016, 50, 4742-4751.	4.6	18
34	Biological control of biofilms on membranes by metazoans. <i>Water Research</i> , 2016, 88, 20-29.	5.3	79
35	Activity and growth of anammox biomass on aerobically pre-treated municipal wastewater. <i>Water Research</i> , 2015, 80, 325-336.	5.3	195
36	Effect of particulate organic substrate on aerobic granulation and operating conditions of sequencing batch reactors. <i>Water Research</i> , 2015, 85, 158-166.	5.3	93

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37	Resiliency of Anammox against External Stress Factors – Effects of Temperature and Wastewater Constituents. Proceedings of the Water Environment Federation, 2015, 2015, 1986-1993.	0.0	0
38	An interactive framework of process engineering and systems microbiology toward improved performance of aerobic-anaerobic ammonium oxidation for energy-efficient nitrogen removal from wastewater. Proceedings of the Water Environment Federation, 2015, 2015, 1-8.	0.0	0
39	How far can genetic signatures be used to anticipate and trigger the behavior of environmental biotechnology systems in the water engineering domain?. Proceedings of the Water Environment Federation, 2015, 2015, 6170-6170.	0.0	1
40	The feasibility of automated online flow cytometry for in-situ monitoring of microbial dynamics in aquatic ecosystems. Frontiers in Microbiology, 2014, 5, 265.	1.5	113
41	Linking bacterial population dynamics and nutrient removal in the granular sludge biofilm ecosystem engineered for wastewater treatment. FEMS Microbiology Ecology, 2014, 88, 579-595.	1.3	101
42	Multilevel correlations in the biological phosphorus removal process: From bacterial enrichment to conductivity-based metabolic batch tests and polyphosphatase assays. Biotechnology and Bioengineering, 2014, 111, 2421-2435.	1.7	35
43	Towards Community Systems Microbiology for the Optimization of Aerobic-Anaerobic Ammonium Oxidation Processes. Proceedings of the Water Environment Federation, 2014, 2014, 2645-2649.	0.0	0
44	A consolidated approach of flocculent and granular sludge systems under the perspective of bacterial resource management. Proceedings of the Water Environment Federation, 2014, 2014, 5008-5009.	0.0	6
45	Identification of trigger factors selecting for polyphosphate- and glycogen-accumulating organisms in aerobic granular sludge sequencing batch reactors. Water Research, 2013, 47, 7006-7018.	5.3	67
46	Assessment of bacterial and structural dynamics in aerobic granular biofilms. Frontiers in Microbiology, 2013, 4, 175.	1.5	123
47	PyroTRF-ID: a novel bioinformatics methodology for the affiliation of terminal-restriction fragments using 16S rRNA gene pyrosequencing data. BMC Microbiology, 2012, 12, 306.	1.3	23
48	Bacterial Selection during the Formation of Early-Stage Aerobic Granules in Wastewater Treatment Systems Operated Under Wash-Out Dynamics. Frontiers in Microbiology, 2012, 3, 332.	1.5	84
49	Mass Flows of X-ray Contrast Media and Cytostatics in Hospital Wastewater. Environmental Science & Technology, 2009, 43, 4810-4817.	4.6	125
50	Infrared Spectroscopic Examination of Aqueous Humor. Journal of Ocular Pharmacology and Therapeutics, 2007, 23, 54-56.	0.6	2
51	Non-Invasive Measurement of Intraocular Pressure by Near-Infrared Spectroscopy. American Journal of Ophthalmology, 2005, 140, 307-308.	1.7	6