David W Graham

List of Publications by Year
in descending order

116 papers	9,460 citations	41344 49 h-index	39675 94 g-index
121 all docs	121 docs citations	121 times ranked	10099 citing authors

#	Article	IF	Citations
1	Understanding and managing uncertainty and variability for wastewater monitoring beyond the pandemic: Lessons learned from the United Kingdom national COVID-19 surveillance programmes. Journal of Hazardous Materials, 2022, 424, 127456.	12.4	105
2	Effects of heavy metals pollution on the co-selection of metal and antibiotic resistance in urban rivers in UK and India. Environmental Pollution, 2022, 306, 119326.	7.5	34
3	Genetic sequencing detected the SARS-CoV-2 delta variant in wastewater a month prior to the first COVID-19 case in Ahmedabad (India). Environmental Pollution, 2022, 310, 119757.	7.5	15
4	Multidrug-resistant bacteria and microbial communities in a river estuary with fragmented suburban waste management. Journal of Hazardous Materials, 2021, 405, 124687.	12.4	32
5	Extended-Spectrum Î²-Lactamase and Carbapenemase Genes are Substantially and Sequentially Reduced during Conveyance and Treatment of Urban Sewage. Environmental Science & Technology, 2021, 55, 5939-5949.	10.0	24
6	Strategic value of interviewer training and local community-based organisations for WaSH and antibiotic resistance surveys. Journal of Water Sanitation and Hygiene for Development, 2021, 11, 535-545.	1.8	0
7	Developing Surrogate Markers for Predicting Antibiotic Resistance â€œHot Spotsâ€•in Rivers Where Limited Data Are Available. Environmental Science & Technology, 2021, 55, 7466-7478.	10.0	21
8	Dynamics of integron structures across a wastewater network â€“ Implications to resistance gene transfer. Water Research, 2021, 206, 117720.	11.3	18
9	Site Specific Relationships between COVID-19 Cases and SARS-CoV-2 Viral Load in Wastewater Treatment Plant Influent. Environmental Science & Technology, 2021, 55, 15276-15286.	10.0	38
10	Improved quantitative microbiome profiling for environmental antibiotic resistance surveillance. Environmental Microbiomes, 2021, 16, 21.	5.0	4
11	Effect of Î² -lactamases associated to the resistance of Î² -lactam antibiotics on the treatment of wastewater. Journal of Environmental Chemical Engineering, 2020, 8, 102247.	6.7	2
12	Impact of Redox Conditions on Antibiotic Resistance Conjugative Gene Transfer Frequency and Plasmid Fate in Wastewater Ecosystems. Environmental Science & Technology, 2020, 54, 14984-14993.	10.0	29
13	Impact of Cold Temperatures on Nitrogen Removal in Denitrifying Down-Flow Hanging Sponge (DDHS) Reactors. Water (Switzerland), 2020, 12, 2029.	2.7	3
14	Shedding of SARS-CoV-2 in feces and urine and its potential role in person-to-person transmission and the environment-based spread of COVID-19. Science of the Total Environment, 2020, 749, 141364.	8.0	293
15	Making waves: Wastewater-based epidemiology for COVID-19 â€“ approaches and challenges for surveillance and prediction. Water Research, 2020, 186, 116404.	11.3	250
16	Seasonal influences on the use of genetic markers as performance indicators for small wastewater treatment plants. Science of the Total Environment, 2020, 739, 139928.	8.0	3
17	Predicted Impact of Climate Change on Trihalomethanes Formation in Drinking Water Treatment. Scientific Reports, 2019, 9, 9967.	3.3	30
18	Spatial ecology of a wastewater network defines the antibiotic resistance genes in downstream receiving waters. Water Research, 2019, 162, 347-357.	11.3	108

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19	Understanding drivers of antibiotic resistance genes in High Arctic soil ecosystems. Environment International, 2019, 125, 497-504.	10.0	137
20	Molecular microbial ecology of stable versus failing rice straw anaerobic digesters. Microbial Biotechnology, 2019, 12, 879-891.	4.2	7
21	Complexities in understanding antimicrobial resistance across domesticated animal, human, and environmental systems. Annals of the New York Academy of Sciences, 2019, 1441, 17-30.	3.8	112
22	Critically important antibiotics: criteria and approaches for measuring and reducing their use in food animal agriculture. Annals of the New York Academy of Sciences, 2019, 1441, 8-16.	3.8	88
23	Strategic Approach for Prioritising Local and Regional Sanitation Interventions for Reducing Global Antibiotic Resistance. Water (Switzerland), 2019, 11, 27.	2.7	26
24	A Simple Approach to Predicting the Reliability of Small Wastewater Treatment Plants. Water (Switzerland), 2019, 11, 2397.	2.7	13
25	Co-optimization of sponge-core bioreactors for removing total nitrogen and antibiotic resistance genes from domestic wastewater. Science of the Total Environment, 2018, 634, 1417-1423.	8.0	16
26	Seasonal dynamics of tetracycline resistance gene transport in the Sumas River agricultural watershed of British Columbia, Canada. Science of the Total Environment, 2018, 628-629, 490-498.	8.0	28
27	Retrofitting options for wastewater networks to achieve climate change reduction targets. Applied Energy, 2018, 218, 430-441.	10.1	17
28	Microbial community composition and diversity in rice straw digestion bioreactors with and without dairy manure. Applied Microbiology and Biotechnology, 2018, 102, 8599-8612.	3.6	23
29	A Review of Phosphorus Removal Technologies and Their Applicability to Small-Scale Domestic Wastewater Treatment Systems. Frontiers in Environmental Science, 2018, 6, .	3.3	303
30	Carbapenem resistance exposures via wastewaters across New Delhi. Environment International, 2018, 119, 302-308.	10.0	45
31	Reusing Treated Wastewater: Consideration of the Safety Aspects Associated with Antibiotic-Resistant Bacteria and Antibiotic Resistance Genes. Water (Switzerland), 2018, 10, 244.	2.7	83
32	Effect of feeding frequency and organic loading rate on biomethane production in the anaerobic digestion of rice straw. Applied Energy, 2017, 207, 156-165.	10.1	52
33	Enhanced denitrification in Downflow Hanging Sponge reactors for decentralised domestic wastewater treatment. Bioresource Technology, 2017, 226, 1-8.	9.6	27
34	Hospital Wastewater Releases of Carbapenem-Resistance Pathogens and Genes in Urban India. Environmental Science & Technology, 2017, 51, 13906-13912.	10.0	107
35	Antibiotic Resistance Genes and Associated Microbial Community Conditions in Aging Landfill Systems. Environmental Science & Technology, 2017, 51, 12859-12867.	10.0	154
36	The Effect of Feeding Frequency and Organic Loading Rate on the Anaerobic Digestion of Chinese Rice Straw. Energy Procedia, 2017, 105, 62-67.	1.8	7

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37	A 21-year record of vertically migrating subepilimnetic populations of Cryptomonas spp.. Inland Waters, 2016, 6, 173-184.	2.2	7
38	Microbial Communities in a High Arctic Polar Desert Landscape. Frontiers in Microbiology, 2016, 7, 419.	3.5	37
39	Appearance of Î²-lactam Resistance Genes in Agricultural Soils and Clinical Isolates over the 20th Century. Scientific Reports, 2016, 6, 21550.	3.3	119
40	A conceptual framework for invasion in microbial communities. ISME Journal, 2016, 10, 2773-2779.	9.8	100
41	Climatic, Geographic and Operational Determinants of Trihalomethanes (THMs) in Drinking Water Systems. Scientific Reports, 2016, 6, 35027.	3.3	34
42	Dominant and novel clades of Candidatus Accumulibacter phosphatis in 18 globally distributed full-scale wastewater treatment plants. Scientific Reports, 2015, 5, 11857.	3.3	64
43	Relationships between Antibiotics and Antibiotic Resistance Gene Levels in Municipal Solid Waste Leachates in Shanghai, China. Environmental Science & Technology, 2015, 49, 4122-4128.	10.0	254
44	Metagenomics Shows That Low-Energy Anaerobicâ^'Aerobic Treatment Reactors Reduce Antibiotic Resistance Gene Levels from Domestic Wastewater. Environmental Science & Technology, 2015, 49, 2577-2584.	10.0	147
45	Antibiotic Resistance in the Environment: Not the Usual Suspects. Chemistry and Biology, 2015, 22, 805-806.	6.0	2
46	A preliminary and qualitative study of resource ratio theory to nitrifying labâ€scale bioreactors. Microbial Biotechnology, 2015, 8, 590-603.	4.2	10
47	Underappreciated Role of Regionally Poor Water Quality on Globally Increasing Antibiotic Resistance. Environmental Science & Technology, 2014, 48, 11746-11747.	10.0	44
48	Increased Waterborne bla_{NDM-1} Resistance Gene Abundances Associated with Seasonal Human Pilgrimages to the Upper Ganges River. Environmental Science & Technology, 2014, 48, 3014-3020.	10.0	133
49	Soil geochemistry confines microbial abundances across an arctic landscape; implications for net carbon exchange with the atmosphere. Biogeochemistry, 2014, 120, 307-317.	3.5	38
50	Condition assessment and preservation of open-air rock art panels during environmental change. Journal of Cultural Heritage, 2014, 15, 49-56.	3.3	30
51	Nitrification in hybrid bioreactors treating simulated domestic wastewater. Journal of Applied Microbiology, 2013, 115, 621-630.	3.1	11
52	The Scourge of Antibiotic Resistance: The Important Role of the Environment. Clinical Infectious Diseases, 2013, 57, 704-710.	5.8	487
53	Management Options for Reducing the Release of Antibiotics and Antibiotic Resistance Genes to the Environment. Environmental Health Perspectives, 2013, 121, 878-885.	6.0	657
54	Variations in methanobactin structure influences copper utilization by methane-oxidizing bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8400-8404.	7.1	81

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55	Feasibility tests for treating shampoo and hair colorant wastewaters using anaerobic processes. Water Science and Technology, 2012, 65, 303-308.	2.5	6
56	Seasonal Variations in Antibiotic Resistance Gene Transport in the Almendares River, Havana, Cuba. Frontiers in Microbiology, 2012, 3, 396.	3.5	80
57	Mercury Levels in Sediments and Mangrove Oysters, Crassostrea rizophorae, from the North Coast of Villa Clara, Cuba. Bulletin of Environmental Contamination and Toxicology, 2012, 88, 589-593.	2.7	15
58	Conditional confined oscillatory dynamics of Escherichia coli strain K12-MG1655 in chemostat systems. Applied Microbiology and Biotechnology, 2012, 94, 185-192.	3.6	4
59	Copper-Binding Properties and Structures of Methanobactins from Methylosinus trichosporium OB3b. Inorganic Chemistry, 2011, 50, 1378-1391.	4.0	76
60	Antibiotic Resistance Gene Abundances Associated with Waste Discharges to the Almendares River near Havana, Cuba. Environmental Science & Technology, 2011, 45, 418-424.	10.0	264
61	Effects of copper mineralogy and methanobactin on cell growth and sMMO activity in <i>Methylosinus trichosporium</i> OB3b. Biogeosciences, 2011, 8, 2887-2894.	3.3	15
62	Antibiotic Resistance Gene Abundances Correlate with Metal and Geochemical Conditions in Archived Scottish Soils. PLoS ONE, 2011, 6, e27300.	2.5	310
63	Non-linear population dynamics in chemostats associated with liveâ€“dead cell cycling in Escherichia coli strain K12-MG1655. Applied Microbiology and Biotechnology, 2011, 89, 791-798.	3.6	5
64	Stimulation of Methanotroph Activity by Cu-Substituted Borosilicate Glass. Geomicrobiology Journal, 2011, 28, 1-10.	2.0	17
65	Low-Dissolved-Oxygen Nitrifying Systems Exploit Ammonia-Oxidizing Bacteria with Unusually High Yields. Applied and Environmental Microbiology, 2011, 77, 7787-7796.	3.1	80
66	Production, Isolation, Purification, and Functional Characterization of Methanobactins. Methods in Enzymology, 2011, 495, 227-245.	1.0	7
67	Differential fate of erythromycin and beta-lactam resistance genes from swine lagoon waste under different aquatic conditions. Environmental Pollution, 2010, 158, 1506-1512.	7.5	70
68	Correlations between in situ denitrification activity and nir-gene abundances in pristine and impacted prairie streams. Environmental Pollution, 2010, 158, 3225-3229.	7.5	72
69	Birth, growth and death as structuring operators in bacterial population dynamics. Journal of Theoretical Biology, 2010, 264, 45-54.	1.7	9
70	Zinc-induced antibiotic resistance in activated sludge bioreactors. Water Research, 2010, 44, 3829-3836.	11.3	69
71	Evidence of Increasing Antibiotic Resistance Gene Abundances in Archived Soils since 1940. Environmental Science & Technology, 2010, 44, 580-587.	10.0	665
72	Assessment of Total Mercury Levels in Clarias gariepinus from the Sagua la Grande River, Cuba. Bulletin of Environmental Contamination and Toxicology, 2009, 82, 101-105.	2.7	8

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73	Spatial Heterogeneity of Denitrification Genes in a Highly Homogenous Urban Stream. Environmental Science & Technology, 2009, 43, 4273-4279.	10.0	74
74	Accumulation of Tetracycline Resistance Genes in Aquatic Biofilms Due to Periodic Waste Loadings from Swine Lagoons. Environmental Science & Technology, 2009, 43, 7643-7650.	10.0	46
75	A comparative assessment of molecular biological and direct microscopic techniques for assessing aquatic systems. Environmental Monitoring and Assessment, 2008, 145, 465-473.	2.7	0
76	Fate of Tetracycline Resistance Genes in Aquatic Systems: Migration from the Water Column to Peripheral Biofilms. Environmental Science & Technology, 2008, 42, 5131-5136.	10.0	95
77	Indirect Evidence of Transposon-Mediated Selection of Antibiotic Resistance Genes in Aquatic Systems at Low-Level Oxytetracycline Exposures. Environmental Science & Technology, 2008, 42, 5348-5353.	10.0	111
78	Methane monooxygenase gene expression mediated by methanobactin in the presence of mineral copper sources. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 12040-12045.	7.1	94
79	Experimental demonstration of chaotic instability in biological nitrification. ISME Journal, 2007, 1, 385-393.	9.8	247
80	Abundance of six tetracycline resistance genes in wastewater lagoons at cattle feedlots with different antibiotic use strategies. Environmental Microbiology, 2007, 9, 143-151.	3.8	297
81	Methanobactin-promoted dissolution of Cu-substituted borosilicate glass. Geobiology, 2007, 5, 251-263.	2.4	32
82	Nitrite-oxidizing bacteria guild ecology associated with nitrification failure in a continuous-flow reactor. FEMS Microbiology Ecology, 2007, 62, 195-201.	2.7	50
83	Influence of isolation on the recovery of pond mesocosms from the application of an insecticide. I. Study design and planktonic community responses. Environmental Toxicology and Chemistry, 2007, 26, 1265-1279.	4.3	49
84	Influence of isolation on the recovery of pond mesocosms from the application of an insecticide. II. Benthic macroinvertebrate responses. Environmental Toxicology and Chemistry, 2007, 26, 1280-1290.	4.3	76
85	Water Hyacinths (Eichhornia crassipes) as Indicators of Heavy Metal Impact of a Large Landfill on the Almendares River near Havana, Cuba. Bulletin of Environmental Contamination and Toxicology, 2007, 79, 583-587.	2.7	18
86	Effects of eutrophication on vitellogenin gene expression in male fathead minnows (Pimephales) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2 559-566.	7.5	14
87	Disappearance of oxytetracycline resistance genes in aquatic systems. FEMS Microbiology Letters, 2006, 263, 176-182.	1.8	42
88	RESPONSES OF MOLECULAR INDICATORS OF EXPOSURE IN MESOCOSMS: COMMON CARP (CYPRINUS) Tj ETQq0 0 0 rgBT /Overlock 1 Chemistry, 2005, 24, 190.	4.3	34
89	Response of water column microbial communities to sudden exposure to deltamethrin in aquatic mesocosms. FEMS Microbiology Ecology, 2005, 54, 157-165.	2.7	21
90	Factors Affecting the Fate of Ciprofloxacin in Aquatic Field Systems. Water, Air, and Soil Pollution, 2005, 161, 383-398.	2.4	122

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91	Purification and Physicalâ^'Chemical Properties of Methanobactin:Â A Chalkophore fromMethylosinus trichosporiumOB3bâ€. Biochemistry, 2005, 44, 5140-5148.	2.5	75
92	Fate and Effects of Enrofloxacin in Aquatic Systems under Different Light Conditions. Environmental Science & Technology, 2005, 39, 9140-9146.	10.0	90
93	Assessment of heavy metal levels in Almendares River sedimentsâ€"Havana City, Cuba. Water Research, 2005, 39, 3945-3953.	11.3	184
94	Quantification of Tetracycline Resistance Genes in Feedlot Lagoons by Real-Time PCR. Applied and Environmental Microbiology, 2004, 70, 7372-7377.	3.1	167
95	Methanobactin, a Copper-Acquisition Compound from Methane-Oxidizing Bacteria. Science, 2004, 305, 1612-1615.	12.6	303
96	A deep maximum of green sulphur bacteria ('Chlorochromatium aggregatum') in a strongly stratified reservoir. Freshwater Biology, 2004, 49, 1337-1354.	2.4	11
97	Designed ecosystem services: application of ecological principles in wastewater treatment engineering. Frontiers in Ecology and the Environment, 2004, 2, 199-206.	4.0	42
98	Development of alternate ssu-rRNA probing strategies for characterizing aquatic microbial communities. Journal of Microbiological Methods, 2004, 56, 323-330.	1.6	8
99	Effects of oxygen and nitrogen conditions on the transformation kinetics of 1,2-dichloroethenes by Methylosinus trichosporium OB3b and its sMMOC mutant. Biodegradation, 2003, 14, 407-414.	3.0	9
100	Separations coupled with NMR detection. TrAC - Trends in Analytical Chemistry, 2003, 22, 766-775.	11.4	32
101	PHYSICAL AND CHEMICAL CONDITIONS SURROUNDING THE DIURNAL VERTICAL MIGRATION OF CRYPTOMONAS SPP. (CRYPTOPHYCEAE) IN A SEASONALLY STRATIFIED MIDWESTERN RESERVIOR (USA). Journal of Phycology, 2003, 39, 855-861.	2.3	17
102	Nutrient level, microbial activity, and alachlor transformation in aerobic aquatic systems. Water Research, 2003, 37, 4761-4769.	11.3	28
103	Peer Reviewed: Theoretical Ecology for Engineering Biology. Environmental Science & Technology, 2003, 37, 64A-70A.	10.0	96
104	Influence of Autochthonous Dissolved Organic Carbon and Nutrient Limitation on Alachlor Biotransformation in Aerobic Aquatic Systems. Environmental Science & Technology, 2003, 37, 4157-4162.	10.0	23
105	Alachlor and metolachlor transformation pattern in corn and soil. Weed Science, 2002, 50, 581-586.	1.5	11
106	Effect of oxygen level on simultaneous nitrogenase and sMMO expression and activity in Methylosinus trichosporium OB3b and its sMMOC mutant, PP319: aerotolerant N2 fixation in PP319. FEMS Microbiology Letters, 2001, 201, 133-138.	1.8	10
107	Alachlor transformation patterns in aquatic field mesocosms under variable oxygen and nutrient conditions. Water Research, 2000, 34, 4054-4062.	11.3	33
108	Development of small outdoor microcosms for studying contaminant transformation rates and mechanisms under various water column conditions. Environmental Toxicology and Chemistry, 1999, 18, 1124-1132.	4.3	11

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109	Metolachlor and Alachlor Breakdown Product Formation Patterns in Aquatic Field Mesocosms. Environmental Science & Technology, 1999, 33, 4471-4476.	10.0	65
110	Application of Resource-Ratio Theory to Hydrocarbon Biodegradation. Environmental Science & Technology, 1998, 32, 3386-3395.	10.0	96
111	Isolation of Copper Biochelates from Methylosinus trichosporium OB3b and Soluble Methane Monooxygenase Mutants. Applied and Environmental Microbiology, 1998, 64, 1115-1122.	3.1	54
112	Copper-Binding Compounds from Methylosinus trichosporium OB3b. Journal of Bacteriology, 1998, 180, 3606-3613.	2.2	93
113	Fate of Organics during Column Studies of Soil Aquiferâ€‰Treatment. Journal of Environmental Engineering, ASCE, 1996, 122, 314-321.	1.4	54
114	Factors affecting competition between type I and type II methanotrophs in two-organism, continuous-flow reactors. Microbial Ecology, 1993, 25, 1-17.	2.8	226
115	Wastewater systems assessment. , 0, , 134-157.		1
116	Environmental impact evaluation of decentralized sewage treatment technologies: A life cycle assessment approach. Water and Environment Journal, 0, , .	2.2	1