Philip L Bond

List of Publications by Year
in descending order

126	12,171	23567 58	29157 104
papers	citations	h-index	g-index

132	132	132	10416
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Corrosion mitigation by nitrite spray on corroded concrete in a real sewer system. Science of the Total Environment, 2022, 806, 151328.	8.0	10
2	Evaluation of continuous and intermittent trickling strategies for the removal of hydrogen sulfide in a biotrickling filter. Chemosphere, 2022, 291, 132723.	8.2	10
3	Reactive nitrogen species from free nitrous acid (FNA) cause cell lysis. Water Research, 2022, 217, 118401.	11.3	13
4	Structural changes in model compounds of sludge extracellular polymeric substances caused by exposure to free nitrous acid. Water Research, 2021, 188, 116553.	11.3	19
5	Nonnutritive sweeteners can promote the dissemination of antibiotic resistance through conjugative gene transfer. ISME Journal, 2021, 15, 2117-2130.	9.8	131
6	Non-antibiotic pharmaceuticals promote the transmission of multidrug resistance plasmids through intra- and intergenera conjugation. ISME Journal, 2021, 15, 2493-2508.	9.8	76
7	Chlorine disinfection facilitates natural transformation through ROS-mediated oxidative stress. ISME Journal, 2021, 15, 2969-2985.	9.8	99
8	Synergistic effect on concrete corrosion control in sewer environment achieved by applying surface washing on calcium nitrite admixed concrete. Construction and Building Materials, 2021, 302, 124184.	7.2	11
9	Characterizing the premise plumbing microbiome in both water and biofilms of a 50-year-old building. Science of the Total Environment, 2021, 798, 149225.	8.0	15
10	New insights of the bacterial response to exposure of differently sized silver nanomaterials. Water Research, 2020, 169, 115205.	11.3	29
11	Nitrite admixed concrete for wastewater structures: Mechanical properties, leaching behavior and biofilm development. Construction and Building Materials, 2020, 233, 117341.	7.2	27
12	Both silver ions and silver nanoparticles facilitate the horizontal transfer of plasmid-mediated antibiotic resistance genes. Water Research, 2020, 169, 115229.	11.3	179
13	Improving wastewater management using free nitrous acid (FNA). Water Research, 2020, 171, 115382.	11.3	111
14	Structural Changes in Cell-Wall and Cell-Membrane Organic Materials Following Exposure to Free Nitrous Acid. Environmental Science & Technology, 2020, 54, 10301-10312.	10.0	21
15	Efficient inactivation of antibiotic resistant bacteria and antibiotic resistance genes by photo-Fenton process under visible LED light and neutral pH. Water Research, 2020, 179, 115878.	11.3	112
16	Non-antibiotic pharmaceuticals enhance the transmission of exogenous antibiotic resistance genes through bacterial transformation. ISME Journal, 2020, 14, 2179-2196.	9.8	133
17	Triclosan at environmental concentrations can enhance the spread of extracellular antibiotic resistance genes through transformation. Science of the Total Environment, 2020, 713, 136621.	8.0	75
18	Molecular diversity of arbuscular mycorrhizal fungal communities across the gradient of alkaline Fe ore tailings, revegetated waste rock to natural soil sites. Environmental Science and Pollution Research, 2020, 27, 11968-11979.	5.3	7

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19	Increased Resistance of Nitrite-Admixed Concrete to Microbially Induced Corrosion in Real Sewers. Environmental Science & Technology, 2020, 54, 2323-2333.	10.0	33
20	Adaptive Evolution of Geobacter sulfurreducens in Coculture with Pseudomonas aeruginosa. MBio, 2020, 11, .	4.1	5
21	Physiological and transcriptomic analyses reveal CuO nanoparticle inhibition of anabolic and catabolic activities of sulfate-reducing bacterium. Environment International, 2019, 125, 65-74.	10.0	46
22	Periodic deprivation of gaseous hydrogen sulfide affects the activity of the concrete corrosion layer in sewers. Water Research, 2019, 157, 463-471.	11.3	12
23	A comparative proteomic analysis of Desulfovibrio vulgaris Hildenborough in response to the antimicrobial agent free nitrous acid. Science of the Total Environment, 2019, 672, 625-633.	8.0	13
24	Enhanced Growth of Pilin-Deficient Geobacter sulfurreducens Mutants in Carbon Poor and Electron Donor Limiting Conditions. Microbial Ecology, 2019, 78, 618-630.	2.8	1
25	Corrosion of reinforcing steel in concrete sewers. Science of the Total Environment, 2019, 649, 739-748.	8.0	35
26	Evaluation of data-driven models for predicting the service life of concrete sewer pipes subjected to corrosion. Journal of Environmental Management, 2019, 234, 431-439.	7.8	47
27	Distinct microbially induced concrete corrosion at the tidal region of reinforced concrete sewers. Water Research, 2019, 150, 392-402.	11.3	43
28	Antiepileptic drug carbamazepine promotes horizontal transfer of plasmid-borne multi-antibiotic resistance genes within and across bacterial genera. ISME Journal, 2019, 13, 509-522.	9.8	245
29	Mechanisms of Persistence of the Ammonia-Oxidizing Bacteria Nitrosomonas to the Biocide Free Nitrous Acid. Environmental Science & Technology, 2018, 52, 5386-5397.	10.0	52
30	Effect of the anode potential on the physiology and proteome of Shewanella oneidensis MR-1. Bioelectrochemistry, 2018, 119, 172-179.	4.6	22
31	Deciphering the electric code of Geobacter sulfurreducens in cocultures with Pseudomonas aeruginosa via SWATH-MS proteomics. Bioelectrochemistry, 2018, 119, 150-160.	4.6	24
32	Silver nanoparticles stimulate the proliferation of sulfate reducing bacterium Desulfovibrio vulgaris. Water Research, 2018, 129, 163-171.	11.3	29
33	Triclosan at environmentally relevant concentrations promotes horizontal transfer of multidrug resistance genes within and across bacterial genera. Environment International, 2018, 121, 1217-1226.	10.0	182
34	Evidence of differential adaptation to decreased temperature by anammox bacteria. Environmental Microbiology, 2018, 20, 3514-3528.	3.8	39
35	Engineering biological nitrogen removal in wastewater treatment via the control of nitrite oxidising bacteria using free nitrous acid. Microbiology Australia, 2018, 39, 47.	0.4	0
36	Free sulfurous acid (FSA) inhibition of biological thiosulfate reduction (BTR) in the sulfur cycle-driven wastewater treatment process. Chemosphere, 2017, 176, 212-220.	8.2	10

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37	Copper Oxide Nanoparticles Induce Lysogenic Bacteriophage and Metal-Resistance Genes in Pseudomonas aeruginosa PAO1. ACS Applied Materials & Interfaces, 2017, 9, 22298-22307.	8.0	72
38	Improved degradation of anaerobically digested sludge during post aerobic digestion using ultrasonic pretreatment. Environmental Science: Water Research and Technology, 2017, 3, 857-864.	2.4	8
39	Unraveling microbial structure and diversity of activated sludge in a full-scale simultaneous nitrogen and phosphorus removal plant using metagenomic sequencing. Enzyme and Microbial Technology, 2017, 102, 16-25.	3.2	100
40	Data on metagenomic profiles of activated sludge from a full-scale wastewater treatment plant. Data in Brief, 2017, 15, 833-839.	1.0	13
41	Comparison of microbial communities across sections of a corroding sewer pipe and the effects of wastewater flooding. Biofouling, 2017, 33, 780-792.	2.2	24
42	Diversity of As Metabolism Functional Genes in Pb-Zn Mine Tailings. Pedosphere, 2017, 27, 630-637.	4.0	11
43	Metagenomic analysis reveals wastewater treatment plants as hotspots of antibiotic resistance genes and mobile genetic elements. Water Research, 2017, 123, 468-478.	11.3	604
44	Prediction of concrete corrosion in sewers with hybrid Gaussian processes regression model. RSC Advances, 2017, 7, 30894-30903.	3.6	34
45	The Ecology of Acidophilic Microorganisms in the Corroding Concrete Sewer Environment. Frontiers in Microbiology, 2017, 8, 683.	3.5	78
46	Antimicrobial Effects of Free Nitrous Acid on Desulfovibrio vulgaris: Implications for Sulfide-Induced Corrosion of Concrete. Applied and Environmental Microbiology, 2016, 82, 5563-5575.	3.1	30
47	Metagenomic and metaproteomic analyses of Accumulibacter phosphatisâ€enriched floccular and granular biofilm. Environmental Microbiology, 2016, 18, 273-287.	3.8	51
48	Determining Multiple Responses of Pseudomonas aeruginosa PAO1 to an Antimicrobial Agent, Free Nitrous Acid. Environmental Science & Technology, 2016, 50, 5305-5312.	10.0	48
49	Achieving Stable Nitritation for Mainstream Deammonification by Combining Free Nitrous Acid-Based Sludge Treatment and Oxygen Limitation. Scientific Reports, 2016, 6, 25547.	3.3	104
50	Bioelectrochemical reduction of an azo dye by a Shewanella oneidensis MR-1 formed biocathode. International Biodeterioration and Biodegradation, 2016, 115, 250-256.	3.9	19
51	Wastewater-Enhanced Microbial Corrosion of Concrete Sewers. Environmental Science & Technology, 2016, 50, 8084-8092.	10.0	85
52	Predicting concrete corrosion of sewers using artificial neural network. Water Research, 2016, 92, 52-60.	11.3	106
53	Effects of surface washing on the mitigation of concrete corrosion under sewer conditions. Cement and Concrete Composites, 2016, 68, 88-95.	10.7	30
54	A decade of metaproteomics: Where we stand and what the future holds. Proteomics, 2015, 15, 3409-3417.	2.2	161

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55	Assessing the genetic diversity of Cu resistance in mine tailings through high-throughput recovery of full-length copA genes. Scientific Reports, 2015, 5, 13258.	3.3	27
56	From lithotroph- to organotroph-dominant: directional shift of microbial community in sulphidic tailings during phytostabilization. Scientific Reports, 2015, 5, 12978.	3.3	64
57	Identification of controlling factors for the initiation of corrosion of fresh concrete sewers. Water Research, 2015, 80, 30-40.	11.3	78
58	Establishing microbial diversity and functions in weathered and neutral Cuâ€“Pbâ€“Zn tailings with native soil addition. Geoderma, 2015, 247-248, 108-116.	5.1	41
59	The concentration-determined and population-specific antimicrobial effects of free nitrous acid on Pseudomonas aeruginosa PAO1. Applied Microbiology and Biotechnology, 2015, 99, 2305-2312.	3.6	29
60	Impact of fluctuations in gaseous H 2 S concentrations on sulfide uptake by sewer concrete: The effect of high H 2 S loads. Water Research, 2015, 81, 84-91.	11.3	28
61	Expanding our view of genomic diversity in <scp>C</scp>andidatusâ€¦<scp>A</scp>ccumulibacter clades. Environmental Microbiology, 2015, 17, 1574-1585.	3.8	98
62	How Does Poly(hydroxyalkanoate) Affect Methane Production from the Anaerobic Digestion of Waste-Activated Sludge?. Environmental Science & Technology, 2015, 49, 12253-12262.	10.0	125
63	A novel and simple treatment for control of sulfide induced sewer concrete corrosion using free nitrous acid. Water Research, 2015, 70, 279-287.	11.3	51
64	Use of SWATH mass spectrometry for quantitative proteomic investigation of Shewanella oneidensis MR-1 biofilms grown on graphite cloth electrodes. Systematic and Applied Microbiology, 2015, 38, 135-139.	2.8	36
65	The role of iron in sulfide induced corrosion ofÂsewer concrete. Water Research, 2014, 49, 166-174.	11.3	92
66	Determining the long-term effects of H2S concentration, relative humidity and air temperature on concrete sewer corrosion. Water Research, 2014, 65, 157-169.	11.3	122
67	A rapid, non-destructive methodology to monitor activity of sulfide-induced corrosion of concrete based on H2S uptake rate. Water Research, 2014, 59, 229-238.	11.3	32
68	Bacterial diversity in response to direct revegetation in the Pbâ€“Znâ€“Cu tailings under subtropical and semi-arid conditions. Ecological Engineering, 2014, 68, 233-240.	3.6	47
69	Previously unclassified bacteria dominate during thermophilic and mesophilic anaerobic pre-treatment of primary sludge. Systematic and Applied Microbiology, 2013, 36, 281-290.	2.8	22
70	Electron competition among nitrogen oxides reduction during methanol-utilizing denitrification in wastewater treatment. Water Research, 2013, 47, 3273-3281.	11.3	200
71	Drivers of microbial community composition in mesophilic and thermophilic temperature-phased anaerobic digestion pre-treatment reactors. Water Research, 2013, 47, 7098-7108.	11.3	111
72	Sequence-specific and DNA structure-dependent interactions of Escherichia coli MutS and human p53 with DNA. Analytical Biochemistry, 2013, 442, 51-61.	2.4	9

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73	Breakage and growth towards a stable aerobic granule size during the treatment of wastewater. Water Research, 2013, 47, 5338-5349.	11.3	80
74	Microbial community analysis during continuous fermentation of thermally hydrolysed waste activated sludge. Water Science and Technology, 2012, 65, 7-14.	2.5	9
75	High-Throughput Amplicon Sequencing Reveals Distinct Communities within a Corroding Concrete Sewer System. Applied and Environmental Microbiology, 2012, 78, 7160-7162.	3.1	64
76	Determining the mechanisms for aerobic granulation from mixed seed of floccular and crushed granules in activated sludge wastewater treatment. Water Research, 2012, 46, 761-771.	11.3	107
77	Surface neutralization and H2S oxidation at early stages of sewer corrosion: Influence of temperature, relative humidity and H2S concentration. Water Research, 2012, 46, 4235-4245.	11.3	141
78	Soil Bacterial Consortia and Previous Exposure Enhance the Biodegradation of Sulfonamides from Pig Manure. Microbial Ecology, 2012, 64, 140-151.	2.8	79
79	Enhancing aerobic granulation for biological nutrient removal from domestic wastewater. Bioresource Technology, 2012, 103, 101-108.	9.6	124
80	Evidence of compositional differences between the extracellular and intracellular DNA of a granular sludge biofilm. Letters in Applied Microbiology, 2011, 53, 1-7.	2.2	10
81	Pandemic pharmaceutical dosing effects on wastewater treatment: no adaptation of activated sludge bacteria to degrade the antiviral drug Oseltamivir (TamifluÂ®) and loss of nutrient removal performance. FEMS Microbiology Letters, 2011, 315, 17-22.	1.8	38
82	Biofilm development in the extremely acidophilic archaeon â€˜Ferroplasma acidarmanusâ€™ Fer1. Extremophiles, 2010, 14, 485-491.	2.3	49
83	Initial development and structure of biofilms on microbial fuel cell anodes. BMC Microbiology, 2010, 10, 98.	3.3	180
84	Evidence for bacteriophage activity causing community and performance changes in a phosphorus-removal activated sludge. FEMS Microbiology Ecology, 2010, 74, 631-642.	2.7	59
85	Further limitations of phylogenetic group-specific probes used for detection of bacteria in environmental samples. ISME Journal, 2010, 4, 959-961.	9.8	12
86	Monitoring associations between clade-level variation, overall community structure and ecosystem function in enhanced biological phosphorus removal (EBPR) systems using terminal-restriction fragment length polymorphism (T-RFLP). Water Research, 2010, 44, 4908-4923.	11.3	51
87	Granule Formation Mechanisms within an Aerobic Wastewater System for Phosphorus Removal. Applied and Environmental Microbiology, 2010, 76, 7588-7597.	3.1	76
88	Radiolabelled proteomics to determine differential functioning of Accumulibacter during the anaerobic and aerobic phases of a bioreactor operating for enhanced biological phosphorus removal. Environmental Microbiology, 2009, 11, 3029-3044.	3.8	60
89	Microbial community proteomics: elucidating the catalysts and metabolic mechanisms that drive the Earth's biogeochemical cycles. Current Opinion in Microbiology, 2009, 12, 310-317.	5.1	70
90	Bioenergetic models for acetate and phosphate transport in bacteria important in enhanced biological phosphorus removal. Environmental Microbiology, 2008, 10, 87-98.	3.8	45

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91	Cathodic oxygen reduction catalyzed by bacteria in microbial fuel cells. ISME Journal, 2008, 2, 519-527.	9.8	268
92	Community proteogenomics highlights microbial strain-variant protein expression within activated sludge performing enhanced biological phosphorus removal. ISME Journal, 2008, 2, 853-864.	9.8	156
93	Metaproteomics Provides Functional Insight into Activated Sludge Wastewater Treatment. PLoS ONE, 2008, 3, e1778.	2.5	145
94	Structural and Regulatory Genes Required to Make the Gas Dimethyl Sulfide in Bacteria. Science, 2007, 315, 666-669.	12.6	256
95	Towards determining details of anaerobic growth coupled to ferric iron reduction by the acidophilic archaeon â€˜Ferroplasma acidarmanusâ€™ Fer1. Extremophiles, 2007, 11, 159-168.	2.3	19
96	Characterization of an ATP-dependent DNA ligase from the acidophilic archaeon â€œFerroplasma acidarmanusâ€•Fer1. Extremophiles, 2007, 11, 315-327.	2.3	13
97	Extreme arsenic resistance by the acidophilic archaeon â€˜Ferroplasma acidarmanusâ€™ Fer1. Extremophiles, 2007, 11, 425-434.	2.3	86
98	Towards exposure of elusive metabolic mixed-culture processes: the application of metaproteomic analyses to activated sludge. Water Science and Technology, 2006, 54, 217-226.	2.5	44
99	Metaproteomics: studying functional gene expression in microbial ecosystems. Trends in Microbiology, 2006, 14, 92-97.	7.7	326
100	Screening a wide hostâ€•range, wasteâ€•water metagenomic library in tryptophan auxotrophs of Rhizobium leguminosarum and of Escherichia coli reveals different classes of cloned trp genes. Environmental Microbiology, 2005, 7, 1927-1936.	3.8	65
101	A wide hostâ€•range metagenomic library from a waste water treatment plant yields a novel alcohol/aldehyde dehydrogenase. Environmental Microbiology, 2005, 7, 1917-1926.	3.8	107
102	Molecular insight into extreme copper resistance in the extremophilic archaeon â€˜Ferroplasma acidarmanusâ€™ Fer1. Microbiology (United Kingdom), 2005, 151, 2637-2646.	1.8	79
103	Analysis of differential protein expression during growth states of Ferroplasma strains and insights into electron transport for iron oxidation. Microbiology (United Kingdom), 2005, 151, 4127-4137.	1.8	80
104	Metabolically Active Eukaryotic Communities in Extremely Acidic Mine Drainage. Applied and Environmental Microbiology, 2004, 70, 6264-6271.	3.1	159
105	Characterization of Ferroplasma Isolates and Ferroplasma acidarmanus sp. nov., Extreme Acidophiles from Acid Mine Drainage and Industrial Bioleaching Environments. Applied and Environmental Microbiology, 2004, 70, 2079-2088.	3.1	186
106	The application of two-dimensional polyacrylamide gel electrophoresis and downstream analyses to a mixed community of prokaryotic microorganisms. Environmental Microbiology, 2004, 6, 911-920.	3.8	347
107	First use of two-dimensional polyacrylamide gel electrophoresis to determine phylogenetic relationships. Journal of Microbiological Methods, 2004, 58, 297-302.	1.6	19
108	Arsenic resistance in the archaeon "Ferroplasma acidarmanus": new insights into the structure and evolution of the ars genes. Extremophiles, 2003, 7, 123-130.	2.3	56

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109	Growth in sulfidic mineral environments: metal resistance mechanisms in acidophilic micro-organisms. Microbiology (United Kingdom), 2003, 149, 1959-1970.	1.8	286
110	Characterization of a nitrate-respiring bacterial community using the nitrate reductase gene (narG) as a functional marker. Microbiology (United Kingdom), 2003, 149, 229-237.	1.8	59
111	Glycogen-accumulating organisms in laboratory-scale and full-scale wastewater treatment processes b bThe GenBank accession numbers for the sequences reported in this paper are given in Methods.. Microbiology (United Kingdom), 2002, 148, 3353-3364.	1.8	377
112	A review and update of the microbiology of enhanced biological phosphorus removal in wastewater treatment plants. Antonie Van Leeuwenhoek, 2002, 81, 681-691.	1.7	161
113	Characteristics of attachment and growth of Thiobacillus caldus on sulphide minerals: a chemotactic response to sulphur minerals?. Environmental Microbiology, 2000, 2, 324-332.	3.8	86
114	Phylogeny of Microorganisms Populating a Thick, Subaerial, Predominantly Lithotrophic Biofilm at an Extreme Acid Mine Drainage Site. Applied and Environmental Microbiology, 2000, 66, 3842-3849.	3.1	325
115	Comparison of Acid Mine Drainage Microbial Communities in Physically and Geochemically Distinct Ecosystems. Applied and Environmental Microbiology, 2000, 66, 4962-4971.	3.1	282
116	Geochemical and biological aspects of sulfide mineral dissolution: lessons from Iron Mountain, California. Chemical Geology, 2000, 169, 383-397.	3.3	129
117	An Archaeal Iron-Oxidizing Extreme Acidophile Important in Acid Mine Drainage. Science, 2000, 287, 1796-1799.	12.6	510
118	Formation of Sphalerite (ZnS) Deposits in Natural Biofilms of Sulfate-Reducing Bacteria. , 2000, 290, 1744-1747.		554
119	Identification of Polyphosphate-Accumulating Organisms and Design of 16S rRNA-Directed Probes for Their Detection and Quantitation. Applied and Environmental Microbiology, 2000, 66, 1175-1182.	3.1	691
120	Bio-P and non-bio-P bacteria identification by a novel microbial approach. Water Science and Technology, 1999, 39, 13.	2.5	16
121	Anaerobic phosphate release from activated sludge with enhanced biological phosphorus removal. A possible mechanism of intracellular pH control. Biotechnology and Bioengineering, 1999, 63, 507-515.	3.3	44
122	Identification of Some of the Major Groups of Bacteria in Efficient and Nonefficient Biological Phosphorus Removal Activated Sludge Systems. Applied and Environmental Microbiology, 1999, 65, 4077-4084.	3.1	202
123	Bio-P and non-bio-P bacteria identification by a novel microbial approach. Water Science and Technology, 1999, 39, 13-20.	2.5	8
124	The use of 16S rDNA clone libraries to describe the microbial diversity of activated sludge communities. Water Science and Technology, 1998, 37, 451.	2.5	27
125	Characterisation of enhanced biological phosphorus removal activated sludges with dissimilar phosphorus removal performances. Water Science and Technology, 1998, 37, 567.	2.5	15
126	Characterisation of enhanced biological phosphorus removal activated sludges with dissimilar phosphorus removal performances. Water Science and Technology, 1998, 37, 567-571.	2.5	19