Christopher T Lefevre

List of Publications by Year
in descending order

66 papers	3,499 citations	117571 34 h-index	149623 56 g-index
72 all docs	72 docs citations	72 times ranked	2269 citing authors

#	Article	IF	Citations
1	Mass collection of magnetotactic bacteria from the permanently stratified ferruginous Lake Pavin, France. Environmental Microbiology, 2022, 24, 721-736.	1.8	7
2	Ice nucleation in a Gram-positive bacterium isolated from precipitation depends on a polyketide synthase and non-ribosomal peptide synthetase. ISME Journal, 2022, 16, 890-897.	4.4	4
3	Intracellular amorphous Ca-carbonate and magnetite biomineralization by a magnetotactic bacterium affiliated to the Alphaproteobacteria. ISME Journal, 2021, 15, 1-18.	4.4	52
4	Complete Genome Sequence of Strain SS-5, a Magnetotactic Gammaproteobacterium Isolated from the Salton Sea, a Shallow, Saline, Endorheic Rift Lake Located on the San Andreas Fault in California. Microbiology Resource Announcements, 2021, 10, .	0.3	4
5	The gammaproteobacterium Achromatium forms intracellular amorphous calcium carbonate and not (crystalline) calcite. Geobiology, 2021, 19, 199-213.	1.1	20
6	Biogeochemical Niche of Magnetotactic Cocci Capable of Sequestering Large Polyphosphate Inclusions in the Anoxic Layer of the Lake Pavin Water Column. Frontiers in Microbiology, 2021, 12, 789134.	1.5	3
7	RGD-functionalized magnetosomes are efficient tumor radioenhancers for X-rays and protons. Nanomedicine: Nanotechnology, Biology, and Medicine, 2020, 23, 102084.	1.7	15
8	Transformation Cycle of Magnetosomes in Human Stem Cells: From Degradation to Biosynthesis of Magnetic Nanoparticles Anew. ACS Nano, 2020, 14, 1406-1417.	7.3	36
9	Magnetoreception in Microorganisms. Trends in Microbiology, 2020, 28, 266-275.	3.5	35
10	Magnetospirillum gryphiswaldense. Trends in Microbiology, 2020, 28, 947-948.	3.5	9
11	Complete Genome Sequence of Strain BW-2, a Magnetotactic Gammaproteobacterium in the Family Ectothiorhodospiraceae , Isolated from a Brackish Spring in Death Valley, California. Microbiology Resource Announcements, 2020, 9, .	0.3	4
12	Ironâ€biomineralizing organelle in magnetotactic bacteria: function, synthesis and preservation in ancient rock samples. Environmental Microbiology, 2020, 22, 3611-3632.	1.8	54
13	Repeated horizontal gene transfers triggered parallel evolution of magnetotaxis in two evolutionary divergent lineages of magnetotactic bacteria. ISME Journal, 2020, 14, 1783-1794.	4.4	25
14	High-speed motility originates from cooperatively pushing and pulling flagella bundles in bilophotrichous bacteria. ELife, 2020, 9, .	2.8	27
15	Decoding Biomineralization: Interaction of a Mad10-Derived Peptide with Magnetite Thin Films. Nano Letters, 2019, 19, 8207-8215.	4.5	9
16	Ectosymbiotic bacteria at the origin of magnetoreception in a marine protist. Nature Microbiology, 2019, 4, 1088-1095.	5.9	57
17	Swimming with magnets: From biological organisms to synthetic devices. Physics Reports, 2019, 789, 1-54.	10.3	57
18	Targeted thermal therapy with genetically engineered magnetite magnetosomes@RGD: Photothermia is far more efficient than magnetic hyperthermia. Journal of Controlled Release, 2018, 279, 271-281.	4.8	110

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19	Magnetotactic bacteria used to generate electricity based on Faraday's law of electromagnetic induction. Letters in Applied Microbiology, 2018, 66, 362-367.	1.0	14
20	Accumulation and Dissolution of Magnetite Crystals in a Magnetically Responsive Ciliate. Applied and Environmental Microbiology, 2018, 84, .	1.4	17
21	Genomic study of a novel magnetotactic Alphaproteobacteria uncovers the multiple ancestry of magnetotaxis. Environmental Microbiology, 2018, 20, 4415-4430.	1.8	48
22	Magneto-Aerotaxis: Bacterial Motility in Magnetic Fields. Biophysical Journal, 2017, 112, 567a.	0.2	1
23	Genetically tailored magnetosomes used as MRI probe for molecular imaging of brain tumor. Biomaterials, 2017, 121, 167-178.	5.7	95
24	Localized iron accumulation precedes nucleation and growth of magnetite crystals in magnetotactic bacteria. Scientific Reports, 2017, 7, 8291.	1.6	12
25	Desulfamplus magnetovallimortis gen. nov., sp. nov., a magnetotactic bacterium from a brackish desert spring able to biomineralize greigite and magnetite, that represents a novel lineage in the Desulfobacteraceae. Systematic and Applied Microbiology, 2017, 40, 280-289.	1.2	39
26	Endothiovibrio diazotrophicus gen. nov., sp. nov., a novel nitrogen-fixing, sulfur-oxidizing gammaproteobacterium isolated from a salt marsh. International Journal of Systematic and Evolutionary Microbiology, 2017, 67, 1491-1498.	0.8	10
27	Genomic insights into the earlyâ€diverging magnetotactic bacteria. Environmental Microbiology, 2016, 18, 1-3.	1.8	11
28	Growth of magnetotactic sulfateâ€reducing bacteria in oxygen concentration gradient medium. Environmental Microbiology Reports, 2016, 8, 1003-1015.	1.0	24
29	Destabilization of a flow focused suspension of magnetotactic bacteria. Physical Review Fluids, 2016, 1, .	1.0	45
30	Positioning the Flagellum at the Center of a Dividing Cell To Combine Bacterial Division with Magnetic Polarity. MBio, 2015, 6, e02286.	1.8	13
31	Magnetosomes, Biogenic Magnetic Nanomaterials for Brain Molecular Imaging with 17.2 T MRI Scanner. Advanced Healthcare Materials, 2015, 4, 1076-1083.	3.9	55
32	MamA as a Model Protein for Structure-Based Insight into the Evolutionary Origins of Magnetotactic Bacteria. PLoS ONE, 2015, 10, e0130394.	1.1	17
33	Structure and evolution of the magnetochrome domains: no longer alone. Frontiers in Microbiology, 2014, 5, 117.	1.5	9
34	Draft Genome Sequence of the Obligately Alkaliphilic Sulfate-Reducing Bacterium Desulfonatronum thiodismutans Strain MLF1. Genome Announcements, 2014, 2, .	0.8	3
35	Deciphering unusual uncultured magnetotactic multicellular prokaryotes through genomics. ISME Journal, 2014, 8, 1055-1068.	4.4	42
36	Diversity of Magneto-Aerotactic Behaviors and Oxygen Sensing Mechanisms in Cultured Magnetotactic Bacteria. Biophysical Journal, 2014, 107, 527-538.	0.2	122

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37	Magnetotactic Bacteria, Magnetosomes, and Nanotechnology. , 2014, , 39-74.		14
38	Evolution of the bacterial organelle responsible for magnetotaxis. Trends in Microbiology, 2013, 21, 534-543.	3.5	62
39	Ecology, Diversity, and Evolution of Magnetotactic Bacteria. Microbiology and Molecular Biology Reviews, 2013, 77, 497-526.	2.9	338
40	Magnetotactic Bacteria from Extreme Environments. Life, 2013, 3, 295-307.	1.1	40
41	Monophyletic origin of magnetotaxis and the first magnetosomes. Environmental Microbiology, 2013, 15, 2267-2274.	1.8	102
42	Comparative genomic analysis of magnetotactic bacteria from the <scp>D</scp>eltaproteobacteria provides new insights into magnetite and greigite magnetosome genes required for magnetotaxis. Environmental Microbiology, 2013, 15, 2712-2735.	1.8	99
43	Magnetococcus marinus gen. nov., sp. nov., a marine, magnetotactic bacterium that represents a novel lineage (Magnetococcaceae fam. nov., Magnetococcales ord. nov.) at the base of the Alphaproteobacteria. International Journal of Systematic and Evolutionary Microbiology, 2013, 63, 801-808.	0.8	134
44	Magnetotactic Bacteria. , 2013, , 453-494.		51
45	Magnetovibrio blakemorei gen. nov., sp. nov., a magnetotactic bacterium (Alphaproteobacteria :) Tj ETQq1 1 0.784314 rgBT /Overloc Microbiology, 2013, 63, 1824-1833.	0.8	102
46	Phylogenetic significance of composition and crystal morphology of magnetosome minerals. Frontiers in Microbiology, 2013, 4, 344.	1.5	105
47	Extremophilic Magnetotactic Bacteria. Cellular Origin and Life in Extreme Habitats, 2013, , 581-595.	0.3	0
48	Insight into the Evolution of Magnetotaxis in Magnetospirillum spp., Based on mam Gene Phylogeny. Applied and Environmental Microbiology, 2012, 78, 7238-7248.	1.4	52
49	Novel magnetite-producing magnetotactic bacteria belonging to the Gammaproteobacteria. ISME Journal, 2012, 6, 440-450.	4.4	130
50	Magnetotactic Protists at the Oxicâ€“Anoxic Transition Zones of Coastal Aquatic Environments. Cellular Origin and Life in Extreme Habitats, 2012, , 131-143.	0.3	6
51	Magnetospira thiophila gen. nov., sp. nov., a marine magnetotactic bacterium that represents a novel lineage within the Rhodospirillaceae (Alphaproteobacteria). International Journal of Systematic and Evolutionary Microbiology, 2012, 62, 2443-2450.	0.8	70
52	Morphological features of elongated-anisotropic magnetosome crystals in magnetotactic bacteria of the Nitrospirae phylum and the Deltaproteobacteria class. Earth and Planetary Science Letters, 2011, 312, 194-200.	1.8	65
53	Cultureâ€independent characterization of a novel, uncultivated magnetotactic member of theNitrospiraephylum. Environmental Microbiology, 2011, 13, 538-549.	1.8	93
54	Isolation of obligately alkaliphilic magnetotactic bacteria from extremely alkaline environments. Environmental Microbiology, 2011, 13, 2342-2350.	1.8	72

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55	Common ancestry of iron oxide- and iron-sulfide-based biomineralization in magnetotactic bacteria. ISME Journal, 2011, 5, 1634-1640.	4.4	89
56	A Cultured Greigite-Producing Magnetotactic Bacterium in a Novel Group of Sulfate-Reducing Bacteria. Science, 2011, 334, 1720-1723.	6.0	184
57	A Bacterial Backbone: Magnetosomes in Magnetotactic Bacteria. , 2011, , 75-102.		16
58	Calcium ionâ€mediated assembly and function of glycosylated flagellar sheath of marine magnetotactic bacterium. Molecular Microbiology, 2010, 78, 1304-1312.	1.2	19
59	Moderately Thermophilic Magnetotactic Bacteria from Hot Springs in Nevada. Applied and Environmental Microbiology, 2010, 76, 3740-3743.	1.4	127
60	Nonmagnetotactic Multicellular Prokaryotes from Low-Saline, Nonmarine Aquatic Environments and Their Unusual Negative Phototactic Behavior. Applied and Environmental Microbiology, 2010, 76, 3220-3227.	1.4	50
61	Characterization of Bacterial Magnetotactic Behaviors by Using a Magnetospectrophotometry Assay. Applied and Environmental Microbiology, 2009, 75, 3835-3841.	1.4	45
62	Isolation and characterization of a magnetotactic bacterial culture from the Mediterranean Sea. Environmental Microbiology, 2009, 11, 1646-1657.	1.8	127
63	Characterization of a homogeneous taxonomic group of marine magnetotactic cocci within a low tide zone in the China Sea. Environmental Microbiology, 2008, 10, 1158-1164.	1.8	58
64	Difference between the Magnetic Properties of the Magnetotactic Bacteria and Those of the Extracted Magnetosomes: Influence of the Distance between the Chains of Magnetosomes. Journal of Physical Chemistry C, 2008, 112, 12304-12309.	1.5	47
65	Characterization of Mediterranean magnetotactic bacteria. Journal of Ocean University of China, 2007, 6, 355-359.	0.6	29
66	Magnetotactic bacteria as a new model for P sequestration in the ferruginous Lake Pavin. Geochemical Perspectives Letters, 0, , 35-41.	1.0	54