Dirk SchÃ¼ler

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3509575/publications.pdf

Version: 2024-02-01

149 papers	10,945 citations	23500 58 h-index	33814 99 g-index
161 all docs	161 docs citations	161 times ranked	4953 citing authors

#	Article	IF	Citations
1	Magnetotactic Bacteria and Magnetosomes. Chemical Reviews, 2008, 108, 4875-4898.	23.0	734
2	An acidic protein aligns magnetosomes along a filamentous structure in magnetotactic bacteria. Nature, 2006, 440, 110-114.	13.7	486
3	Magnetosome biogenesis in magnetotactic bacteria. Nature Reviews Microbiology, 2016, 14, 621-637.	13.6	415
4	Biochemical and Proteomic Analysis of the Magnetosome Membrane in Magnetospirillum gryphiswaldense. Applied and Environmental Microbiology, 2004, 70, 1040-1050.	1.4	318
5	Bacterial magnetosomes: microbiology, biomineralization and biotechnological applications. Applied Microbiology and Biotechnology, 1999, 52, 464-473.	1.7	299
6	Magnetic properties of bacterial magnetosomes as potential diagnostic and therapeutic tools. Journal of Magnetism and Magnetic Materials, 2005, 293, 80-86.	1.0	293
7	A Large Gene Cluster Encoding Several Magnetosome Proteins Is Conserved in Different Species of Magnetotactic Bacteria. Applied and Environmental Microbiology, 2001, 67, 4573-4582.	1.4	269
8	The Genus Magnetospirillum gen. nov. Description of Magnetospirillum gryphiswaldense sp. nov. and Transfer of Aquaspirillum magnetotacticum to Magnetospirillum magnetotacticum comb. nov.. Systematic and Applied Microbiology, 1991, 14, 379-385.	1.2	265
9	A Hypervariable 130-Kilobase Genomic Region of Magnetospirillum gryphiswaldense Comprises a Magnetosome Island Which Undergoes Frequent Rearrangements during Stationary Growth. Journal of Bacteriology, 2005, 187, 7176-7184.	1.0	235
10	Characterization of a Spontaneous Nonmagnetic Mutant of Magnetospirillum gryphiswaldense Reveals a Large Deletion Comprising a Putative Magnetosome Island. Journal of Bacteriology, 2003, 185, 5779-5790.	1.0	200
11	Biosynthesis of magnetic nanostructures in a foreign organism by transfer of bacterial magnetosome gene clusters. Nature Nanotechnology, 2014, 9, 193-197.	15.6	198
12	Genetics and cell biology of magnetosome formation in magnetotactic bacteria. FEMS Microbiology Reviews, 2008, 32, 654-672.	3.9	196
13	Genomics, Genetics, and Cell Biology of Magnetosome Formation. Annual Review of Microbiology, 2009, 63, 501-521.	2.9	185
14	The Major Magnetosome Proteins MamGFDC Are Not Essential for Magnetite Biomineralization inMagnetospirillum gryphiswaldensebut Regulate the Size of Magnetosome Crystals. Journal of Bacteriology, 2008, 190, 377-386.	1.0	182
15	Synthesis of Magnetite Nanoparticles for Bio- and Nanotechnology: Genetic Engineering and Biomimetics of Bacterial Magnetosomes. Macromolecular Bioscience, 2007, 7, 144-151.	2.1	168
16	Comparative Genome Analysis of Four Magnetotactic Bacteria Reveals a Complex Set of Group-Specific Genes Implicated in Magnetosome Biomineralization and Function. Journal of Bacteriology, 2007, 189, 4899-4910.	1.0	159
17	Functional Analysis of the Magnetosome Island in Magnetospirillum gryphiswaldense: The mamAB Operon Is Sufficient for Magnetite Biomineralization. PLoS ONE, 2011, 6, e25561.	1.1	155
18	A simple light scattering method to assay magnetism inMagnetospirillum gryphiswaldense. FEMS Microbiology Letters, 1995, 132, 139-145.	0.7	149

#	Article	IF	Citations
19	Loss of the actinâ€like protein MamK has pleiotropic effects on magnetosome formation and chain assembly in Magnetospirillum gryphiswaldense. Molecular Microbiology, 2010, 77, 208-224.	1.2	143
20	Iron-limited growth and kinetics of iron uptake in Magnetospirillum gryphiswaldense. Archives of Microbiology, 1996, 166, 301-307.	1.0	141
21	Diversity and vertical distribution of magnetotactic bacteria along chemical gradients in freshwater microcosms. FEMS Microbiology Ecology, 2005, 52, 185-195.	1.3	127
22	Intracellular Magnetite Biomineralization in Bacteria Proceeds by a Distinct Pathway Involving Membraneâ€Bound Ferritin and an Iron(II) Species. Angewandte Chemie - International Edition, 2007, 46, 8495-8499.	7.2	126
23	Combined Approach for Characterization of Uncultivated Magnetotactic Bacteria from Various Aquatic Environments. Applied and Environmental Microbiology, 2005, 71, 2723-2731.	1.4	125
24	The cation diffusion facilitator proteins MamB and MamM of Magnetospirillum gryphiswaldense have distinct and complex functions, and are involved in magnetite biomineralization and magnetosome membrane assembly. Molecular Microbiology, 2011, 82, 818-835.	1.2	125
25	Singleâ€cell analysis reveals a novel uncultivated magnetotactic bacterium within the candidate division OP3. Environmental Microbiology, 2012, 14, 1709-1721.	1.8	121
26	The biomineralization of magnetosomes in Magnetospirillum gryphiswaldense. International Microbiology, 2002, 5, 209-214.	1.1	118
27	Development of a genetic system for Magnetospirillum gryphiswaldense. Archives of Microbiology, 2003, 179, 89-94.	1.0	117
28	Conservation of proteobacterial magnetosome genes and structures in an uncultivated member of the deep-branchingNitrospiraphylum. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1134-1139.	3.3	115
29	Singleâ€cell genomics of uncultivated deepâ€branching magnetotactic bacteria reveals a conserved set of magnetosome genes. Environmental Microbiology, 2016, 18, 21-37.	1.8	115
30	Molecular analysis of a subcellular compartment: the magnetosome membrane in Magnetospirillum gryphiswaldense. Archives of Microbiology, 2004, 181, 1-7.	1.0	114
31	Complete Genome Sequence of the Chemolithoautotrophic Marine Magnetotactic Coccus Strain MC-1. Applied and Environmental Microbiology, 2009, 75, 4835-4852.	1.4	114
32	Genetic Dissection of the mamAB and mms6 Operons Reveals a Gene Set Essential for Magnetosome Biogenesis in Magnetospirillum gryphiswaldense. Journal of Bacteriology, 2014, 196, 2658-2669.	1.0	110
33	N2-dependent growth and nitrogenase activity in the metal-metabolizing bacteria, Geobacter and Magnetospirillum species. Environmental Microbiology, 2000, 2, 266-273.	1.8	106
34	Monophyletic origin of magnetotaxis and the first magnetosomes. Environmental Microbiology, 2013, 15, 2267-2274.	1.8	102
35	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
36	Comparative analysis of magnetosome gene clusters in magnetotactic bacteria provides further evidence for horizontal gene transfer. Environmental Microbiology, 2009, 11, 1267-1277.	1.8	96

#	Article	IF	Citations
37	Toward Cloning of the Magnetotactic Metagenome: Identification of Magnetosome Island Gene Clusters in Uncultivated Magnetotactic Bacteria from Different Aquatic Sediments. Applied and Environmental Microbiology, 2009, 75, 3972-3979.	1.4	96
38	The Periplasmic Nitrate Reductase Nap Is Required for Anaerobic Growth and Involved in Redox Control of Magnetite Biomineralization in Magnetospirillum gryphiswaldense. Journal of Bacteriology, 2012, 194, 4847-4856.	1.0	95
39	Biogenic nanoparticles: production, characterization, and application of bacterial magnetosomes. Journal of Physics Condensed Matter, 2006, 18, S2815-S2828.	0.7	92
40	Properties of intracellular magnetite crystals produced by Desulfovibrio magneticus strain RS-1. Earth and Planetary Science Letters, 2006, 249, 444-455.	1.8	92
41	The Acidic Repetitive Domain of the Magnetospirillum gryphiswaldense MamJ Protein Displays Hypervariability but Is Not Required for Magnetosome Chain Assembly. Journal of Bacteriology, 2007, 189, 6437-6446.	1.0	92
42	Expression of Green Fluorescent Protein Fused to Magnetosome Proteins in Microaerophilic Magnetotactic Bacteria. Applied and Environmental Microbiology, 2008, 74, 4944-4953.	1.4	91
43	Ultrastructure, tactic behaviour and potential for sulfate reduction of a novel multicellular magnetotactic prokaryote from North Sea sediments. Environmental Microbiology, 2009, 11, 1493-1505.	1.8	91
44	Environmental parameters affect the physical properties of fast-growing magnetosomes. American Mineralogist, 2008, 93, 463-469.	0.9	90
45	Magnetosome chains are recruited to cellular division sites and split by asymmetric septation. Molecular Microbiology, 2011, 82, 1316-1329.	1.2	80
46	The magnetosome proteins <scp>MamX</scp>, <scp>MamZ</scp> and <scp>MamH</scp> are involved in redox control of magnetite biomineralization in <scp>M</scp>agnetospirillum gryphiswaldense. Molecular Microbiology, 2013, 89, 872-886.	1.2	79
47	Unraveling the Function of the Rhodospirillum rubrum Activator of Polyhydroxybutyrate (PHB) Degradation: the Activator Is a PHB-Granule-Bound Protein (Phasin). Journal of Bacteriology, 2004, 186, 2466-2475.	1.0	77
48	Improved Technique for the Isolation of Magnetotactic Spirilla from a Freshwater Sediment and their Phylogenetic Characterization. Systematic and Applied Microbiology, 1999, 22, 466-471.	1.2	72
49	Polarity of bacterial magnetotaxis is controlled by aerotaxis through a common sensory pathway. Nature Communications, 2014, 5, 5398.	5.8	72
50	Transcriptional Organization and Regulation of Magnetosome Operons in Magnetospirillum gryphiswaldense. Applied and Environmental Microbiology, 2006, 72, 5757-5765.	1.4	71
51	Phylogenetic Analysis of Uncultured Magnetotactic Bacteria from the Alpha-Subclass of Proteobacteria. Systematic and Applied Microbiology, 1995, 17, 501-508.	1.2	70
52	Cultivationâ€independent characterization of â€˜Candidatus Magnetobacterium bavaricumâ€™ via ultrastructural, geochemical, ecological and metagenomic methods. Environmental Microbiology, 2010, 12, 2466-2478.	1.8	69
53	Fluorescent Bacterial Magnetic Nanoparticles as Bimodal Contrast Agents. Investigative Radiology, 2007, 42, 235-241.	3.5	67
54	The Presumptive Magnetosome Protein Mms16 Is a Poly(3-Hydroxybutyrate) Granule-Bound Protein (Phasin) in Magnetospirillum gryphiswaldense. Journal of Bacteriology, 2005, 187, 2416-2425.	1.0	64

#	Article	IF	Citations
55	Deletion of a fur -Like Gene Affects Iron Homeostasis and Magnetosome Formation in Magnetospirillum gryphiswaldense. Journal of Bacteriology, 2010, 192, 4192-4204.	1.0	64
56	Biomineralization of magnetic iron minerals in bacteria. Supramolecular Science, 1998, 5, 383-390.	0.7	63
57	Magnetosome Expression of Functional Camelid Antibody Fragments (Nanobodies) in Magnetospirillum gryphiswaldense. Applied and Environmental Microbiology, 2011, 77, 6165-6171.	1.4	63
58	Bioengineered bioluminescent magnetotactic bacteria as a powerful tool for chip-based whole-cell biosensors. Lab on A Chip, 2013, 13, 4881.	3.1	62
59	Crystal-size and shape distributions of magnetite from uncultured magnetotactic bacteria as a potential biomarker. American Mineralogist, 2005, 90, 1233-1240.	0.9	61
60	Diversity analysis of magnetotactic bacteria in Lake Miyun, northern China, by restriction fragment length polymorphism. Systematic and Applied Microbiology, 2009, 32, 342-350.	1.2	58
61	MamY is a membrane-bound protein that aligns magnetosomes and the motility axis of helical magnetotactic bacteria. Nature Microbiology, 2019, 4, 1978-1989.	5.9	58
62	Inactivation of the Flagellin Gene flaA in Magnetospirillum gryphiswaldense Results in Nonmagnetotactic Mutants Lacking Flagellar Filaments. Applied and Environmental Microbiology, 2004, 70, 3624-3631.	1.4	54
63	Semisynthetic Biogenic Magnetosome Nanoparticles for the Detection of Proteins and Nucleic Acids. Small, 2006, 2, 1251-1255.	5.2	54
64	Overproduction of Magnetosomes by Genomic Amplification of Biosynthesis-Related Gene Clusters in a Magnetotactic Bacterium. Applied and Environmental Microbiology, 2016, 82, 3032-3041.	1.4	53
65	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
66	Cation site occupancy of biogenic magnetite compared to polygenic ferrite spinels determined by X-ray magnetic circular dichroism. European Journal of Mineralogy, 2007, 19, 707-716.	0.4	51
67	Magnetotactic Bacteria. , 2013, , 453-494.		51
68	Genetic and Ultrastructural Analysis Reveals the Key Players and Initial Steps of Bacterial Magnetosome Membrane Biogenesis. PLoS Genetics, 2016, 12, e1006101.	1.5	51
69	Cytochrome cd1 Nitrite Reductase NirS Is Involved in Anaerobic Magnetite Biomineralization in Magnetospirillum gryphiswaldense and Requires NirN for Proper d1 Heme Assembly. Journal of Bacteriology, 2013, 195, 4297-4309.	1.0	48
70	Segregation of prokaryotic magnetosomes organelles is driven by treadmilling of a dynamic actin-like MamK filament. BMC Biology, 2016, 14, 88.	1.7	48
71	Distinguishing magnetic particle size of iron oxide nanoparticles with first-order reversal curves. Journal of Applied Physics, 2014, 116, .	1.1	47
72	New Vectors for Chromosomal Integration Enable High-Level Constitutive or Inducible Magnetosome Expression of Fusion Proteins in Magnetospirillum gryphiswaldense. Applied and Environmental Microbiology, 2014, 80, 2609-2616.	1.4	46

#	Article	IF	Citations
73	Diversity and Taxonomy of Magnetotactic Bacteria. , 2006, , 25-36.		44
74	Cre- lox -Based Method for Generation of Large Deletions within the Genomic Magnetosome Island of Magnetospirillum gryphiswaldense. Applied and Environmental Microbiology, 2010, 76, 2439-2444.	1.4	43
75	Metagenomic Analysis Reveals Unexpected Subgenomic Diversity of Magnetotactic Bacteria within the Phylum Nitrospirae. Applied and Environmental Microbiology, 2011, 77, 323-326.	1.4	42
76	Cation Diffusion Facilitators Transport Initiation and Regulation Is Mediated by Cation Induced Conformational Changes of the Cytoplasmic Domain. PLoS ONE, 2014, 9, e92141.	1.1	41
77	Nanostructure and field-induced arrangement of magnetosomes studied by SANSPOL. Physica B: Condensed Matter, 2004, 350, E309-E313.	1.3	38
78	A Tailored galK Counterselection System for Efficient Markerless Gene Deletion and Chromosomal Tagging in Magnetospirillum gryphiswaldense. Applied and Environmental Microbiology, 2014, 80, 4323-4330.	1.4	38
79	Singleâ€cell genomics reveals potential for magnetite and greigite biomineralization in an uncultivated multicellular magnetotactic prokaryote. Environmental Microbiology Reports, 2014, 6, 524-531.	1.0	38
80	A quantitative assessment of the membrane-integral sub-proteome of a bacterial magnetic organelle. Journal of Proteomics, 2018, 172, 89-99.	1.2	36
81	Towards standardized purification of bacterial magnetic nanoparticles for future in vivo applications. Acta Biomaterialia, 2021, 120, 293-303.	4.1	36
82	The Terminal Oxidase cbb ₃ Functions in Redox Control of Magnetite Biomineralization in Magnetospirillum gryphiswaldense. Journal of Bacteriology, 2014, 196, 2552-2562.	1.0	35
83	The dual role of MamB in magnetosome membrane assembly and magnetite biomineralization. Molecular Microbiology, 2018, 107, 542-557.	1.2	35
84	Analysis of Magnetosome Chains in Magnetotactic Bacteria by Magnetic Measurements and Automated Image Analysis of Electron Micrographs. Applied and Environmental Microbiology, 2013, 79, 7755-7762.	1.4	34
85	Probing the Mechanical Properties of Magnetosome Chains in Living Magnetotactic Bacteria. Nano Letters, 2014, 14, 4653-4659.	4.5	34
86	Biologically controlled synthesis and assembly of magnetite nanoparticles. Faraday Discussions, 2015, 181, 71-83.	1.6	34
87	A Versatile Toolkit for Controllable and Highly Selective Multifunctionalization of Bacterial Magnetic Nanoparticles. Small, 2020, 16, e1906922.	5.2	34
88	The FtsZ-Like Protein FtsZm of Magnetospirillum gryphiswaldense Likely Interacts with Its Generic Homolog and Is Required for Biomineralization under Nitrate Deprivation. Journal of Bacteriology, 2014, 196, 650-659.	1.0	32
89	In Vivo Display of a Multisubunit Enzyme Complex on Biogenic Magnetic Nanoparticles. Applied and Environmental Microbiology, 2009, 75, 7734-7738.	1.4	31
90	Frequent Mutations within the Genomic Magnetosome Island of Magnetospirillum gryphiswaldense Are Mediated by RecA. Journal of Bacteriology, 2011, 193, 5328-5334.	1.0	31

#	Article	IF	Citations
91	Clone libraries and single cell genome amplification reveal extended diversity of uncultivated magnetotactic bacteria from marine and freshwater environments. Environmental Microbiology, 2013, 15, 1290-1301.	1.8	31
92	The MagA Protein of Magnetospirilla Is Not Involved in Bacterial Magnetite Biomineralization. Journal of Bacteriology, 2012, 194, 1018-1023.	1.0	30
93	The oxygen sensor MgFnr controls magnetite biomineralization by regulation of denitrification in Magnetospirillum gryphiswaldense. BMC Microbiology, 2014, 14, 153.	1.3	29
94	Complete Genome Sequence of Magnetospirillum gryphiswaldense MSR-1. Genome Announcements, 2014, 2, .	0.8	27
95	In Vivo Coating of Bacterial Magnetic Nanoparticles by Magnetosome Expression of Spider Silk-Inspired Peptides. Biomacromolecules, 2018, 19, 962-972.	2.6	26
96	Generation of Multishell Magnetic Hybrid Nanoparticles by Encapsulation of Genetically Engineered and Fluorescent Bacterial Magnetosomes with ZnO and SiO₂. Small, 2015, 11, 4209-4217.	5.2	24
97	An Intracellular Nanotrap Redirects Proteins and Organelles in Live Bacteria. MBio, 2015, 6, .	1.8	24
98	Generation of Multifunctional Magnetic Nanoparticles with Amplified Catalytic Activities by Genetic Expression of Enzyme Arrays on Bacterial Magnetosomes. Advanced Biology, 2018, 2, 1700109.	3.0	24
99	Labeling of macrophages using bacterial magnetosomes and their characterization by magnetic resonance imaging. Journal of Magnetism and Magnetic Materials, 2007, 311, 454-459.	1.0	23
100	A Compass To Boost Navigation: Cell Biology of Bacterial Magnetotaxis. Journal of Bacteriology, 2020, 202, .	1.0	23
101	Genetic Analysis of Magnetosome Biomineralization. , 2006, , 133-161.		22
102	Bacterial Magnetosome Biomineralization - A Novel Platform to Study Molecular Mechanisms of Human CDF-Related Type-II Diabetes. PLoS ONE, 2014, 9, e97154.	1.1	22
103	Magnetic anisotropy of non-interacting collinear nanocrystal-chains. Applied Physics Letters, 2014, 104, .	1.5	22
104	Experimental mixtures of superparamagnetic and singleâ€domain magnetite with respect to Dayâ€Dunlop plots. Geochemistry, Geophysics, Geosystems, 2015, 16, 1739-1752.	1.0	20
105	Blocking of magnetic moments of magnetosomes measured by magnetorelaxometry and direct observation by magnetic force microscopy. Journal of Magnetism and Magnetic Materials, 2005, 289, 70-73.	1.0	19
106	Disease-Homologous Mutation in the Cation Diffusion Facilitator Protein MamM Causes Single-Domain Structural Loss and Signifies Its Importance. Scientific Reports, 2016, 6, 31933.	1.6	17
107	Generation of nanomagnetic biocomposites by genetic engineering of bacterial magnetosomes. Bioinspired, Biomimetic and Nanobiomaterials, 2019, 8, 86-98.	0.7	17
108	Bacterioferritin of Magnetospirillum gryphiswaldense Is a Heterotetraeicosameric Complex Composed of Functionally Distinct Subunits but Is Not Involved in Magnetite Biomineralization. MBio, 2019, 10, .	1.8	17

#	Article	IF	Citations
109	Singleâ€step transfer of biosynthetic operons endows a nonâ€magnetotactic Magnetospirillum strain from wetland with magnetosome biosynthesis. Environmental Microbiology, 2020, 22, 1603-1618.	1.8	17
110	Identification of Promoters for Efficient Gene Expression inMagnetospirillum gryphiswaldense. Applied and Environmental Microbiology, 2009, 75, 4206-4210.	1.4	16
111	Magnetic properties of single biogenic magnetite nanoparticles. Journal of Nanoparticle Research, 2011, 13, 3345-3352.	0.8	16
112	The Polar Organizing Protein PopZ Is Fundamental for Proper Cell Division and Segregation of Cellular Content in Magnetospirillum gryphiswaldense. MBio, 2019, 10, .	1.8	16
113	Towards a 'chassis' for bacterial magnetosome biosynthesis: genome streamlining of Magnetospirillum gryphiswaldense by multiple deletions. Microbial Cell Factories, 2021, 20, 35.	1.9	16
114	A bacterial cytolinker couples positioning of magnetic organelles to cell shape control. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 32086-32097.	3.3	16
115	Reevaluation of the Complete Genome Sequence of Magnetospirillum gryphiswaldense MSR-1 with Single-Molecule Real-Time Sequencing Data. Genome Announcements, 2018, 6, .	0.8	15
116	Determination of the Concentration of Magnetotactic Bacteria by Means of Susceptibility Measurements. Japanese Journal of Applied Physics, 1993, 32, 252-260.	0.8	14
117	Numerical unmixing of weakly and strongly magnetic minerals: examples with synthetic mixtures of magnetite and hematite. Geophysical Journal International, 2019, 217, 280-287.	1.0	14
118	Genome-Wide Identification of Essential and Auxiliary Gene Sets for Magnetosome Biosynthesis in Magnetospirillum gryphiswaldense. MSystems, 2020, 5, .	1.7	14
119	An automated oxystat fermentation regime for microoxic cultivation of Magnetospirillum gryphiswaldense. Microbial Cell Factories, 2020, 19, 206.	1.9	14
120	High-Throughput Microfluidic Sorting of Live Magnetotactic Bacteria. Applied and Environmental Microbiology, 2018, 84, .	1.4	12
121	A gradientâ€forming MipZ protein mediating the control of cell division in the magnetotactic bacterium MagnetospirillumÂgryphiswaldense. Molecular Microbiology, 2019, 112, 1423-1439.	1.2	12
122	Bacterial Magnetosomes as Novel Platform for the Presentation of Immunostimulatory, Membraneâ€Bound Ligands in Cellular Biotechnology. Advanced Biology, 2020, 4, e1900231.	3.0	12
123	Highâ€Yield Production, Characterization, and Functionalization of Recombinant Magnetosomes in the Synthetic Bacterium Rhodospirillum rubrum â€œmagneticumâ€. Advanced Biology, 2021, 5, e2101017.	1.4	12
124	Evaluation of gene expression analysis using RNA-targeted partial genome arrays. Systematic and Applied Microbiology, 2006, 29, 349-357.	1.2	10
125	Precise Assembly of Genetically Functionalized Magnetosomes and Tobacco Mosaic Virus Particles Generates a Magnetic Biocomposite. ACS Applied Materials & Interfaces, 2018, 10, 37898-37910.	4.0	10
126	Probing the Nanostructure and Arrangement of Bacterial Magnetosomes by Small-Angle X-Ray Scattering. Applied and Environmental Microbiology, 2019, 85, .	1.4	10

#	Article	IF	Citations
127	Biocompatibility, uptake and subcellular localization of bacterial magnetosomes in mammalian cells. Nanoscale Advances, 2021, 3, 3799-3815.	2.2	10
128	Magnetic guidance of the magnetotactic bacterium Magnetospirillum gryphiswaldense. Soft Matter, 2016, 12, 3631-3635.	1.2	9
129	Quantifying the Benefit of a Dedicated â€œMagnetoskeletonâ€• in Bacterial Magnetotaxis by Live-Cell Motility Tracking and Soft Agar Swimming Assay. Applied and Environmental Microbiology, 2020, 86, .	1.4	9
130	Magnetospirillum gryphiswaldense. Trends in Microbiology, 2020, 28, 947-948.	3.5	9
131	The Complex Transcriptional Landscape of Magnetosome Gene Clusters in Magnetospirillum gryphiswaldense. MSystems, 2021, 6, e0089321.	1.7	9
132	Examination of magnetite nanoparticles utilising the temperature dependent magnetorelaxometry. Journal of Magnetism and Magnetic Materials, 2011, 323, 1179-1184.	1.0	8
133	Identification and elimination of genomic regions irrelevant for magnetosome biosynthesis by large-scale deletion in Magnetospirillum gryphiswaldense. BMC Microbiology, 2021, 21, 65.	1.3	8
134	A Magnetosome-Based Platform for Flow Biocatalysis. ACS Applied Materials & Interfaces, 2022, 14, 22138-22150.	4.0	8
135	The in vivo mechanics of the magnetotactic backbone as revealed by correlative FLIM-FRET and STED microscopy. Scientific Reports, 2019, 9, 19615.	1.6	7
136	Magnetosomes in Magnetotactic Bacteria. Microbiology Monographs, 2006, , 167-191.	0.3	6
137	Preparation of Bacterial Magnetosomes for Proteome Analysis. Methods in Molecular Biology, 2018, 1841, 45-57.	0.4	6
138	Induction of Axonal Outgrowth in Mouse Hippocampal Neurons via Bacterial Magnetosomes. International Journal of Molecular Sciences, 2021, 22, 4126.	1.8	6
139	Genetically Engineered Organization: Protein Template, Biological Recognition Sites, and Nanoparticles. Advanced Materials Interfaces, 2017, 4, 1600285.	1.9	5
140	SEAP activity measurement in reporter cell-based assays using BCIP / NBT as substrate. Analytical Biochemistry, 2019, 585, 113402.	1.1	4
141	Biosynthesis and Intracellular Organization of Magnetosomes in Magnetotactic Bacteria. Microbiology Monographs, 2020, , 53-70.	0.3	4
142	Bacteriophageâ€Templated Assembly of Magnetic Nanoparticles and Their Actuation Potential. ChemNanoMat, 2021, 7, 942-949.	1.5	3
143	Biochemical and Genetic Analysis of the Magnetosome Membrane in Magnetospirillum gryphiswaldense. , 2005, , 61-73.		2
144	Crystal structure of the magnetobacterial protein MtxA C-terminal domain reveals a new sequence-structure relationship. Frontiers in Molecular Biosciences, 2015, 2, 25.	1.6	2

#	Article	IF	Citations
145	Sesbanimide R, a Novel Cytotoxic Polyketide Produced by Magnetotactic Bacteria. MBio, 2021, 12, .	1.8	2
146	In vivo Architecture of the Polar Organizing Protein Z (PopZ) Meshwork in the Alphaproteobacteria Magnetospirillum gryphiswaldense and Caulobacter crescentus. Journal of Molecular Biology, 2022, 434, 167423.	2.0	2
147	Phylogeny and In Situ Identification of Magnetotactic Bacteria. , 2005, , 45-60.		1
148	Spatiotemporal Organization of Chemotaxis Pathways in Magnetospirillum gryphiswaldense. Applied and Environmental Microbiology, 2020, 87, .	1.4	1
149	Torsional Magnetic Angle for Magnetospirillum gryphiswaldense. Series in Bioengineering, 2021, , 47-59.	0.3	0