Atsushi Arakaki

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/12029710/publications.pdf

Version: 2024-02-01

66 papers	3,772 citations	147801 31 h-index	128289 60 g-index
69 all docs	69 docs citations	69 times ranked	3750 citing authors

#	Article	IF	Citations
1	Mesocrystalline Ordering and Phase Transformation of Iron Oxide Biominerals in the Ultrahard Teeth of Cryptochiton stelleri. Small Structures, 2022, 3, .	12.0	11
2	Unveiling characteristic proteins for the structural development of beetle elytra. Acta Biomaterialia, 2022, 140, 467-480.	8.3	6
3	Singleâ€cell genotyping of phytoplankton from ocean water by gelâ€based cell manipulation. Biotechnology Journal, 2022, , 2100633.	3.5	0
4	Nanoarchitected Tough Biological Composites from Assembled Chitinous Scaffolds. Accounts of Chemical Research, 2022, 55, 1360-1371.	15.6	10
5	Adsorption of Biomineralization Protein Mms6 on Magnetite (Fe3O4) Nanoparticles. International Journal of Molecular Sciences, 2022, 23, 5554.	4.1	4
6	Structural Design Variations in Beetle Elytra. Advanced Functional Materials, 2021, 31, 2106468.	14.9	12
7	Structural Design Variations in Beetle Elytra (Adv. Funct. Mater. 50/2021). Advanced Functional Materials, 2021, 31, .	14.9	0
8	Crystallization by particle attachment is a colloidal assembly process. Nature Materials, 2020, 19, 391-396.	27.5	78
9	Toughening mechanisms of the elytra of the diabolical ironclad beetle. Nature, 2020, 586, 543-548.	27.8	121
10	Radular stylus of Cryptochiton stelleri: A multifunctional lightweight and flexible fiber-reinforced composite. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 111, 103991.	3.1	14
11	Restoration and Modification of Magnetosome Biosynthesis by Internal Gene Acquisition in a Magnetotactic Bacterium. Biotechnology Journal, 2020, 15, e2000278.	3.5	5
12	Analysis of UV irradiation-induced cell settling of an oleaginous diatom, Fistulifera solaris, for efficient biomass recovery. Algal Research, 2020, 47, 101834.	4.6	2
13	Integrated molecular analysis of the inactivation of a non-enveloped virus, feline calicivirus, by UV-C radiation. Journal of Bioscience and Bioengineering, 2018, 126, 63-68.	2.2	15
14	Enhanced Tubulation of Liposome Containing Cardiolipin by MamY Protein from Magnetotactic Bacteria. Biotechnology Journal, 2018, 13, 1800087.	3.5	12
15	Molecular Mechanism of Magnetic Crystal Formation in Magnetotactic Bacteria. , 2018, , 23-51.		3
16	UV-C irradiation accelerates neutral lipid synthesis in the marine oleaginous diatom Fistulifera solaris. Bioresource Technology, 2017, 245, 1520-1526.	9.6	13
17	Quantitative and time-course analysis of microbial degradation of 1H,1H,2H,2H,8H,8Hâ€“perfluorododecanol in activated sludge. Applied Microbiology and Biotechnology, 2017, 101, 8259-8266.	3.6	2
18	Core Amino Acid Residues in the Morphology-Regulating Protein, Mms6, for Intracellular Magnetite Biomineralization. Scientific Reports, 2016, 6, 35670.	3.3	20

#	Article	IF	Citations
19	Bacterial Inactivation by Applying an Alternating Electromagnetic Field Using PAMAM Dendron-modified Magnetic Nanoparticles. Electrochemistry, 2016, 84, 324-327.	1.4	5
20	Biomagnetic Recovery and Bioaccumulation of Selenium Granules in Magnetotactic Bacteria. Applied and Environmental Microbiology, 2016, 82, 3886-3891.	3.1	34
21	Comparative Subcellular Localization Analysis of Magnetosome Proteins Reveals a Unique Localization Behavior of Mms6 Protein onto Magnetite Crystals. Journal of Bacteriology, 2016, 198, 2794-2802.	2.2	26
22	Control of magnetite nanocrystal morphology in magnetotactic bacteria by regulation of mms7 gene expression. Scientific Reports, 2016, 6, 29785.	3.3	28
23	Bioinspired Magnetite Crystallization Directed by Random Copolypeptides. Advanced Functional Materials, 2015, 25, 711-719.	14.9	32
24	Crystal Growth of Aspirin Using a Temperature-Controlled Microfluidic Device. Crystal Growth and Design, 2015, 15, 4549-4555.	3.0	5
25	Controlled radical polymerization of styrene with magnetic iron oxides prepared through hydrothermal, bioinspired, and bacterial processes. RSC Advances, 2015, 5, 51122-51129.	3.6	2
26	Biomineralization-inspired synthesis of functional organic/inorganic hybrid materials: organic molecular control of self-organization of hybrids. Organic and Biomolecular Chemistry, 2015, 13, 974-989.	2.8	139
27	A Bioinspired Coprecipitation Method for the Controlled Synthesis of Magnetite Nanoparticles. Crystal Growth and Design, 2014, 14, 5561-5568.	3.0	61
28	Coâ€ordinated functions of <scp>Mms</scp> proteins define the surface structure of cuboâ€octahedral magnetite crystals in magnetotactic bacteria. Molecular Microbiology, 2014, 93, 554-567.	2.5	58
29	Functionalization of Magnetotactic Bacteria for Microrobotic Applications. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	4
30	Glycosylceramides from marine green microalga Tetraselmis sp.. Phytochemistry, 2013, 85, 107-114.	2.9	16
31	Biologically synthesized or bioinspired process-derived iron oxides as catalysts for living cationic polymerization of a vinyl ether. Chemical Communications, 2012, 48, 10904.	4.1	20
32	Efficient DNA release from PAMAM dendrimer-modified superparamagnetic nanoparticles for DNA recovery. Polymer Journal, 2012, 44, 672-677.	2.7	18
33	Highest levels of Cu, Mn and Co doped into nanomagnetic magnetosomes through optimized biomineralisation. Journal of Materials Chemistry, 2012, 22, 11919.	6.7	40
34	Characterization of magnetic nanoparticles modified with thiol functionalized PAMAM dendron for DNA recovery. Journal of Colloid and Interface Science, 2012, 377, 469-475.	9.4	27
35	Magnetic bacterial protein Mms6 controls morphology, crystallinity and magnetism of cobalt-doped magnetite nanoparticles in vitro. Journal of Materials Chemistry, 2011, 21, 15244.	6.7	63
36	Altererythrobacter ishigakiensis sp. nov., an astaxanthin-producing bacterium isolated from a marine sediment. International Journal of Systematic and Evolutionary Microbiology, 2011, 61, 2956-2961.	1.7	63

#	Article	IF	Citations
37	MMS6 Protein Regulates Crystal Morphology during Nano-sized Magnetite Biomineralization in Vivo. Journal of Biological Chemistry, 2011, 286, 6386-6392.	3.4	155
38	Microbial biodegradation of a novel fluorotelomer alcohol, 1H,1H,2H,2H,8H,8H-perfluorododecanol, yields short fluorinated acids. Applied Microbiology and Biotechnology, 2010, 88, 1193-1203.	3.6	18
39	TCRâ€î² repertoire analysis of antigenâ€specific single T cells using a highâ€density microcavity array. Biotechnology and Bioengineering, 2010, 106, 311-318.	3.3	9
40	Control of the morphology and size of magnetite particles with peptides mimicking the Mms6 protein from magnetotactic bacteria. Journal of Colloid and Interface Science, 2010, 343, 65-70.	9.4	124
41	Identification and functional characterization of liposome tubulation protein from magnetotactic bacteria. Molecular Microbiology, 2010, 76, 480-488.	2.5	49
42	Preparation of Genomic DNA from a Single Species of Uncultured Magnetotactic Bacterium by Multiple-Displacement Amplification. Applied and Environmental Microbiology, 2010, 76, 1480-1485.	3.1	28
43	Size-Selective Microcavity Array for Rapid and Efficient Detection of Circulating Tumor Cells. Analytical Chemistry, 2010, 82, 6629-6635.	6.5	309
44	Simultaneously Discrete Biomineralization of Magnetite and Tellurium Nanocrystals in Magnetotactic Bacteria. Applied and Environmental Microbiology, 2010, 76, 5526-5532.	3.1	42
45	Iron oxide crystal formation on a substrate modified with the Mms6 protein from magnetotactic bacteria. Materials Research Society Symposia Proceedings, 2009, 1187, 46.	0.1	10
46	Proteomic analysis of irregular, bulletâ€shaped magnetosomes in the sulphateâ€reducing magnetotactic bacterium Desulfovibrio magneticus RSâ€1. Proteomics, 2009, 9, 3341-3352.	2.2	32
47	High-Density Microcavity Array for Cell Detection: Single-Cell Analysis of Hematopoietic Stem Cells in Peripheral Blood Mononuclear Cells. Analytical Chemistry, 2009, 81, 5308-5313.	6.5	74
48	Whole genome sequence of Desulfovibrio magneticus strain RS-1 revealed common gene clusters in magnetotactic bacteria. Genome Research, 2009, 19, 1801-1808.	5.5	103
49	Formation of magnetite by bacteria and its application. Journal of the Royal Society Interface, 2008, 5, 977-999.	3.4	218
50	High-Efficiency Single-Cell Entrapment and Fluorescence in Situ Hybridization Analysis Using a Poly(dimethylsiloxane) Microfluidic Device Integrated with a Black Poly(ethylene terephthalate) Micromesh. Analytical Chemistry, 2008, 80, 5139-5145.	6.5	57
51	Quantitative Detection of Immunoreaction using Magnetite Nanoparticles and Raman Scattering Spectroscopy. E-Journal of Surface Science and Nanotechnology, 2008, 6, 142-146.	0.4	2
52	Detection ofCryptosporidium parvum oocysts using a microfluidic device equipped with the SUS micromesh and FITC-labeled antibody. Biotechnology and Bioengineering, 2007, 96, 272-280.	3.3	33
53	Cytoplasmic ATPase involved in ferrous ion uptake from magnetotactic bacteriumMagnetospirillum magneticumAMB-1. FEBS Letters, 2007, 581, 3443-3448.	2.8	16
54	Molecular analysis of magnetotactic bacteria and development of functional bacterial magnetic particles for nano-biotechnology. Trends in Biotechnology, 2007, 25, 182-188.	9.3	115

#	Article	IF	Citations
55	Controlled formation of magnetite crystal by partial oxidation of ferrous hydroxide in the presence of recombinant magnetotactic bacterial protein Mms6. Biomaterials, 2007, 28, 5381-5389.	11.4	241
56	Origin of magnetosome membrane: Proteomic analysis of magnetosome membrane and comparison with cytoplasmic membrane. Proteomics, 2006, 6, 5234-5247.	2.2	136
57	Synthesis of magnetic nanoparticles and their application to bioassays. Analytical and Bioanalytical Chemistry, 2006, 384, 593-600.	3.7	166
58	Molecular Bioengineering of Bacterial Magnetic Particles for Biotechnological Applications. , 2006, , 227-254.		19
59	Detection of biomolecular interaction between biotin and streptavidin on a self-assembled monolayer using magnetic nanoparticles. Biotechnology and Bioengineering, 2004, 88, 543-546.	3.3	47
60	Fully automated DNA extraction from blood using magnetic particles modified with a hyperbranched polyamidoamine dendrimer. Journal of Bioscience and Bioengineering, 2003, 95, 21-26.	2.2	78
61	Single-nucleotide polymorphism analysis using fluorescence resonance energy transfer between DNA-labeling fluorophore, fluorescein isothiocyanate, and DNA intercalator, POPO-3, on bacterial magnetic particles. Biotechnology and Bioengineering, 2003, 84, 96-102.	3.3	60
62	A Novel Protein Tightly Bound to Bacterial Magnetic Particles in Magnetospirillum magneticum Strain AMB-1. Journal of Biological Chemistry, 2003, 278, 8745-8750.	3.4	342
63	DNA extraction using bacterial magnetic particles modified with hyperbranched polyamidoamine dendrimer. Journal of Biotechnology, 2003, 101, 219-228.	3.8	108
64	Desulfovibrio magneticus sp. nov., a novel sulfate-reducing bacterium that produces intracellular single-domain-sized magnetite particles.. International Journal of Systematic and Evolutionary Microbiology, 2002, 52, 215-221.	1.7	152
65	Preparation of luciferase-bacterial magnetic particle complex by artificial integration of MagA-luciferase fusion protein into the bacterial magnetic particle membrane. Biotechnology and Bioengineering, 2002, 77, 614-618.	3.3	24
66	Cadmium Recovery by a Sulfate-Reducing Magnetotactic Bacterium, Desulfovibrio magneticus RS-1, Using Magnetic Separation. Applied Biochemistry and Biotechnology, 2002, 98-100, 833-840.	2.9	36