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List of Publications by Year
in descending order

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88 papers	3,217 citations	159585 30 h-index	175258 52 g-index
90 all docs	90 docs citations	90 times ranked	2524 citing authors

#	Article	IF	Citations
1	Complexation of Uranium by Cells and S-Layer Sheets of Bacillus sphaericus JG-A12. Applied and Environmental Microbiology, 2005, 71, 5532-5543.	3.1	246
2	Bacterial interactions with uranium: An environmental perspective. Journal of Contaminant Hydrology, 2008, 102, 285-295.	3.3	206
3	Metal binding by bacteria from uranium mining waste piles and its technological applications. Biotechnology Advances, 2006, 24, 58-68.	11.7	171
4	Novel supported Pd hydrogenation bionanocatalyst for hybrid homogeneous/heterogeneous catalysis. Catalysis Today, 2007, 128, 80-87.	4.4	109
5	Microbacterium isolates from the vicinity of a radioactive waste depository and their interactions with uranium. FEMS Microbiology Ecology, 2007, 59, 694-705.	2.7	104
6	Microbial synthesis of core/shell gold/palladium nanoparticles for applications in green chemistry. Journal of the Royal Society Interface, 2012, 9, 1705-1712.	3.4	95
7	Bio-precipitation of uranium by two bacterial isolates recovered from extreme environments as estimated by potentiometric titration, TEM and X-ray absorption spectroscopic analyses. Journal of Hazardous Materials, 2011, 197, 1-10.	12.4	89
8	Bacterial biomineralization: new insights from Myxococcus -induced mineral precipitation. Geological Society Special Publication, 2010, 336, 31-50.	1.3	85
9	Lanthanum fixation by Myxococcus xanthus: cellular location and extracellular polysaccharide observation. Chemosphere, 2003, 52, 113-120.	8.2	80
10	Secondary Structure and Pd(II) Coordination in S-Layer Proteins from Bacillus sphaericus Studied by Infrared and X-Ray Absorption Spectroscopy. Biophysical Journal, 2006, 91, 996-1007.	0.5	75
11	Characterization of U(VI)-Acidithiobacillus ferrooxidans complexes using EXAFS, transmission electron microscopy, and energy-dispersive X-ray analysis. Radiochimica Acta, 2003, 91, 583-592.	1.2	73
12	Green synthesis and biotransformation of amorphous Se nanospheres to trigonal 1D Se nanostructures: impact on Se mobility within the concept of radioactive waste disposal. Environmental Science: Nano, 2018, 5, 2103-2116.	4.3	67
13	Complexation of uranium (VI) by three eco-types of Acidithiobacillus ferrooxidans studied using time-resolved laser-induced fluorescence spectroscopy and infrared spectroscopy. BioMetals, 2003, 16, 331-339.	4.1	66
14	Potential application of biomineralization by Synechococcus PCC8806 for concrete restoration. Ecological Engineering, 2015, 82, 459-468.	3.6	64
15	Spectroscopic and Microscopic Characterization of Uranium Biomineralization inMyxococcus xanthus. Geomicrobiology Journal, 2007, 24, 441-449.	2.0	63
16	Characterization of intracellular palladium nanoparticles synthesized by Desulfovibrio desulfuricans and Bacillus benzeovorans. Journal of Nanoparticle Research, 2015, 17, 264.	1.9	61
17	Interaction mechanisms of bacterial strains isolated from extreme habitats with uranium. Radiochimica Acta, 2006, 94, 723-729.	1.2	54
18	Microbial communities in bentonite formations and their interactions with uranium. Applied Geochemistry, 2014, 49, 77-86.	3.0	48

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19	High-efficient microbial immobilization of solved U(VI) by the Stenotrophomonas strain Br8. Water Research, 2020, 183, 116110.	11.3	46
20	Developments in the study and applications of bacterial transformations of selenium species. Critical Reviews in Biotechnology, 2020, 40, 1250-1264.	9.0	44
21	Synthesis of Pd/Ru Bimetallic Nanoparticles by Escherichia coli and Potential as a Catalyst for Upgrading 5-Hydroxymethyl Furfural Into Liquid Fuel Precursors. Frontiers in Microbiology, 2019, 10, 1276.	3.5	41
22	Combined use of flow cytometry and microscopy to study the interactions between the gram-negative betaproteobacterium Acidovorax facilis and uranium(VI). Journal of Hazardous Materials, 2016, 317, 127-134.	12.4	40
23	Brewery yeast as a biosorbent for uranium. Journal of Applied Bacteriology, 1996, 81, 283-287.	1.1	39
24	Biosorption and Biomineralization of U(VI) by the Marine Bacterium Idiomarina loihiensis MAH1: Effect of Background Electrolyte and pH. PLoS ONE, 2014, 9, e91305.	2.5	39
25	Bacterial Diversity in Bentonites, Engineered Barrier for Deep Geological Disposal of Radioactive Wastes. Microbial Ecology, 2015, 70, 922-935.	2.8	39
26	Novel catalytically active Pd/Ru bimetallic nanoparticles synthesized by Bacillus benzeovorans. Scientific Reports, 2019, 9, 4715.	3.3	38
27	Interactions of three eco-types of Acidithiobacillus ferrooxidans with U(VI). BioMetals, 2001, 14, 171-179.	4.1	37
28	Biosorption of uranium by Myxococcus xanthus. International Biodeterioration and Biodegradation, 1997, 40, 107-114.	3.9	36
29	Comparative heavy metal biosorption study of brewery yeast and Myxococcus xanthus biomass. Chemosphere, 1997, 35, 2277-2283.	8.2	34
30	Strong Paramagnetism of Gold Nanoparticles Deposited on aSulfolobus acidocaldarius<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>S</mml:mi></mml:math>Layer. Physical Review Letters, 2012, 109, 247203.	7.8	33
31	Effect of U(VI) aqueous speciation on the binding of uranium by the cell surface of Rhodotorula mucilaginosa, a natural yeast isolate from bentonites. Chemosphere, 2018, 199, 351-360.	8.2	31
32	Bacillus safensis JG-B5T affects the fate of selenium by extracellular production of colloidally less stable selenium nanoparticles. Journal of Hazardous Materials, 2020, 384, 121146.	12.4	31
33	Stenotrophomonas bentonitica sp. nov., isolated from bentonite formations. International Journal of Systematic and Evolutionary Microbiology, 2017, 67, 2779-2786.	1.7	31
34	Time-Resolved Laser Fluorescence Spectroscopy Study on the Interaction of Curium(III) withDesulfovibrio ÃspÃ¶ensisDSM 10631T. Environmental Science & Technology, 2004, 38, 1455-1459.	10.0	29
35	Multisystem combined uranium resistance mechanisms and bioremediation potential of Stenotrophomonas bentonitica BII-R7: Transcriptomics and microscopic study. Journal of Hazardous Materials, 2021, 403, 123858.	12.4	29
36	Screening of bacterial strains isolated from uranium mill tailings porewaters for bioremediation purposes. Journal of Environmental Radioactivity, 2017, 166, 130-141.	1.7	28

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37	Microbial interaction with and tolerance of radionuclides: underlying mechanisms and biotechnological applications. Microbial Biotechnology, 2021, 14, 810-828.	4.2	28
38	Molecular and atomic analysis of uranium complexes formed by three eco-types of Acidithiobacillus ferrooxidans. Biochemical Society Transactions, 2002, 30, 669-672.	3.4	27
39	Selective Oxidation of Benzyl-Alcohol over Biomass-Supported Au/Pd Bioinorganic Catalysts. Topics in Catalysis, 2011, 54, 1110-1114.	2.8	27
40	Fungal biomineralization of lead phosphates on the surface of lead metal. Minerals Engineering, 2017, 106, 46-54.	4.3	27
41	Manufacturing and characterization of Pd nanoparticles formed on immobilized bacterial cells. Letters in Applied Microbiology, 2006, 43, 39-45.	2.2	26
42	Spectroscopic characterization of gold nanoparticles formed by cells and S-layer protein of Bacillus sphaericus JG-A12. Materials Science and Engineering C, 2007, 27, 188-192.	7.3	26
43	Metabolism-dependent bioaccumulation of uranium by Rhodosporidium toruloides isolated from the flooding water of a former uranium mine. PLoS ONE, 2018, 13, e0201903.	2.5	26
44	Characterization of Palladium Nanoparticles Produced by Healthy and Microwave-Injured Cells of Desulfovibrio desulfuricans and Escherichia coli. Nanomaterials, 2019, 9, 857.	4.1	26
45	Exploring bacterial community composition in Mediterranean deep-sea sediments and their role in heavy metal accumulation. Science of the Total Environment, 2020, 712, 135660.	8.0	26
46	Chemical and structural characterization of Se^{IV} biotransformations by Stenotrophomonas bentonitica into Se⁰ nanostructures and volatiles Se species. Environmental Science: Nano, 2020, 7, 2140-2155.	4.3	26
47	Profiling native aquifer bacteria in a uranium roll-front deposit and their role in biogeochemical cycle dynamics: Insights regarding in situ recovery mining. Science of the Total Environment, 2020, 721, 137758.	8.0	25
48	Decrease of U(VI) Immobilization Capability of the Facultative Anaerobic Strain Paenibacillus sp. JG-TB8 under Anoxic Conditions Due to Strongly Reduced Phosphatase Activity. PLoS ONE, 2014, 9, e102447.	2.5	24
49	Biomineralization and biotransformations of actinide materials. MRS Bulletin, 2010, 35, 849-857.	3.5	23
50	Molecular Structure, UV/Vis Spectra, and Cyclic Voltammograms of Mn(II), Co(II), and Zn(II) 5,10,15,20-Tetraphenyl-21-oxaporphyrins. Inorganic Chemistry, 2013, 52, 1515-1524.	4.0	23
51	Interaction of U(VI) with Schizophyllum commune studied by microscopic and spectroscopic methods. BioMetals, 2014, 27, 775-785.	4.1	23
52	Biogeochemical changes induced in uranium mining waste pile samples by uranyl nitrate treatments under anaerobic conditions. Geobiology, 2009, 7, 282-294.	2.4	22
53	Spectroscopic study on uranyl carboxylate complexes formed at the surface layer of Sulfolobus acidocaldarius. Dalton Transactions, 2015, 44, 2684-2692.	3.3	22
54	Biosynthesis of zinc sulfide quantum dots using waste off-gas from a metal bioremediation process. RSC Advances, 2017, 7, 21484-21491.	3.6	22

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55	Shifts in bentonite bacterial community and mineralogy in response to uranium and glycerol-2-phosphate exposure. Science of the Total Environment, 2019, 692, 219-232.	8.0	21
56	Uranium removal from complex mining waters by alginate beads doped with cells of Stenotrophomonas sp. Br8: Novel perspectives for metal bioremediation. Journal of Environmental Management, 2021, 296, 113411.	7.8	20
57	Silver Sorption to Myxococcus xanthus Biomass. Geomicrobiology Journal, 2001, 18, 183-192.	2.0	18
58	S-Layer protein fromLysinibacillus sphaericusJG-A12 as matrix for Au^{III}sorption and Au-nanoparticle formation. Spectroscopy, 2010, 24, 177-181.	0.8	18
59	Magnetic Au Nanoparticles on Archaeal S-Layer Ghosts as Templates. Nanomaterials and Nanotechnology, 2011, 1, 13.	3.0	18
60	Structural Analysis of Uranyl Complexation by the EFâ€Hand Motif of Calmodulin: Effect of Phosphorylation. Chemistry - A European Journal, 2017, 23, 15505-15517.	3.3	18
61	Microbial community changes induced by uranyl nitrate in bentonite clay microcosms. Applied Clay Science, 2018, 160, 206-216.	5.2	18
62	Multidisciplinary characterization of U(VI) sequestration by Acidovorax facilis for bioremediation purposes. Journal of Hazardous Materials, 2018, 347, 233-241.	12.4	17
63	Myxococcus xanthus biomass as biosorbent for lead. Journal of Applied Microbiology, 1998, 84, 63-67.	3.1	16
64	Reversible pH-dependent curium(III) biosorption by the bentonite yeast isolate Rhodotorula mucilaginosa BII-R8. Journal of Hazardous Materials, 2019, 370, 156-163.	12.4	16
65	The Bioreduction of Selenite under Anaerobic and Alkaline Conditions Analogous to Those Expected for a Deep Geological Repository System. Molecules, 2019, 24, 3868.	3.8	16
66	Bioaccumulation of U(VI) by Sulfolobus acidocaldarius under moderate acidic conditions. Radiochimica Acta, 2011, 99, 543-554.	1.2	15
67	The interaction of Desulfovibrio ÃspÃ¶ensis DSM 10631T with plutonium. Radiochimica Acta, 2006, 94, 815-824.	1.2	14
68	Deciphering indigenous bacteria in compacted bentonite through a novel and efficient DNA extraction method: Insights into biogeochemical processes within the Deep Geological Disposal of nuclear waste concept. Journal of Hazardous Materials, 2021, 408, 124600.	12.4	14
69	Interactions of Sulfolobus acidocaldarius with uranium. Radiochimica Acta, 2010, 98, .	1.2	13
70	Molecular Binding of Eu^{III}/Cm^{III} by Stenotrophomonas bentonitica and Its Impact on the Safety of Future Geodisposal of Radioactive Waste. Environmental Science & Technology, 2020, 54, 15180-15190.	10.0	13
71	Accumulation of Heavy Metals by Micro-organisms: Biomineralization and Nanocluster Formation. , 2010, , 483-500.		12
72	Probing the viability of palladiumâ€challenged bacterial cells using flow cytometry. Journal of Chemical Technology and Biotechnology, 2019, 94, 295-301.	3.2	11

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73	Cupriavidus metallidurans NA4 actively forms polyhydroxybutyrate-associated uranium-phosphate precipitates. Journal of Hazardous Materials, 2022, 421, 126737.	12.4	11
74	Impact of anoxic conditions, uranium(VI) and organic phosphate substrate on the biogeochemical potential of the indigenous bacterial community of bentonite. Applied Clay Science, 2022, 216, 106331.	5.2	11
75	Upconversion of Cellulosic Waste Into a Potential â€œDrop in Fuelâ€•via Novel Catalyst Generated Using Desulfovibrio desulfuricans and a Consortium of Acidophilic Sulfidogens. Frontiers in Microbiology, 2019, 10, 970.	3.5	9
76	Draft Genome Sequence of Stenotrophomonas bentonitica BII-R7 ^T , a Selenite-Reducing Bacterium Isolated from Spanish Bentonites. Genome Announcements, 2017, 5, .	0.8	8
77	Biotechnological synthesis of Pd/Ag and Pd/Au nanoparticles for enhanced Suzukiâ€“Miyaura crossâ€coupling activity. Microbial Biotechnology, 2021, 14, 2435-2447.	4.2	7
78	Nanopatterning of Magnetic CrNi Prussian Blue Nanoparticles Using a Bacterial S-Layer as a Biotemplate. Inorganic Chemistry, 2015, 54, 6758-6762.	4.0	6
79	Effect of Temperature and Cell Viability on Uranium Biomineralization by the Uranium Mine Isolate Penicillium simplicissimum. Frontiers in Microbiology, 2021, 12, 802926.	3.5	6
80	Attachment on mortar surfaces by cyanobacterium Gloeocapsa PCC 73106 and sequestration of CO₂ by microbially induced calcium carbonate. MicrobiologyOpen, 2021, 10, e1243.	3.0	5
81	Draft genome sequence data of Microbacterium sp. strain Be9 isolated from uranium-mill tailings porewaters. Data in Brief, 2020, 31, 105732.	1.0	4
82	Enhanced hydrogenation catalyst synthesized by DesulfovibrioÂdesulfuricans exposed to a radio frequency magnetic field. Microbial Biotechnology, 2021, 14, 2041-2058.	4.2	2
83	Magnetic properties of transition-metal nanoclusters on a biological substrate. Journal of Magnetism and Magnetic Materials, 2007, 310, e821-e823.	2.3	1
84	High resolution electron microscopy study of biologically derived ruthenium and palladium/ruthenium nanoparticles. , 2016, , .		1
85	Molecular techniques for understanding microbial abundance and activity in clay barriers used for geodisposal. , 2021, , 71-96.		1
86	Bentonite geomicrobiology. , 2021, , 137-155.		1
87	Uranium biomineralization by uranium mining waste isolates: a multidisciplinary approach study. , 2008, , 723-724.		1
88	Coupled Biohydrogen Production and Bio-Nanocatalysis for Dual Energy from Cellulose: Towards Cellulosic Waste Up-Conversion into Biofuels. Catalysts, 2022, 12, 577.	3.5	1