Ute BÃ¶ttger

List of Publications by Year
in descending order

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28 papers	540 citations	623734 14 h-index	642732 23 g-index
28 all docs	28 docs citations	28 times ranked	709 citing authors

#	Article	IF	Citations
1	Limits of Life and the Habitability of Mars: The ESA Space Experiment BIOMEX on the ISS. Astrobiology, 2019, 19, 145-157.	3.0	111
2	Optimizing the detection of carotene in cyanobacteria in a martian regolith analogue with a Raman spectrometer for the ExoMars mission. Planetary and Space Science, 2012, 60, 356-362.	1.7	77
3	Preservation of Biomarkers from Cyanobacteria Mixed with MarsÂLike Regolith Under Simulated Martian Atmosphere and UV Flux. Origins of Life and Evolution of Biospheres, 2016, 46, 289-310.	1.9	38
4	Protection of cyanobacterial carotenoids' Raman signatures by Martian mineral analogues after highâ€dose gamma irradiation. Journal of Raman Spectroscopy, 2018, 49, 1617-1627.	2.5	37
5	Mineralogical and Raman spectroscopy studies of natural olivines exposed to different planetary environments. Planetary and Space Science, 2014, 104, 163-172.	1.7	25
6	Responses of the Black Fungus <i>Cryomyces antarcticus</i> to Simulated Mars and Space Conditions on Rock Analogs. Astrobiology, 2019, 19, 209-220.	3.0	25
7	The Effect of High-Dose Ionizing Radiation on the Isolated Photobiont of the Astrobiological Model Lichen<i>Circinaria gyrosa</i>. Astrobiology, 2017, 17, 154-162.	3.0	24
8	Laser alteration on iron sulfides under various environmental conditions. Journal of Raman Spectroscopy, 2017, 48, 1509-1517.	2.5	22
9	Mineralogical analyses of surface sediments in the Antarctic Dry Valleys: coordinated analyses of Raman spectra, reflectance spectra and elemental abundances. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140198.	3.4	20
10	Lowâ€level LIBS and Raman data fusion in the context of in situ Mars exploration. Journal of Raman Spectroscopy, 2020, 51, 1682-1701.	2.5	19
11	Single-cell analysis of the methanogenic archaeon Methanosarcina soligelidi from Siberian permafrost by means of confocal Raman microspectrocopy for astrobiological research. Planetary and Space Science, 2014, 98, 191-197.	1.7	18
12	The Chelyabinsk meteorite: New insights from a comprehensive electron microscopy and Raman spectroscopy study with evidence for graphite in olivine of ordinary chondrites. Meteoritics and Planetary Science, 2018, 53, 416-432.	1.6	17
13	In situ science on Phobos with the Raman spectrometer for MMX (RAX): preliminary design and feasibility of Raman measurements. Earth, Planets and Space, 2021, 73, .	2.5	17
14	<i>Ab initio</i> simulations and experimental Raman spectra of <scp>Mg₂SiO₄</scp> forsterite to simulate Mars surface environmental conditions. Journal of Raman Spectroscopy, 2017, 48, 1528-1535.	2.5	14
15	Effects of pulsed laser and plasma interaction on Fe, Ni, Ti, and their oxides for LIBS Raman analysis in extraterrestrial environments. Journal of Raman Spectroscopy, 2020, 51, 1667-1681.	2.5	10
16	The evaluation of timeâ€resolved Raman spectroscopy for the suppression of background fluorescence from spaceâ€relevant samples. Journal of Raman Spectroscopy, 2019, 50, 969-982.	2.5	8
17	Fungal biomarkers are detectable in Martian rock-analogues after space exposure: implications for the search of life on Mars. International Journal of Astrobiology, 2021, 20, 345-358.	1.6	8
18	Identification of inorganic and organic inclusions in the subglacial antarctic Lake Vostok ice with Raman spectroscopy. Journal of Raman Spectroscopy, 2017, 48, 1503-1508.	2.5	6

#	ARTICLE	IF	CITATIONS
19	Raman spectra of hydrous minerals investigated under various environmental conditions in preparation for planetary space missions. Journal of Raman Spectroscopy, 2018, 49, 1830-1839.	2.5	6
20	Raman spectra of the Markovka chondrite (H4). Journal of Raman Spectroscopy, 2022, 53, 463-471.	2.5	6
21	Fungal Biomarkers Stability in Mars Regolith Analogues after Simulated Space and Mars-like Conditions. Journal of Fungi (Basel, Switzerland), 2021, 7, 859.	3.5	6
22	Laser-induced alteration of Raman spectra for micron-sized solid particles. Planetary and Space Science, 2017, 138, 25-32.	1.7	5
23	Shifted Excitation Raman Difference Spectroscopy applied to extraterrestrial particles returned from the asteroid Itokawa. Planetary and Space Science, 2017, 144, 106-111.	1.7	5
24	Artifact formation during Raman measurements and its relevance to the search for chemical biosignatures on Mars. Planetary and Space Science, 2019, 179, 104714.	1.7	4
25	Space weathering simulation of micrometeorite bombardment on silicates and their mixture for space application. Journal of Raman Spectroscopy, 2022, 53, 411-419.	2.5	4
26	Application of Raman Spectroscopy as In Situ Technology for the Search for Life. Cellular Origin and Life in Extreme Habitats, 2013, , 331-345.	0.3	3
27	The Ground-Based BIOMEX Experiment Verification Tests for Life Detection on Mars. Life, 2021, 11, 1212.	2.4	3
28	Investigation of fungal biomolecules after Low Earth Orbit exposure: a testbed for the next Moon missions. Environmental Microbiology, 2022, , .	3.8	2