Eva Mateo-Marti

List of Publications by Year
in descending order

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34	708	567281 15	552781 26
papers	citations	h-index	g-index

34	34	34	940
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Stability of liquid saline water on present day Mars. Geophysical Research Letters, 2009, 36, .	4.0	93
2	A DNA biosensor based on peptide nucleic acids on gold surfaces. Biosensors and Bioelectronics, 2007, 22, 1926-1932.	10.1	79
3	Self-Assembled Monolayers of Peptide Nucleic Acids on Gold Surfaces:Â A Spectroscopic Study. Langmuir, 2005, 21, 9510-9517.	3.5	54
4	Protection of chemolithoautotrophic bacteria exposed to simulated Mars environmental conditions. Icarus, 2010, 209, 482-487.	2.5	47
5	The resistance of the lichen Circinaria gyrosa (nom. provis.) towards simulated Mars conditionsâ€"a model test for the survival capacity of an eukaryotic extremophile. Planetary and Space Science, 2012, 72, 102-110.	1.7	35
6	Near-UV Transmittance of Basalt Dust as an Analog of the Martian Regolith: Implications for Sensor Calibration and Astrobiology. Sensors, 2006, 6, 688-696.	3.8	30
7	CH4/N2/H2-spark hydrophobic tholins: A systematic approach to the characterisation of tholins. Part II. Icarus, 2009, 204, 672-680.	2.5	30
8	A chamber for studying planetary environments and its applications to astrobiology. Measurement Science and Technology, 2006, 17, 2274-2280.	2.6	29
9	A Comprehensive Review of HCN-Derived Polymers. Processes, 2021, 9, 597.	2.8	29
10	CH4/N2/H2 spark hydrophilic tholins: A systematic approach to the characterization of tholins. Icarus, 2008, 198, 232-241.	2.5	27
11	Pyrite surface environment drives molecular adsorption: cystine on pyrite(100) investigated by X-ray photoemission spectroscopy and low energy electron diffraction. Physical Chemistry Chemical Physics, 2016, 18, 27219-27225.	2.8	24
12	Defects on a pyrite(100) surface produce chemical evolution of glycine under inert conditions: experimental and theoretical approaches. Physical Chemistry Chemical Physics, 2019, 21, 24535-24542.	2.8	22
13	Nucleic acid interactions with pyrite surfaces. Chemical Physics, 2008, 352, 11-18.	1.9	19
14	Spectroscopic study of cystine adsorption on pyrite surface: From vacuum to solution conditions. Chemical Physics, 2015, 458, 92-98.	1.9	19
15	Constraining the preservation of organic compounds in Mars analog nontronites after exposure to acid and alkaline fluids. Scientific Reports, 2020, 10, 15097.	3.3	15
16	A dual perspective on the microwave-assisted synthesis of HCN polymers towards the chemical evolution and design of functional materials. Scientific Reports, 2020, 10, 22350.	3.3	15
17	Pyrite-induced uv-photocatalytic abiotic nitrogen fixation: implications for early atmospheres and Life. Scientific Reports, 2019, 9, 15311.	3.3	13
18	Planetary Atmosphere and Surfaces Chamber (PASC): A Platform to Address Various Challenges in Astrobiology. Challenges, 2014, 5, 213-223.	1.7	12

#	Article	IF	Citations
19	An XPS study of HCN-derived films on pyrite surfaces: a prebiotic chemistry standpoint towards the development of protective coatings. RSC Advances, 2021, 11, 20109-20117.	3.6	12
20	Do peptide nucleic acids form self-assembled monolayers on pyrite surfaces?. Surface Science, 2007, 601, 4195-4199.	1.9	11
21	Sulfur amino acids and alanine on pyrite (100) by X-ray photoemission spectroscopy: Surface or molecular role?. Applied Surface Science, 2017, 414, 303-312.	6.1	11
22	APTES-Based Silica Nanoparticles as a Potential Modifier for the Selective Sequestration of CO2 Gas Molecules. Nanomaterials, 2021, 11, 2893.	4.1	11
23	CO2 adsorption capacities of amine-functionalized microporous silica nanoparticles. Reactive and Functional Polymers, 2022, 170, 105100.	4.1	11
24	UV irradiation study of a tripeptide isolated in an argon matrix: A tautomerism process evidenced by infrared and X-ray photoemission spectroscopies. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 109, 247-252.	3.9	9
25	HCN-derived polymers from thermally induced polymerization of diaminomaleonitrile: A non-enzymatic peroxide sensor based on prebiotic chemistry. European Polymer Journal, 2022, 162, 110897.	5.4	9
26	Ultraviolet Photostability of Adenine on Gold and Silicon Surfaces. Astrobiology, 2009, 9, 573-579.	3.0	7
27	Tuning the Morphology in the Nanoscale of NH4CN Polymers Synthesized by Microwave Radiation: A Comparative Study. Polymers, 2022, 14, 57.	4.5	7
28	Ar+ ion bombardment dictates glycine adsorption on pyrite (1 0 0) surface: X-ray photoemission spectroscopy and DFT approach. Applied Surface Science, 2020, 530, 147182.	6.1	6
29	2-D organization of silica nanoparticles on gold surfaces: CO₂marker detection and storage. RSC Advances, 2020, 10, 31758-31764.	3.6	6
30	Ultraviolet Irradiation on a Pyrite Surface Improves Triglycine Adsorption. Life, 2018, 8, 50.	2.4	5
31	A Lizarditeâ€“HCN Interaction Leading the Increasing of Molecular Complexity in an Alkaline Hydrothermal Scenario: Implications for Origin of Life Studies. Life, 2021, 11, 661.	2.4	5
32	Study of the Stability of GlyÂ·MgSO₄Â·5H₂O under Simulated Martian Conditions by In Situ Raman Spectroscopy. Astrobiology, 2022, 22, 75-86.	3.0	3
33	Dehydration rate of the glycineâ€MgSO₄Â·5H₂O complex and the stability of glycine expelled from the complex by in situ Raman spectroscopy under Marsâ€relevant conditions. Journal of Raman Spectroscopy, 2022, 53, 724-734.	2.5	2
34	Characterizing Interstellar Medium, Planetary Surface and Deep Environments by Spectroscopic Techniques Using Unique Simulation Chambers at Centro de Astrobiologia (CAB). Life, 2019, 9, 72.	2.4	1