Olivier Poch

List of Publications by Year
in descending order

48 papers	1,596 citations	257450 24 h-index	302126 39 g-index
60 all docs	60 docs citations	60 times ranked	1737 citing authors

#	Article	IF	Citations
1	Reflectance spectra (1â€“5ÂÎ¼m) at low temperatures and different grain sizes of ammonium-bearing minerals relevant for icy bodies. Icarus, 2022, 382, 115055.	2.5	8
2	Reflectance study of ice and Mars soil simulant associationsâ€”II. CO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si125.svg" display="inline" id="d1e1871"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> and H<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si125.svg" display="inline" id="d1e1879"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></	2.5	0
3	Visible and near-infrared reflectance of hyperfine and hyperporous particulate surfaces. Icarus, 2021, 357, 114141.	2.5	13
4	Reflectance study of ice and Mars soil simulant associations â€“ I. H2O ice. Icarus, 2021, 358, 114169.	2.5	5
5	Dwarf planet (1) Ceres surface bluing due to high porosity resulting from sublimation. Nature Communications, 2021, 12, 274.	12.8	10
6	Potential role of the X circular code in the regulation of gene expression. BioSystems, 2021, 203, 104368.	2.0	6
7	Biosignatures of the Earth. Astronomy and Astrophysics, 2021, 651, A68.	5.1	6
8	Origins of colors variability among C-cluster main-belt asteroids. Icarus, 2021, 365, 114494.	2.5	5
9	Testing tholins as analogues of the dark reddish material covering Plutoâ€™s Cthulhu region. Icarus, 2021, 367, 114574.	2.5	6
10	VIS-IR Spectroscopy of Mixtures of Water Ice, Organic Matter, and Opaque Mineral in Support of Small Body Remote Sensing Observations. Minerals (Basel, Switzerland), 2021, 11, 1222.	2.0	4
11	VIS-NIR/SWIR Spectral Properties of H2O Ice Depending on Particle Size and Surface Temperature. Minerals (Basel, Switzerland), 2021, 11, 1328.	2.0	6
12	Ammonium salts are a reservoir of nitrogen on a cometary nucleus and possibly on some asteroids. Science, 2020, 367, .	12.6	115
13	Infrared detection of aliphatic organics on a cometary nucleus. Nature Astronomy, 2020, 4, 500-505.	10.1	41
14	The Photochemistry on Space Station (PSS) Experiment: Organic Matter under Mars-like Surface UV Radiation Conditions in Low Earth Orbit. Astrobiology, 2019, 19, 1037-1052.	3.0	16
15	Experimenting with Mixtures of Water Ice and Dust as Analogues for Icy Planetary Material. Space Science Reviews, 2019, 215, 1.	8.1	29
16	Simulated asteroid materials based on carbonaceous chondrite mineralogies. Meteoritics and Planetary Science, 2019, 54, 2067-2082.	1.6	28
17	Ultraviolet-photon fingerprints on chondritic large organic molecules. Geochemical Journal, 2019, 53, 21-32.	1.0	19
18	A snapshot full-Stokes spectropolarimeter for detecting life on Earth. , 2019, , .		3

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19	Cometary Dust. Space Science Reviews, 2018, 214, 1.	8.1	88
20	0.2 to 10ÂkeV electrons interacting with water ice: Radiolysis, sputtering, and sublimation. Planetary and Space Science, 2018, 155, 91-98.	1.7	23
21	Thermal fracturing on comets. Astronomy and Astrophysics, 2018, 610, A76.	5.1	24
22	Polarimetry of Water Ice Particles Providing Insights on Grain Size and Degree of Sintering on Icy Planetary Surfaces. Journal of Geophysical Research E: Planets, 2018, 123, 2564-2584.	3.6	19
23	Remote Sensing of Potential Biosignatures from Rocky, Liquid, or Icy (Exo)Planetary Surfaces. Astrobiology, 2017, 17, 231-252.	3.0	29
24	Bidirectional reflectance of laboratory cometary analogues to interpret the spectrophotometric properties of the nucleus of comet 67P/Churyumov-Gerasimenko. Planetary and Space Science, 2017, 148, 1-11.	1.7	15
25	Bidirectional reflectance and VIS-NIR spectroscopy of cometary analogues under simulated space conditions. Planetary and Space Science, 2017, 145, 14-27.	1.7	14
26	Space as a Tool for Astrobiology: Review and Recommendations for Experimentations in Earth Orbit and Beyond. Space Science Reviews, 2017, 209, 83-181.	8.1	54
27	MyGeneFriends: A Social Network Linking Genes, Genetic Diseases, and Researchers. Journal of Medical Internet Research, 2017, 19, e212.	4.3	5
28	A porosity gradient in 67P/C-G nucleus suggested from CONSERT and SESAME-PP results: an interpretation based on new laboratory permittivity measurements of porous icy analogues. Monthly Notices of the Royal Astronomical Society, 2016, 462, S89-S98.	4.4	29
29	Oxidants at the Surface of Mars: A Review in Light of Recent Exploration Results. Astrobiology, 2016, 16, 977-996.	3.0	83
30	Characterization of the permittivity of controlled porous water ice-dust mixtures to support the radar exploration of icy bodies. Journal of Geophysical Research E: Planets, 2016, 121, 2426-2443.	3.6	17
31	Surface charging of thick porous water ice layers relevant for ion sputtering experiments. Planetary and Space Science, 2016, 126, 63-71.	1.7	11
32	Decimetre-scaled spectrophotometric properties of the nucleus of comet 67P/Churyumovâ€“Gerasimenko from OSIRIS observations. Monthly Notices of the Royal Astronomical Society, 2016, 462, S287-S303.	4.4	26
33	Sublimation of water ice mixed with silicates and tholins: Evolution of surface texture and reflectance spectra, with implications for comets. Icarus, 2016, 267, 154-173.	2.5	73
34	Sublimation of iceâ€“tholins mixtures: A morphological and spectro-photometric study. Icarus, 2016, 266, 288-305.	2.5	35
35	Experimental characterization of the opposition surge in fine-grained waterâ€“ice and high albedo ice analogs. Icarus, 2016, 264, 109-131.	2.5	23
36	OSIRIS observations of meter-sized exposures of H₂O ice at the surface of 67P/Churyumov-Gerasimenko and interpretation using laboratory experiments. Astronomy and Astrophysics, 2015, 583, A25.	5.1	97

#	Article	IF	Citations
37	Redistribution of particles across the nucleus of comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2015, 583, A17.	5.1	149
38	VISâ€NIR reflectance of water ice/regolith analogue mixtures and implications for the detectability of ice mixed within planetary regoliths. Geophysical Research Letters, 2015, 42, 6205-6212.	4.0	36
39	The SCITEAS experiment: Optical characterizations of sublimating icy planetary analogues. Planetary and Space Science, 2015, 109-110, 106-122.	1.7	26
40	Effect of Nontronite Smectite Clay on the Chemical Evolution of Several Organic Molecules under Simulated Martian Surface Ultraviolet Radiation Conditions. Astrobiology, 2015, 15, 221-237.	3.0	49
41	Laboratory insights into the chemical and kinetic evolution of several organic molecules under simulated Mars surface UV radiation conditions. Icarus, 2014, 242, 50-63.	2.5	56
42	Can laboratory tholins mimic the chemistry producing Titan's aerosols? A review in light of ACP experimental results. Planetary and Space Science, 2013, 77, 91-103.	1.7	51
43	Chemical evolution of organic molecules under Mars-like UV radiation conditions simulated in the laboratory with the â€œMars organic molecule irradiation and evolutionâ€•(MOMIE) setup. Planetary and Space Science, 2013, 85, 188-197.	1.7	39
44	The PROCESS Experiment: Amino and Carboxylic Acids Under Mars-Like Surface UV Radiation Conditions in Low-Earth Orbit. Astrobiology, 2012, 12, 436-444.	3.0	33
45	Prebiotic-like chemistry on Titan. Chemical Society Reviews, 2012, 41, 5380.	38.1	82
46	The PROCESS Experiment: An Astrochemistry Laboratory for Solid and Gaseous Organic Samples in Low-Earth Orbit. Astrobiology, 2012, 12, 412-425.	3.0	28
47	Production yields of organics of astrobiological interest from H2Oâ€“NH3 hydrolysis of Titan's tholins. Planetary and Space Science, 2012, 61, 114-123.	1.7	34
48	The fate of aerosols on the surface of Titan. Faraday Discussions, 2010, 147, 419.	3.2	28