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	Redistribution of particles across the nucleus of comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2015, 583, A17.	5.1	149
2	Ammonium salts are a reservoir of nitrogen on a cometary nucleus and possibly on some asteroids. Science, 2020, 367, .	12.6	115
3	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
4	Cometary Dust. Space Science Reviews, 2018, 214, 1.	8.1	88
5	Oxidants at the Surface of Mars: A Review in Light of Recent Exploration Results. Astrobiology, 2016, 16, 977-996.	3.0	83
6	Prebiotic-like chemistry on Titan. Chemical Society Reviews, 2012, 41, 5380.	38.1	82
7	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
8	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
9	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
10	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
11	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
12	Infrared detection of aliphatic organics on a cometary nucleus. Nature Astronomy, 2020, 4, 500-505.	10.1	41
13	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
14	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
15	Sublimation of iceâ€"tholins mixtures: A morphological and spectro-photometric study. Icarus, 2016, 266, 288-305.	2.5	35
16	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
17	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
18	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

#	Article	IF	Citations
19	Remote Sensing of Potential Biosignatures from Rocky, Liquid, or Icy (Exo)Planetary Surfaces. Astrobiology, 2017, 17, 231-252.	3.0	29
20	Experimenting with Mixtures of Water Ice and Dust as Analogues for Icy Planetary Material. Space Science Reviews, 2019, 215, 1.	8.1	29
21	The fate of aerosols on the surface of Titan. Faraday Discussions, 2010, 147, 419.	3.2	28
22	The PROCESS Experiment: An Astrochemistry Laboratory for Solid and Gaseous Organic Samples in Low-Earth Orbit. Astrobiology, 2012, 12, 412-425.	3.0	28
23	Simulated asteroid materials based on carbonaceous chondrite mineralogies. Meteoritics and Planetary Science, 2019, 54, 2067-2082.	1.6	28
24	The SCITEAS experiment: Optical characterizations of sublimating icy planetary analogues. Planetary and Space Science, 2015, 109-110, 106-122.	1.7	26
25	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
26	Thermal fracturing on comets. Astronomy and Astrophysics, 2018, 610, A76.	5.1	24
27	Experimental characterization of the opposition surge in fine-grained waterâ€“ice and high albedo ice analogs. Icarus, 2016, 264, 109-131.	2.5	23
28	0.2 to 10Â keV electrons interacting with water ice: Radiolysis, sputtering, and sublimation. Planetary and Space Science, 2018, 155, 91-98.	1.7	23
29	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
30	Ultraviolet-photon fingerprints on chondritic large organic molecules. Geochemical Journal, 2019, 53, 21-32.	1.0	19
31	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
32	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
33	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
34	Bidirectional reflectance and VIS-NIR spectroscopy of cometary analogues under simulated space conditions. Planetary and Space Science, 2017, 145, 14-27.	1.7	14
35	Visible and near-infrared reflectance of hyperfine and hyperporous particulate surfaces. Icarus, 2021, 357, 114141.	2.5	13
36	Surface charging of thick porous water ice layers relevant for ion sputtering experiments. Planetary and Space Science, 2016, 126, 63-71.	1.7	11

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37	Dwarf planet (1) Ceres surface bluing due to high porosity resulting from sublimation. Nature Communications, 2021, 12, 274.	12.8	10
38	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
39	Potential role of the X circular code in the regulation of gene expression. BioSystems, 2021, 203, 104368.	2.0	6
40	Biosignatures of the Earth. Astronomy and Astrophysics, 2021, 651, A68.	5.1	6
41	Testing tholins as analogues of the dark reddish material covering Plutoâ€™s Cthulhu region. Icarus, 2021, 367, 114574.	2.5	6
42	VIS-NIR/SWIR Spectral Properties of H2O Ice Depending on Particle Size and Surface Temperature. Minerals (Basel, Switzerland), 2021, 11, 1328.	2.0	6
43	Reflectance study of ice and Mars soil simulant associations â€“ I. H2O ice. Icarus, 2021, 358, 114169.	2.5	5
44	Origins of colors variability among C-cluster main-belt asteroids. Icarus, 2021, 365, 114494.	2.5	5
45	MyGeneFriends: A Social Network Linking Genes, Genetic Diseases, and Researchers. Journal of Medical Internet Research, 2017, 19, e212.	4.3	5
46	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
47	A snapshot full-Stokes spectropolarimeter for detecting life on Earth. , 2019, , .		3
48	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