

Patrick Pinet

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3321489/publications.pdf>

Version: 2024-02-01

90
papers

10,501
citations

57752

44
h-index

46795

89
g-index

92
all docs

92
docs citations

92
times ranked

5626
citing authors

#	ARTICLE	IF	CITATIONS
1	In situ recording of Mars soundscape. <i>Nature</i> , 2022, 605, 653-658.	27.8	30
2	Deposition and erosion of a Light-Toned Yardang-forming unit of Mt Sharp, Gale crater, Mars. <i>Earth and Planetary Science Letters</i> , 2021, 554, 116681.	4.4	13
3	The SuperCam Instrument Suite on the Mars 2020 Rover: Science Objectives and Mast-Unit Description. <i>Space Science Reviews</i> , 2021, 217, 1.	8.1	131
4	Laser-Induced Breakdown Spectroscopy (LIBS) characterization of granular soils: Implications for ChemCam analyses at Gale crater, Mars. <i>Icarus</i> , 2021, 365, 114481.	2.5	11
5	The SuperCam Instrument Suite on the NASA Mars 2020 Rover: Body Unit and Combined System Tests. <i>Space Science Reviews</i> , 2021, 217, 4.	8.1	160
6	Tracing Carbonate Formation, Serpentinization, and Biological Materials With Micro-/Meso-Scale Infrared Imaging Spectroscopy in a Mars Analog System, Samail Ophiolite, Oman. <i>Earth and Space Science</i> , 2021, 8, e2021EA001637.	2.6	3
7	Characteristics, Origins, and Biosignature Preservation Potential of Carbonate-Bearing Rocks Within and Outside of Jezero Crater. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2021JE006898.	3.6	16
8	Synergistic Ground and Orbital Observations of Iron Oxides on Mt. Sharp and Vera Rubin Ridge. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006294.	3.6	27
9	The Moon's mantle unveiled. <i>Nature</i> , 2019, 569, 338-339.	27.8	4
10	Experimental exploration of volcanic rocks-atmosphere interaction under Venus surface conditions. <i>Icarus</i> , 2019, 329, 8-23.	2.5	40
11	Bagnold Dunes Campaign Phase 2: Visible/Near-Infrared Reflectance Spectroscopy of Longitudinal Ripple Sands. <i>Geophysical Research Letters</i> , 2018, 45, 9480-9487.	4.0	17
12	Visible/near-infrared spectral diversity from in situ observations of the Bagnold Dune Field sands in Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 2655-2684.	3.6	40
13	Origin of the dunitic mantle-crust transition zone in the Oman ophiolite: The interplay between percolating magmas and high-temperature hydrous fluids. <i>Geology</i> , 2017, 45, 471-474.	4.4	42
14	Geochemistry of the Bagnold dune field as observed by ChemCam and comparison with other aeolian deposits at Gale Crater. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 2144-2162.	3.6	46
15	The High Resolution Stereo Camera (HRSC) of Mars Express and its approach to science analysis and mapping for Mars and its satellites. <i>Planetary and Space Science</i> , 2016, 126, 93-138.	1.7	128
16	Magmatic complexity on early Mars as seen through a combination of orbital, in-situ and meteorite data. <i>Lithos</i> , 2016, 254-255, 36-52.	1.4	66
17	ChemCam activities and discoveries during the nominal mission of the Mars Science Laboratory in Gale crater, Mars. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 863-889.	3.0	134
18	Hydrogen detection with ChemCam at Gale crater. <i>Icarus</i> , 2015, 249, 43-61.	2.5	58

#	ARTICLE	IF	CITATIONS
19	In situ evidence for continental crust on early Mars. <i>Nature Geoscience</i> , 2015, 8, 605-609.	12.9	233
20	Characterization and mapping of surface physical properties of Mars from CRISM multi-angular data: Application to Gusev Crater and Meridiani Planum. <i>Icarus</i> , 2015, 253, 271-295.	2.5	26
21	Gale crater and impact processes " Curiosity's first 364 Sols on Mars. <i>Icarus</i> , 2015, 249, 108-128.	2.5	37
22	The ChemCam Remote Micro-Imager at Gale crater: Review of the first year of operations on Mars. <i>Icarus</i> , 2015, 249, 93-107.	2.5	95
23	Understanding the signature of rock coatings in laser-induced breakdown spectroscopy data. <i>Icarus</i> , 2015, 249, 62-73.	2.5	49
24	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1242777.	12.6	687
25	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1243480.	12.6	508
26	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1244734.	12.6	246
27	The rock abrasion record at Gale Crater: Mars Science Laboratory results from Bradbury Landing to Rocknest. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 1374-1389.	3.6	46
28	The adapted Modified Gaussian Model: A tool to characterize the composition of magmatic rocks on terrestrial "planets"., 2014, , .		0
29	Igneous mineralogy at Bradbury Rise: The first ChemCam campaign at Gale crater. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 30-46.	3.6	114
30	A systematic mapping procedure based on the Modified Gaussian Model to characterize magmatic units from olivine/pyroxenes mixtures: Application to the Syrtis Major volcanic shield on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 1632-1655.	3.6	33
31	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. <i>Science</i> , 2013, 341, 1238932.	12.6	327
32	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. <i>Science</i> , 2013, 341, 1239505.	12.6	280
33	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. <i>Science</i> , 2013, 341, 263-266.	12.6	327
34	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. <i>Science</i> , 2013, 341, 1238937.	12.6	367
35	Martian Fluvial Conglomerates at Gale Crater. <i>Science</i> , 2013, 340, 1068-1072.	12.6	326
36	The Petrochemistry of Jake_M: A Martian Mugearite. <i>Science</i> , 2013, 341, 1239463.	12.6	134

#	ARTICLE	IF	CITATIONS
37	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. <i>Science</i> , 2013, 341, 1238670.	12.6	215
38	Surface reflectance of Mars observed by CRISM/MRO: 1. Multi-angle Approach for Retrieval of Surface Reflectance from CRISM observations (MARS-ReCO). <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 514-533.	3.6	37
39	Surface reflectance of Mars observed by CRISM/MRO: 2. Estimation of surface photometric properties in Gusev Crater and Meridiani Planum. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 534-559.	3.6	43
40	The ChemCam Instrument Suite on the Mars Science Laboratory (MSL) Rover: Science Objectives and Mast Unit Description. <i>Space Science Reviews</i> , 2012, 170, 95-166.	8.1	372
41	The ChemCam Instrument Suite on the Mars Science Laboratory (MSL) Rover: Science Objectives and Mast Unit Description. , 2012, , 95-166.		2
42	Segregation of olivine grains in volcanic sands in Iceland and implications for Mars. <i>Earth and Planetary Science Letters</i> , 2011, 310, 233-243.	4.4	49
43	Lunar mare single-scattering, porosity, and surface-roughness properties with SMART-1 AMIE. <i>Astronomy and Astrophysics</i> , 2011, 531, A150.	5.1	23
44	An experimental study of Hapke's modeling of natural granular surface samples. <i>Icarus</i> , 2011, 215, 313-331.	2.5	74
45	A new systematic approach using the Modified Gaussian Model: Insight for the characterization of chemical composition of olivines, pyroxenes and olivine-pyroxene mixtures. <i>Icarus</i> , 2011, 213, 404-422.	2.5	63
46	Volcanic sands of Iceland -Diverse origins of aeolian sand deposits revealed at Dyngjusedur and Lambahraun. <i>Earth Surface Processes and Landforms</i> , 2011, 36, 1789-1808.	2.5	50
47	Thick sections of layered ultramafic cumulates in the Oman ophiolite revealed by an airborne hyperspectral survey: Petrogenesis and relationship to mantle diapirism. <i>Lithos</i> , 2010, 114, 265-281.	1.4	44
48	Quantitative geochemical mapping of martian elemental provinces. <i>Icarus</i> , 2010, 207, 226-247.	2.5	42
49	Mineralogy of recent volcanic plains in the Tharsis region, Mars, and implications for platy-ridged flow composition. <i>Earth and Planetary Science Letters</i> , 2010, 294, 440-450.	4.4	42
50	Surface-compositional properties of the Malea Planum region of the Circum-Hellas Volcanic Province, Mars. <i>Earth and Planetary Science Letters</i> , 2010, 294, 451-465.	4.4	17
51	Evidence in favor of small amounts of ephemeral and transient water during alteration at Meridiani Planum, Mars. <i>American Mineralogist</i> , 2009, 94, 1279-1282.	1.9	45
52	Shape, rheology and emplacement times of small martian shield volcanoes. <i>Journal of Volcanology and Geothermal Research</i> , 2009, 185, 47-68.	2.1	33
53	The morphologies of volcanic landforms at Central Elysium Planitia: Evidence for recent and fluid lavas on Mars. <i>Icarus</i> , 2009, 200, 39-51.	2.5	59
54	Quantitative compositional analysis of martian mafic regions using the MEX/OMEGA reflectance data. <i>Icarus</i> , 2009, 201, 84-101.	2.5	109

#	ARTICLE	IF	CITATIONS
55	The Aristarchus Plateau on the Moon: Mineralogical and structural study from integrated Clementine UV-Vis-NIR spectral data. <i>Icarus</i> , 2009, 199, 9-24.	2.5	36
56	Quantitative compositional analysis of martian mafic regions using the MEx/OMEGA reflectance data 1. Methodology, uncertainties and examples of application. <i>Icarus</i> , 2009, 201, 69-83.	2.5	63
57	Photometric anomalies of the lunar surface studied with SMART-1 AMIE data. <i>Icarus</i> , 2009, 202, 393-413.	2.5	48
58	The volcanic history of central Elysium Planitia: Implications for martian magmatism. <i>Icarus</i> , 2009, 204, 418-442.	2.5	157
59	The Circum-Hellas Volcanic Province, Mars: Overview. <i>Planetary and Space Science</i> , 2009, 57, 895-916.	1.7	83
60	Geological mapping strategy using visible near-infrared-shortwave infrared hyperspectral remote sensing: Application to the Oman ophiolite (Sumail Massif). <i>Geochemistry, Geophysics, Geosystems</i> , 2009, 10, .	2.5	23
61	Analysis of OMEGA/Mars Express data hyperspectral data using a Multiple-Endmember Linear Spectral Unmixing Model (MELSUM): Methodology and first results. <i>Planetary and Space Science</i> , 2008, 56, 951-975.	1.7	88
62	Identification of a new outflow channel on Mars in Syrtis Major Planum using HRSC/MEx data. <i>Planetary and Space Science</i> , 2008, 56, 1030-1042.	1.7	28
63	Gusev photometric variability as seen from orbit by HRSC/Mars-express. <i>Icarus</i> , 2008, 197, 403-428.	2.5	28
64	Mars Express High Resolution Stereo Camera spectrophotometric data: Characteristics and science analysis. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	23
65	Mineralogical structure of the subsurface of Syrtis Major from OMEGA observations of lobate ejecta blankets. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	31
66	Martian surface mineralogy from Observatoire pour la Minéralogie, l'Eau, les Glaces et l'Activité on board the Mars Express spacecraft (OMEGA/MEx): Global mineral maps. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	191
67	Surface roughness and geological mapping at subhectometer scale from the High Resolution Stereo Camera onboard Mars Express. <i>Icarus</i> , 2007, 191, 38-51.	2.5	17
68	Mapping of an ophiolite complex by high-resolution visible-infrared spectrometry. <i>Geochemistry, Geophysics, Geosystems</i> , 2006, 7, n/a-n/a.	2.5	22
69	Orientation and distribution of recent gullies in the southern hemisphere of Mars: Observations from High Resolution Stereo Camera/Mars Express (HRSC/MEX) and Mars Orbiter Camera/Mars Global Surveyor (MOC/MGS) data. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	120
70	Imaging spectroscopy of changing Earth's surface: a major step toward the quantitative monitoring of land degradation and desertification. <i>Comptes Rendus - Geoscience</i> , 2006, 338, 1042-1048.	1.2	16
71	Science objectives and first results from the SMART-1/AMIE multicolour micro-camera. <i>Advances in Space Research</i> , 2006, 37, 14-20.	2.6	26
72	Global Mineralogical and Aqueous Mars History Derived from OMEGA/Mars Express Data. <i>Science</i> , 2006, 312, 400-404.	12.6	1,395

#	ARTICLE	IF	CITATIONS
73	The advanced Moon micro-imager experiment (AMIE) on SMART-1: Scientific goals and expected results. <i>Planetary and Space Science</i> , 2005, 53, 1309-1318.	1.7	18
74	Derivation of elemental abundance maps at intermediate resolution from optical interpolation of lunar prospector gamma-ray spectrometer data. <i>Planetary and Space Science</i> , 2005, 53, 1287-1301.	1.7	45
75	Interpreting photometry of regolith-like surfaces with different topographies: shadowing and multiple scattering. <i>Icarus</i> , 2005, 173, 3-15.	2.5	88
76	Experimental determination of the surface photometric contribution in the spectral reflectance deconvolution processes for a simulated martian crater-like regolithic target. <i>Icarus</i> , 2005, 175, 78-91.	2.5	45
77	Phyllosilicates on Mars and implications for early martian climate. <i>Nature</i> , 2005, 438, 623-627.	27.8	825
78	Thermal properties of lobate ejecta in Syrtis Major, Mars: Implications for the mechanisms of formation. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	32
79	Fluid lava flows in Gusev crater, Mars. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	153
80	The SMART-1 Mission: Photometric Studies of the Moon with the AMIE Camera. <i>Solar System Research</i> , 2003, 37, 251-259.	0.7	4
81	Planetary regolith surface analogs:. <i>Icarus</i> , 2003, 165, 414-427.	2.5	92
82	The Mars NetLander panoramic camera. <i>Planetary and Space Science</i> , 2000, 48, 1377-1392.	1.7	5
83	Discrimination between maturity and composition of lunar soils from integrated Clementine UV-visible/near-infrared data: Application to the Aristarchus Plateau. <i>Journal of Geophysical Research</i> , 2000, 105, 9445-9455.	3.3	72
84	Hyperspectral Imaging and Stress Mapping in Agriculture. <i>Remote Sensing of Environment</i> , 1998, 66, 179-191.	11.0	144
85	Martian surface mineralogy from 0.8 to 1.05 μ m TIGER spectro-imagery measurements in Terra Sirenum and Tharsis Montes formation. <i>Planetary and Space Science</i> , 1996, 44, 859-888.	1.7	15
86	Near-Opportunity Martian Limb-Darkening: Quantification and Implication for Visible-Near-Infrared Bidirectional Reflectance Studies. <i>Icarus</i> , 1995, 115, 354-368.	2.5	38
87	Comparative hypsometric analysis of Earth and Venus. <i>Geophysical Research Letters</i> , 1994, 21, 465-468.	4.0	41
88	Copernicus: A Regional Probe of the Lunar Interior. <i>Science</i> , 1993, 260, 797-801.	12.6	40
89	Spectral identification of geological units on the surface of Mars related to the presence of silicates from Earth-based near-infrared telescopic charge-coupled device imaging. <i>Journal of Geophysical Research</i> , 1990, 95, 14435-14446.	3.3	42
90	Continental erosion and large-scale relief. <i>Tectonics</i> , 1988, 7, 563-582.	2.8	282