Vincenzo Orofino

List of Publications by Year
in descending order

75 papers	2,148 citations	361413 20 h-index	233421 45 g-index
78 all docs	78 docs citations	78 times ranked	1886 citing authors

#	Article	IF	Citations
1	Kinetics of Thermal Decomposition of Particulate Samples of MgCO3: Experiments and Models. Chemistry, 2022, 4, 548-559.	2.2	5
2	Taurid complex smoking gun: Detection of cometary activity. Planetary and Space Science, 2021, 207, 105306.	1.7	6
3	Detection of aqueous alteration minerals in Martian open and closed paleolake basins. Planetary and Space Science, 2021, 208, 105342.	1.7	3
4	The changing temperature of the nucleus of comet 67P induced by morphological and seasonal effects. Nature Astronomy, 2019, 3, 649-658.	10.1	34
5	Kinetics of White Soft Minerals (WSMs) Decomposition under Conditions of Interest for Astrobiology: A Theoretical and Experimental Study. Geosciences (Switzerland), 2019, 9, 101.	2.2	8
6	Aqueous alteration detection in Tikhonravov crater, Mars. Planetary and Space Science, 2018, 152, 165-175.	1.7	3
7	Comparison of astronomical software programs for archaeoastronomical applications. Astronomy and Computing, 2018, 25, 118-132.	1.7	6
8	Global Map of Martian Fluvial Systems: Age and Total Eroded Volume Estimations. Earth and Space Science, 2018, 5, 560-577.	2.6	34
9	Estimate of the water flow duration in large Martian fluvial systems. Planetary and Space Science, 2018, 163, 83-96.	1.7	26
10	SEM morphological studies of carbonates and the search for ancient life on Mars. International Journal of Astrobiology, 2017, 16, 137-142.	1.6	3
11	Refractory and semi-volatile organics at the surface of comet 67P/Churyumov-Gerasimenko: Insights from the VIRTIS/Rosetta imaging spectrometer. Icarus, 2016, 272, 32-47.	2.5	127
12	Exposed water ice on the nucleus of comet 67P/Churyumovâ€“Gerasimenko. Nature, 2016, 529, 368-372.	27.8	104
13	The organic-rich surface of comet 67P/Churyumov-Gerasimenko as seen by VIRTIS/Rosetta. Science, 2015, 347, aaa0628.	12.6	293
14	The role of particle size in the laboratory reflectance spectra of pyroxenes: The case of the 670-nm minor feature. Planetary and Space Science, 2015, 117, 96-105.	1.7	1
15	New Possible Astronomic Alignments at the Megalithic Site of Göbekli Tepe, Turkey. Archaeological Discovery, 2015, 03, 40-50.	0.5	12
16	Microbialites vs detrital micrites: Degree of biogenicity, parameter suitable for Mars analogues. Planetary and Space Science, 2014, 97, 34-42.	1.7	6
17	Infrared spectroscopy of microbially induced carbonates and past life on Mars. Icarus, 2013, 226, 119-126.	2.5	13
18	Midinfrared spectra and optical constants of bulk hematite: Comparison with particulate hematite spectra. Icarus, 2011, 211, 839-848.	2.5	8

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19	A spectroscopic method for identifying terrestrial biocarbonates and application to Mars. Icarus, 2011, 213, 473-479.	2.5	5
20	Assessing spectral evidence of aqueous activity in two putative martian paleolakes. Icarus, 2011, 214, 240-245.	2.5	1
21	The Surface Composition and Temperature of Asteroid 21 Lutetia As Observed by Rosetta/VIRTIS. Science, 2011, 334, 492-494.	12.6	110
22	Study of terrestrial fossils in phyllosilicate-rich soils: Implication in the search for biosignatures on Mars. Icarus, 2010, 208, 202-206.	2.5	16
23	Infrared reflectance spectra of particulate mixtures. Journal of Geophysical Research, 2010, 115, .	3.3	3
24	Evaluation of carbonate abundance in putative martian paleolake basins. Icarus, 2009, 200, 426-435.	2.5	8
25	Time-dependent degradation of biotic carbonates and the search for past life on Mars. Planetary and Space Science, 2009, 57, 632-639.	1.7	12
26	Statistical exploration and volume reduction of planetary remote sensing spectral data. Journal of Geophysical Research, 2008, 113, .	3.3	22
27	Infrared transmission spectroscopy of carbonate samples of biotic origin relevant to Mars exobiological studies. Icarus, 2007, 187, 457-463.	2.5	15
28	Scientific goals for the observation of Venus by VIRTIS on ESA/Venus express mission. Planetary and Space Science, 2007, 55, 1653-1672.	1.7	155
29	A dynamic upper atmosphere of Venus as revealed by VIRTIS on Venus Express. Nature, 2007, 450, 641-645.	27.8	95
30	South-polar features on Venus similar to those near the north pole. Nature, 2007, 450, 637-640.	27.8	110
31	On Potential Spectroscopic Detection of Microfossils on Mars. Earth, Moon and Planets, 2007, 101, 127-140.	0.6	4
32	Optical characterization of laser ablated silicates. Icarus, 2007, 191, 381-393.	2.5	31
33	Crystallisation processes in cosmic silicates: Laboratory progress towards understanding structuralâ€“spectral relationships. Advances in Space Research, 2007, 39, 375-391.	2.6	9
34	Cluster analysis of planetary remote sensing spectral data. Journal of Geophysical Research, 2006, 111, .	3.3	28
35	Space weathering of silicates simulated by nanosecond pulse UV excimer laser. Icarus, 2006, 180, 546-554.	2.5	89
36	Modeling asteroid surfaces from observations and irradiation experiments: The case of 832 Karin. Icarus, 2006, 184, 327-337.	2.5	92

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37	Optical constants of particulate minerals from reflectance measurements: The case of calcite. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 100, 250-255.	2.3	6
38	Diffuse reflectance of altered olivine grains: Remote sensing detection and implications for Mars studies. Planetary and Space Science, 2006, 54, 784-793.	1.7	7
39	The Planetary Fourier Spectrometer (PFS) onboard the European Mars Express mission. Planetary and Space Science, 2005, 53, 963-974.	1.7	151
40	Spectral alteration of the Meteorite Epinal (H5) induced by heavy ion irradiation: a simulation of space weathering effects on near-Earth asteroids. Icarus, 2005, 174, 31-35.	2.5	116
41	The optical constants of gypsum particles as analog of Martian sulfates. Advances in Space Research, 2004, 33, 2246-2251.	2.6	11
42	Crystalline comet dust: Laboratory experiments on a simple silicate system. Meteoritics and Planetary Science, 2003, 38, 457-478.	1.6	13
43	Measurements of spectral emissivity related to planetary missions. Advances in Space Research, 2002, 29, 789-795.	2.6	1
44	The complex refractive index of limestone particles: an extension to the FIR range for Mars applications. Planetary and Space Science, 2002, 50, 839-847.	1.7	17
45	Presence and detection of carbonates on the Martian surface. Journal of Geophysical Research, 2001, 106, 27815-27822.	3.3	20
46	A study of physical processes on the surface of mars and their possible bearing on the detectability of carbonates. Advances in Space Research, 2001, 28, 1191-1196.	2.6	1
47	An infrared zoom for space applications. Planetary and Space Science, 2000, 48, 523-528.	1.7	2
48	Carbonates and coated particles on Mars. Planetary and Space Science, 2000, 48, 1341-1347.	1.7	16
49	The 4.6 micron feature of â€“SiH groups in silicate dust grains and infrared cometary spectra. Planetary and Space Science, 1999, 47, 781-785.	1.7	6
50	Processing of amorphous carbon grains produced in hydrogen-rich atmosphere. Advances in Space Research, 1999, 24, 443-447.	2.6	2
51	The spectroscopic search for carbonates on the surface and in the atmosphere of mars: Laboratory measurements and numerical simulations. Advances in Space Research, 1999, 23, 1609-1612.	2.6	4
52	Variability of Circumstellar Emission from Dust Envelopes Around Carbon Stars. Astrophysics and Space Science, 1998, 262, 107-113.	1.4	1
53	Virtis : an imaging spectrometer for the rosetta mission. Planetary and Space Science, 1998, 46, 1291-1304.	1.7	72
54	The infrared optical constants of limestone particles and implications for the search of carbonates on Mars. Planetary and Space Science, 1998, 46, 1659-1669.	1.7	30

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55	Photometric modelling of the Martian dust rings. Planetary and Space Science, 1998, 46, 1697-1709.	1.7	1
56	Variability of Circumstellar Emission from Dust Envelopes Around Carbon Stars. Astrophysics and Space Science, 1997, 251, 97-102.	1.4	0
57	Modelling the influence of surface emittance and atmospheric transmittance on Martian spectra. Advances in Space Research, 1997, 19, 1281-1284.	2.6	11
58	Laboratory simulations of martian dust. Advances in Space Research, 1997, 20, 1605-1608.	2.6	2
59	On the Interstellar Extinction Hump and Laboratory Carbonaceous Grains. Astrophysical Journal, 1996, 462, 1020.	4.5	7
60	Carbon Grains Produced in Partially Hydrogenated Atmospheres and Their Astrophysical Relevance. Astrophysical Journal, 1996, 472, 419-423.	4.5	11
61	The fir emission of dust particles around c-rich IRAS sources. Astrophysics and Space Science, 1995, 224, 227-231.	1.4	0
62	Effect of composition on IR spectra of synthetic amorphous silicate cosmic dust analogues. Planetary and Space Science, 1995, 43, 1241-1246.	1.7	19
63	Radiation transfer modelling of the dust torus of phobos in view of the Mars mission. Planetary and Space Science, 1995, 43, 1479-1483.	1.7	3
64	A Model for the Amorphous Carbon Grains around C-rich Objects. Astrophysical Journal, 1995, 448, 339.	4.5	8
65	Ultraviolet spectra of amorphous carbon grains: Comparison with the circumstellar extinction around C-rich objects. Astrophysical Journal, 1994, 436, 831.	4.5	11
66	Far-infrared emission from dust in the Bok globule Barnard 335. Monthly Notices of the Royal Astronomical Society, 1993, 262, 805-811.	4.4	1
67	Laboratory Spectra of Amorphous and Crystalline Olivine: An Application to Comet Halley IR Spectrum. International Astronomical Union Colloquium, 1991, 126, 125-128.	0.1	0
68	Raman spectra of different carbonaceous materials of astrophysical interest. Infrared Physics, 1990, 30, 19-25.	0.5	8
69	Hydrogenated amorphous carbon grains in Comet Halley?. Astrophysical Journal, 1990, 348, 718.	4.5	14
70	Temperature behavior of infrared spectra of polycyclic aromatic hydrocarbons and the Unidentified Infrared Bands. Astrophysical Journal, 1990, 364, 152.	4.5	6
71	Carbonaceous materials as components of cometary dust. Advances in Space Research, 1989, 9, 285-289.	2.6	21
72	Raman spectra of submicron amorphous carbon grains and mixtures of polycyclic aromatic hydrocarbons. Infrared Physics, 1988, 28, 383-388.	0.5	8

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73	Amorphous carbon around carbon stars. Astrophysics and Space Science, 1987, 138, 127-140.	1.4	11
74	Interstellar amorphous carbon. Astrophysical Journal, 1987, 321, L87.	4.5	22
75	2.5â€“300 Î¼m laboratory observations of submicron SiC particles as cosmic dust candidates. Infrared Physics, 1986, 26, 37-42.	0.5	11