Bernard Schmitt

List of Publications by Year in descending order

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198 papers 13,922 citations

59 h-index 22166 113 g-index

218 all docs

218 docs citations

times ranked

218

6589 citing authors

#	Article	IF	CITATIONS
1	Global Mineralogical and Aqueous Mars History Derived from OMEGA/Mars Express Data. Science, 2006, 312, 400-404.	12.6	1,395
2	Mars Surface Diversity as Revealed by the OMEGA/Mars Express Observations. Science, 2005, 307, 1576-1581.	12.6	842
3	Phyllosilicates on Mars and implications for early martian climate. Nature, 2005, 438, 623-627.	27.8	825
4	Rain, winds and haze during the Huygens probe's descent to Titan's surface. Nature, 2005, 438, 765-778.	27.8	529
5	Surface Ices and the Atmospheric Composition of Pluto. Science, 1993, 261, 745-748.	12.6	358
6	The organic-rich surface of comet 67P/Churyumov-Gerasimenko as seen by VIRTIS/Rosetta. Science, 2015, 347, aaa0628.	12.6	293
7	The temperature-dependent near-infrared absorption spectrum of hexagonal H2O ice. Journal of Geophysical Research, 1998, 103, 25809-25822.	3.3	291
8	Perennial water ice identified in the south polar cap of Mars. Nature, 2004, 428, 627-630.	27.8	279
9	Ices on the Surface of Triton. Science, 1993, 261, 742-745.	12.6	263
10	Sublimation of ices of astrophysical interest: A bibliographic review. Planetary and Space Science, 2009, 57, 2053-2080.	1.7	263
11	Surface compositions across Pluto and Charon. Science, 2016, 351, aad9189.	12.6	242
12	The diurnal cycle of water ice on comet 67P/Churyumov–Gerasimenko. Nature, 2015, 525, 500-503.	27.8	199
13	Composition, Physical State, and Distribution of Ices at the Surface of Triton. Icarus, 1999, 139, 159-178.	2.5	194
14	Virtis: An Imaging Spectrometer for the Rosetta Mission. Space Science Reviews, 2007, 128, 529-559.	8.1	181
15	Near-Infrared Spectroscopy of Simple Hydrocarbons and Carbon Oxides Diluted in Solid N2and as Pure lces: Implications for Triton and Pluto. Icarus, 1997, 127, 354-378.	2.5	173
16	Virtual atomic and molecular data centre. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2151-2159.	2.3	164
17	Evidence for Methane Segregation at the Surface of Pluto. Icarus, 1999, 142, 421-444.	2.5	149
18	New experimental constraints on the composition and structure of tholins. Icarus, 2008, 198, 218-231.	2.5	144

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19	Summer Evolution of the North Polar Cap of Mars as Observed by OMEGA/Mars Express. Science, 2005, 307, 1581-1584.	12.6	142
20	Hydrous mineralogy of CM and CI chondrites from infrared spectroscopy and their relationship with low albedo asteroids. Geochimica Et Cosmochimica Acta, 2010, 74, 4881-4892.	3.9	136
21	The Temperature-Dependent Spectrum of Methane Ice I between 0.7 and 5 $\hat{l}\frac{1}{4}$ m and Opportunities for Near-Infrared Remote Thermometry. Icarus, 2002, 155, 486-496.	2.5	135
22	Plausible condensates in Titan's stratosphere from Voyager infrared spectra. Planetary and Space Science, 1999, 47, 1305-1329.	1.7	134
23	Near-Infrared Spectra of Icy Outer Solar System Surfaces: Remote Determination of H2O Ice Temperatures. Icarus, 1999, 142, 536-549.	2.5	130
24	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
25	The virtual atomic and molecular data centre (VAMDC) consortium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 074003.	1.5	120
26	Modeling of the thermal behavior and of the chemical differentiation of cometary nuclei. Icarus, 1991, 92, 350-365.	2.5	116
27	Ammonium salts are a reservoir of nitrogen on a cometary nucleus and possibly on some asteroids. Science, 2020, 367, .	12.6	115
28	Mapping SO2 Frost on Io by the Modeling of NIMS Hyperspectral Images. Icarus, 2001, 149, 107-132.	2.5	114
29	Transmission infrared spectra (2–25μm) of carbonaceous chondrites (CI, CM, CV–CK, CR, C2) Tj ETQq1 1 (0.78 4 314	rgBT_{Overlo
30	Initial results from the New Horizons exploration of 2014 MU ₆₉ , a small Kuiper Belt object. Science, 2019, 364, .	12.6	113
31	The Surface Composition and Temperature of Asteroid 21 Lutetia As Observed by Rosetta/VIRTIS. Science, 2011, 334, 492-494.	12.6	110
32	The abundance and stability of "water―in type 1 and 2 carbonaceous chondrites (CI, CM and CR). Geochimica Et Cosmochimica Acta, 2014, 137, 93-112.	3.9	104
33	Exposed water ice on the nucleus of comet 67P/Churyumov–Gerasimenko. Nature, 2016, 529, 368-372.	27.8	104
34	Physical state and distribution of materials at the surface of Pluto from New Horizons LEISA imaging spectrometer. Icarus, 2017, 287, 229-260.	2.5	99
35	High-accuracy measurements of snow Bidirectional Reflectance Distribution Function at visible and NIR wavelengths – comparison with modelling results. Atmospheric Chemistry and Physics, 2010, 10, 2507-2520.	4.9	98
36	Pluto's global surface composition through pixel-by-pixel Hapke modeling of New Horizons Ralph/LEISA data. Icarus, 2017, 287, 218-228.	2.5	95

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37	Optical Properties of Ices From UV to Infrared. Astrophysics and Space Science Library, 1998, , 199-240.	2.7	91
38	A multilayer bidirectional reflectance model for the analysis of planetary surface hyperspectral images at visible and near-infrared wavelengths. Journal of Geophysical Research, 1998, 103, 31367-31389.	3.3	87
39	Water Ice, Silicate, and Polycyclic Aromatic Hydrocarbon Emission Featuresin the [ITAL]Infrared Space Observatory[/ITAL] Spectrum of the Carbon-richPlanetary Nebula CPD â^36608032. Astrophysical Journal, 1999, 513, L135-L138.	4.5	85
40	Mid-infrared study of the molecular structure variability of insoluble organic matter from primitive chondrites. Icarus, 2013, 223, 534-543.	2. 5	85
41	Reflectance spectra and chemical structure of Titan's tholins: Application to the analysis of Cassini–Huygens observations. Icarus, 2006, 185, 301-307.	2.5	84
42	The 3–5MHz global reflectivity map of Mars by MARSIS/Mars Express: Implications for the current inventory of subsurface H2O. Icarus, 2010, 210, 612-625.	2.5	82
43	Winter and spring evolution of northern seasonal deposits on Mars from OMEGA on Mars Express. Journal of Geophysical Research, 2011, 116, .	3.3	79
44	The small satellites of Pluto as observed by New Horizons. Science, 2016, 351, aae0030.	12.6	78
45	TandEM: Titan and Enceladus mission. Experimental Astronomy, 2009, 23, 893-946.	3.7	77
46	First observations of H ₂ O and CO ₂ vapor in comet 67P/Churyumov-Gerasimenko made by VIRTIS onboard Rosetta. Astronomy and Astrophysics, 2015, 583, A6.	5.1	77
47	Titan's 3-micron spectral region from ISO high-resolution spectroscopy. Icarus, 2006, 180, 176-185.	2.5	74
48	Virtis: an imaging spectrometer for the rosetta mission. Planetary and Space Science, 1998, 46, 1291-1304.	1.7	72
49	Evolution of CO ₂ , CH ₄ , and OCS abundances relative to H ₂ O in the coma of comet 67P around perihelion from <i>Rosetta</i> /VIRTIS-H observations. Monthly Notices of the Royal Astronomical Society, 2016, 462, S170-S183.	4.4	72
50	Photometric properties of comet 67P/Churyumov-Gerasimenko from VIRTIS-M onboard Rosetta. Astronomy and Astrophysics, 2015, 583, A31.	5.1	71
51	Detection of exposed H ₂ 0 ice on the nucleus of comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2016, 595, A102.	5.1	67
52	Water Ice on Triton. Icarus, 2000, 147, 309-316.	2.5	66
53	The complete ISO spectrum of NGC 6302. Astronomy and Astrophysics, 2001, 372, 165-172.	5.1	65
54	Color, composition, and thermal environment of Kuiper Belt object (486958) Arrokoth. Science, 2020, 367, .	12.6	64

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55	The Temperature-Dependent Spectra of \hat{l}_{\pm} and \hat{l}_{\pm}^2 Nitrogen Ice with Application to Triton. Icarus, 1993, 105, 254-258.	2.5	63
56	Pluto's Non-isothermal Surface. Icarus, 2000, 147, 220-250.	2.5	63
57	Water sorption on martian regolith analogs: Thermodynamics and near-infrared reflectance spectroscopy. Icarus, 2009, 204, 114-136.	2.5	63
58	Identification of Three Absorption Bands in the 2-Î⅓m Spectrum of Io. Icarus, 1994, 111, 79-105.	2.5	62
59	Seasonal exposure of carbon dioxide ice on the nucleus of comet 67P/Churyumov-Gerasimenko. Science, 2016, 354, 1563-1566.	12.6	61
60	South Pole of Mars: Nature and composition of the icy terrains from Mars Express OMEGA observations. Planetary and Space Science, 2007, 55, 113-133.	1.7	60
61	The temperature dependence of the CO infrared band strength in CO:H2O ices. Astrophysical Journal, 1989, 340, L33.	4.5	60
62	Photometry of meteorites. Icarus, 2012, 218, 364-377.	2.5	58
63	A Spectroscopic Study of CO Diluted in N2Ice: Applications for Triton and Pluto. Icarus, 1997, 128, 181-188.	2.5	57
64	Sequestration of Ethane in the Cryovolcanic Subsurface of Titan. Astrophysical Journal, 2008, 677, L67-L70.	4.5	57
65	STRATIFICATION OF METHANE ICE ON ERIS' SURFACE. Astronomical Journal, 2009, 137, 315-328.	4.7	55
66	No signature of clear CO2 ice from the  cryptic' regions in Mars' south seasonal polar cap. Nature, 2006, 442, 790-792.	27.8	54
67	The global surface composition of 67P/CG nucleus by Rosetta/VIRTIS. (I) Prelanding mission phase. Icarus, 2016, 274, 334-349.	2.5	54
68	TheÂnitrogenÂcyclesÂonÂPlutoÂoverÂseasonalÂand astronomicalÂtimescales. Icarus, 2018, 309, 277-296.	2.5	54
69	Spectrogonio radiometer for the study of the bidirectional reflectance and polarization functions of planetary surfaces 1 Design and tests. Applied Optics, 2004, 43, 1926.	2.1	53
70	A Decade with VAMDC: Results and Ambitions. Atoms, 2020, 8, 76.	1.6	53
71	A model for the overabundance of methane in the atmospheres of Pluto and Triton. Planetary and Space Science, 1996, 44, 1051-1063.	1.7	52
72	Geological mapping of Sputnik Planitia on Pluto. Icarus, 2017, 287, 261-286.	2.5	52

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73	Titan's 5-μm window: observations with the Very Large Telescope. Icarus, 2003, 162, 125-142.	2.5	51
74	A TENTATIVE IDENTIFICATION OF HCN ICE ON TRITON. Astrophysical Journal Letters, 2010, 718, L53-L57.	8.3	51
75	Water vapor mapping on Mars using OMEGA/Mars Express. Planetary and Space Science, 2007, 55, 333-342.	1.7	50
76	Pluto's haze as a surface material. Icarus, 2018, 314, 232-245.	2.5	50
77	Very high resolution mass spectrometry of HCN polymers and tholins. Faraday Discussions, 2010, 147, 495.	3.2	49
78	Composition of Pluto's small satellites: Analysis of New Horizons spectral images. Icarus, 2018, 315, 30-45.	2.5	49
79	Detection of ammonia on Pluto's surface in a region of geologically recent tectonism. Science Advances, 2019, 5, eaav5731.	10.3	49
80	Titan's surface albedo variations over a Titan season from near-infrared CFHT/FTS spectra. Planetary and Space Science, 2006, 54, 1225-1246.	1.7	47
81	Pluto's Spectrum from 1.0 to 4.2 \hat{l} /4m: Implications for Surface Properties. Astronomical Journal, 2007, 133, 420-431.	4.7	47
82	Bladed Terrain on Pluto: Possible origins and evolution. Icarus, 2018, 300, 129-144.	2.5	47
83	Goethite as an alternative origin of the $3.1 < i > \hat{l} / 4 < i > m$ band on dark asteroids. Astronomy and Astrophysics, 2011, 526, A85.	5.1	46
84	Study of Titan's fall southern stratospheric polar cloud composition with Cassini/CIRS: Detection of benzene ice. Icarus, 2018, 310, 89-104.	2.5	46
85	Hydrogen/deuterium exchange in interstellar ice analogs. Astronomy and Astrophysics, 2009, 496, L21-L24.	5.1	46
86	Recent cryovolcanism in Virgil Fossae on Pluto. Icarus, 2019, 330, 155-168.	2.5	45
87	The formation of Charon's red poles from seasonally cold-trapped volatiles. Nature, 2016, 539, 65-68.	27.8	44
88	Aphelion waterâ€ice cloud mapping and property retrieval using the OMEGA imaging spectrometer onboard Mars Express. Journal of Geophysical Research, 2012, 117, .	3.3	42
89	WAVANGLET: An Efficient Supervised Classifier for Hyperspectral Images. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 1374-1385.	6.3	41
90	A cometary nucleus model taking into account all phase changes of water ice: amorphous, crystalline, and clathrate. Astronomy and Astrophysics, 2012, 542, A82.	5.1	41

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91	Carbon dioxide clathrate hydrate FTIR spectrum. Astronomy and Astrophysics, 2009, 504, 869-873.	5.1	40
92	SHADOWS: a spectro-gonio radiometer for bidirectional reflectance studies of dark meteorites and terrestrial analogs: design, calibrations, and performances on challenging surfaces. Applied Optics, 2018, 57, 8279.	1.8	40
93	NIR spectral trends of HED meteorites: Can we discriminate between the magmatic evolution, mechanical mixing and observation geometry effects?. Icarus, 2011, 216, 560-571.	2.5	39
94	A Monte Carlo ray-tracing model for scattering and polarization by large particles with complex shapes. Journal of Geophysical Research, 2000, 105, 29291-29314.	3.3	38
95	Bidirectional reflectance spectroscopy of carbonaceous chondrites: Implications for water quantification and primary composition. Icarus, 2016, 264, 172-183.	2.5	38
96	The CH4 cycles on Pluto over seasonal and astronomical timescales. Icarus, 2019, 329, 148-165.	2.5	38
97	Spectroscopy of some ices of astrophysical interest: SO2, N2 and N2: CH4 mixtures. Planetary and Space Science, 1996, 44, 973-986.	1.7	36
98	The redox state of iron in the matrix of CI, CM and metamorphosed CM chondrites by XANES spectroscopy. Geochimica Et Cosmochimica Acta, 2012, 99, 305-316.	3.9	36
99	How to link the relative abundances of gas species in coma of comets to their initial chemical composition?. Icarus, 2014, 242, 225-248.	2.5	36
100	Equilibrium Data of Methane, Carbon Dioxide, and Xenon Clathrate Hydrates below the Freezing Point of Water. Applications to Astrophysical Environments. Journal of Chemical & Engineering Data, 2010, 55, 5101-5108.	1.9	34
101	The changing temperature of the nucleus of comet 67P induced by morphological and seasonal effects. Nature Astronomy, 2019, 3, 649-658.	10.1	34
102	Dynamics and Evolution of SO2 Gas Condensation around Prometheus-like Volcanic Plumes on Io as Seen by the Near Infrared Mapping Spectrometer. Icarus, 2002, 158, 460-482.	2.5	33
103	The Spectral Nature of Titan's Major Geomorphological Units: Constraints on Surface Composition. Journal of Geophysical Research E: Planets, 2018, 123, 489-507.	3.6	33
104	Possible identification of local deposits of Cl2SO2 on lo from NIMS/Galileo spectra. Journal of Geophysical Research, 2003, 108, 8-1-8-19.	3.3	32
105	Albedo control of seasonal South Polar cap recession on Mars. Icarus, 2009, 200, 374-394.	2.5	32
106	Kinetics of water adsorption on minerals and the breathing of the Martian regolith. Journal of Geophysical Research, 2010, 115 , .	3.3	32
107	What is controlling the reflectance spectra (0.35–150 Âμm) of hydrated (and dehydrated) carbonaceous chondrites?. Icarus, 2018, 313, 124-138.	2.5	32
108	Titan's 5-micron lightcurve. Icarus, 2004, 168, 209-214.	2.5	31

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109	Spectroscopy and detectability of liquid brines on mars. Planetary and Space Science, 2014, 92, 136-149.	1.7	31
110	On the origin & Samp; thermal stability of Arrokoth's and Pluto's ices. Icarus, 2021, 356, 114072.	2.5	31
111	Geology and activity around volcanoes on lo from the analysis of NIMS spectral images. Icarus, 2004, 169, 175-196.	2.5	30
112	Pressure dependent trace gas trapping in amorphous water ice at 77 K: Implications for determining conditions of comet formation. Icarus, 2012, 218, 760-770.	2.5	28
113	VESPA: A community-driven Virtual Observatory in Planetary Science. Planetary and Space Science, 2018, 150, 65-85.	1.7	28
114	Photometric and spectroscopic observations of Sycorax, satellite of Uranus. Astronomy and Astrophysics, 2001, 376, 310-315.	5.1	28
115	CLATHRATE HYDRATES FORMATION IN SHORT-PERIOD COMETS. Astrophysical Journal, 2010, 708, 812-816.	4.5	27
116	Hydrogen isotope exchanges between water and methanol in interstellar ices. Astronomy and Astrophysics, 2015, 584, A98.	5.1	27
117	Prebiotic Chemistry of Pluto. Astrobiology, 2019, 19, 831-848.	3.0	26
118	Strength of the H ₂ O nearâ€infrared absorption bands in hydrated minerals: Effects of particle size and correlation with albedo. Journal of Geophysical Research, 2008, 113, .	3.3	25
119	The Global Color of Pluto from New Horizons. Astronomical Journal, 2017, 154, 258.	4.7	25
120	lons in grain mantles - A new explanation for the 6.86 micron absorption in W33A. Astrophysical Journal, 1989, 341, L87.	4.5	25
121	VAMDC—The Virtual Atomic and Molecular Data Centre—A New Way to Disseminate Atomic and Molecular Data—VAMDC Level 1 Release. AIP Conference Proceedings, 2011, , .	0.4	24
122	A Noachian source region for the "Black Beauty―meteorite, and a source lithology for Mars surface hydrated dust?. Earth and Planetary Science Letters, 2015, 427, 104-111.	4.4	24
123	Pluto: Pits and mantles on uplands north and east of Sputnik Planitia. Icarus, 2017, 293, 218-230.	2.5	24
124	Laboratory simulations of the Vis-NIR spectra of comet 67P using sub-µm sized cosmochemical analogues. Icarus, 2018, 306, 306-318.	2.5	23
125	Some things special about NEAs: Geometric and environmental effects on the optical signatures of hydration. Icarus, 2019, 333, 415-428.	2.5	23
126	Strength of the H ₂ O nearâ€infrared absorption bands in hydrated minerals: Effects of measurement geometry. Journal of Geophysical Research, 2008, 113, .	3.3	21

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127	The secondary history of Sutter's Mill CM carbonaceous chondrite based on water abundance and the structure of its organic matter from two clasts. Meteoritics and Planetary Science, 2014, 49, 2064-2073.	1.6	21
128	The distribution of H2O, CH3OH, and hydrocarbon-ices on Pluto: Analysis of New Horizons spectral images. Icarus, 2019, 331, 148-169.	2.5	21
129	S2O, polysulfuroxide and sulfur polymer on lo's surface?. Icarus, 2008, 194, 647-659.	2.5	20
130	New laboratory measurements of CH4 in Titan's conditions and a reanalysis of the DISR near-surface spectra at the Huygens landing site. Planetary and Space Science, 2008, 56, 613-623.	1.7	20
131	Triton's surface ices: Distribution, temperature and mixing state from VLT/SINFONI observations. Icarus, 2018, 314, 274-293.	2.5	20
132	Style and intensity of hydration among C-complex asteroids: A comparison to desiccated carbonaceous chondrites. lcarus, 2020, 348, 113826.	2.5	20
133	On the stability of clathrate hydrates in comets 67P/Churyumov-Gerasimenko and 46P/Wirtanen. Astronomy and Astrophysics, 2011, 525, A144.	5.1	18
134	NIR reflectance spectroscopy of hydrated and anhydrous sodium carbonates at different temperatures. Icarus, 2019, 317, 388-411.	2.5	18
135	"Water―abundance at the surface of C-complex main-belt asteroids. Icarus, 2021, 357, 114125.	2.5	18
136	<title>VIRTIS: Visible Infrared Thermal Imaging Spectrometer for the Rosetta mission</title> ., 1996,,.		17
137	Temperature-dependent VNIR spectroscopy of hydrated Mg-sulfates. Icarus, 2017, 281, 444-458.	2.5	16
138	Pluto's Beating Heart Regulates the Atmospheric Circulation: Results From Highâ€Resolution and Multiyear Numerical Climate Simulations. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006120.	3.6	16
139	Search for Variations in Pluto's Millimeter-Wave Emission. Icarus, 2000, 147, 580-584.	2.5	15
140	Sublimation of the Martian CO2 Seasonal South Polar Cap. Planetary and Space Science, 2010, 58, 1129-1138.	1.7	15
141	Large-scale cryovolcanic resurfacing on Pluto. Nature Communications, 2022, 13, 1542.	12.8	15
142	A Predicted Dearth of Majority Hypervolatile Ices in Oort Cloud Comets. Planetary Science Journal, 2022, 3, 112.	3.6	15
143	Inflight radiometric calibration of New Horizons' Multispectral Visible Imaging Camera (MVIC). Icarus, 2017, 287, 140-151.	2.5	14
144	Methane distribution on Pluto as mapped by the New Horizons Ralph/MVIC instrument. Icarus, 2018, 314, 195-209.	2.5	14

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145	Low-phase spectral reflectance and equivalent "geometric albedo―of meteorites powders. Icarus, 2021, 354, 114066.	2.5	14
146	Low-temperature reflectance spectra of brucite and the primitive surface of 1-Ceres?. Icarus, 2015, 257, 471-476.	2.5	13
147	Visible and near-infrared reflectance of hyperfine and hyperporous particulate surfaces. Icarus, 2021, 357, 114141.	2.5	13
148	Near-infrared study of Titan's resolved disk in spectro-imaging with CFHT/OASIS. Planetary and Space Science, 2005, 53, 535-556.	1.7	12
149	Hydrogen sulfide clathrate hydrate FTIR spectroscopy: A help gas for clathrate formation in the Solar System?. Icarus, 2012, 220, 427-434.	2.5	12
150	Kinetics of hydrogen/deuterium exchanges in cometary ices. Icarus, 2015, 261, 14-30.	2.5	12
151	Equatorial mountains on Pluto are covered by methane frosts resulting from a unique atmospheric process. Nature Communications, 2020, 11, 5056.	12.8	12
152	Equilibrium Pressure of Ethane, Acetylene, and Krypton Clathrate Hydrates below the Freezing Point of Water. Journal of Chemical & Engineering Data, 2012, 57, 3408-3415.	1.9	11
153	Martian atmosphere as observed by VIRTISâ€M on Rosetta spacecraft. Journal of Geophysical Research, 2010, 115, .	3.3	10
154	Planetary Science Virtual Observatory architecture. Astronomy and Computing, 2014, 7-8, 71-80.	1.7	10
155	and seasonal variability. Monthly Notices of the Royal Astronomical Society, 0, , stw3177.	4.4	10
156	Washboard and fluted terrains on Pluto as evidence for ancient glaciation. Nature Astronomy, 2019, 3, 62-68.	10.1	10
157	Mineralogy, chemistry, and composition of organic compounds in the fresh carbonaceous chondrite Mukundpura: CM1 or CM2?. Meteoritics and Planetary Science, 2020, 55, 1681-1696.	1.6	10
158	Dwarf planet (1) Ceres surface bluing due to high porosity resulting from sublimation. Nature Communications, 2021, 12, 274.	12.8	10
159	Modeling Pluto's minimum pressure: Implications for haze production. Icarus, 2021, 356, 114070.	2.5	10
160	The Ices on Transneptunian Objects and Centaurs. Astrophysics and Space Science Library, 2013, , 107-146.	2.7	10
161	Radiative transfer model for contaminated rough slabs. Applied Optics, 2015, 54, 9228.	2.1	10
162	IMPACT REGIMES AND POST-FORMATION SEQUESTRATION PROCESSES: IMPLICATIONS FOR THE ORIGIN OF HEAVY NOBLE GASES IN TERRESTRIAL PLANETS. Astrophysical Journal, 2010, 714, 1418-1423.	4.5	9

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163	Gas–solid carbonation as a possible source of carbonates in cold planetary environments. Planetary and Space Science, 2013, 76, 28-41.	1.7	9
164	A model of the $3-\hat{l}\frac{1}{4}$ m hydration band with Exponentially Modified Gaussian (EMG) profiles: Application to hydrated chondrites and asteroids. Icarus, 2020, 343, 113686.	2.5	9
165	Cryovolcanic flooding in Viking Terra on Pluto. Icarus, 2021, 356, 113786.	2.5	9
166	Global compositional cartography of Pluto from intensity-based registration of LEISA data. Icarus, 2021, 356, 113833.	2.5	9
167	STRUCTURE AND EVOLUTION OF DIFFERENT ICE SURFACES AT LOW TEMPERATURE ADSORPTION STUDIES. Journal De Physique Colloque, 1987, 48, C1-519-C1-525.	0.2	8
168	Reflectance spectra (1–5Âμm) at low temperatures and different grain sizes of ammonium-bearing minerals relevant for icy bodies. Icarus, 2022, 382, 115055.	2.5	8
169	Temperature-dependent, VIS-NIR reflectance spectroscopy of sodium sulfates. Icarus, 2021, 357, 114165.	2.5	7
170	How to distinguish red coloring matter used in prehistoric time? The contribution of visible nearâ€infrared diffuse reflectance spectroscopy. Color Research and Application, 2021, 46, 653-673.	1.6	7
171	Virtual European Solar & Data Science Journal, 2020, 19, .	1.3	7
172	Volatile transport modeling on Triton with new observational constraints. Icarus, 2022, 373, 114764.	2.5	7
173	Distribution and energy balance of Pluto's nitrogen ice, as seen by New Horizons in 2015. Icarus, 2021, 356, 113633.	2.5	6
174	Testing tholins as analogues of the dark reddish material covering Pluto's Cthulhu region. Icarus, 2021, 367, 114574.	2.5	6
175	VIS-NIR/SWIR Spectral Properties of H2O Ice Depending on Particle Size and Surface Temperature. Minerals (Basel, Switzerland), 2021, 11, 1328.	2.0	6
176	Experimental system for the study of planetary surface materials' BRDF. International Journal of Remote Sensing, 2000, 19, 59-74.	1.0	5
177	Pluto's Sputnik Planitia: Composition of geological units from infrared spectroscopy. Icarus, 2021, 359, 114303.	2.5	5
178	Observations of planetary satellites with ISO. Advances in Space Research, 2002, 30, 1971-1977.	2.6	4
179	Tholins and their relevance for astrophysical issues. Proceedings of the International Astronomical Union, 2008, 4, 409-416.	0.0	4
180	Clathrate hydrates: ftir spectroscopy for astrophysical remote detection. EAS Publications Series, 2012, 58, 219-224.	0.3	4

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