

Bernard Schmitt

List of Publications by Year in descending order

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198
papers

13,922
citations

22132

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113
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218
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218
docs citations

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times ranked

6589
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Global Mineralogical and Aqueous Mars History Derived from OMEGA/Mars Express Data. <i>Science</i> , 2006, 312, 400-404. | 6.0 | 1,395 |
| 2 | Mars Surface Diversity as Revealed by the OMEGA/Mars Express Observations. <i>Science</i> , 2005, 307, 1576-1581. | 6.0 | 842 |
| 3 | Phyllosilicates on Mars and implications for early martian climate. <i>Nature</i> , 2005, 438, 623-627. | 13.7 | 825 |
| 4 | Rain, winds and haze during the Huygens probe's descent to Titan's surface. <i>Nature</i> , 2005, 438, 765-778. | 13.7 | 529 |
| 5 | Surface Ices and the Atmospheric Composition of Pluto. <i>Science</i> , 1993, 261, 745-748. | 6.0 | 358 |
| 6 | The organic-rich surface of comet 67P/Churyumov-Gerasimenko as seen by VIRTIS/Rosetta. <i>Science</i> , 2015, 347, aaa0628. | 6.0 | 293 |
| 7 | The temperature-dependent near-infrared absorption spectrum of hexagonal H ₂ O ice. <i>Journal of Geophysical Research</i> , 1998, 103, 25809-25822. | 3.3 | 291 |
| 8 | Perennial water ice identified in the south polar cap of Mars. <i>Nature</i> , 2004, 428, 627-630. | 13.7 | 279 |
| 9 | Ices on the Surface of Triton. <i>Science</i> , 1993, 261, 742-745. | 6.0 | 263 |
| 10 | Sublimation of ices of astrophysical interest: A bibliographic review. <i>Planetary and Space Science</i> , 2009, 57, 2053-2080. | 0.9 | 263 |
| 11 | Surface compositions across Pluto and Charon. <i>Science</i> , 2016, 351, aad9189. | 6.0 | 242 |
| 12 | The diurnal cycle of water ice on comet 67P/Churyumov-Gerasimenko. <i>Nature</i> , 2015, 525, 500-503. | 13.7 | 199 |
| 13 | Composition, Physical State, and Distribution of Ices at the Surface of Triton. <i>Icarus</i> , 1999, 139, 159-178. | 1.1 | 194 |
| 14 | Virtis: An Imaging Spectrometer for the Rosetta Mission. <i>Space Science Reviews</i> , 2007, 128, 529-559. | 3.7 | 181 |
| 15 | Near-Infrared Spectroscopy of Simple Hydrocarbons and Carbon Oxides Diluted in Solid N ₂ and as Pure Ices: Implications for Triton and Pluto. <i>Icarus</i> , 1997, 127, 354-378. | 1.1 | 173 |
| 16 | Virtual atomic and molecular data centre. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2010, 111, 2151-2159. | 1.1 | 164 |
| 17 | Evidence for Methane Segregation at the Surface of Pluto. <i>Icarus</i> , 1999, 142, 421-444. | 1.1 | 149 |
| 18 | New experimental constraints on the composition and structure of tholins. <i>Icarus</i> , 2008, 198, 218-231. | 1.1 | 144 |

| # | ARTICLE | IF | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Summer Evolution of the North Polar Cap of Mars as Observed by OMEGA/Mars Express. <i>Science</i> , 2005, 307, 1581-1584. | 6.0 | 142 |
| 20 | Hydrous mineralogy of CM and CI chondrites from infrared spectroscopy and their relationship with low albedo asteroids. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 4881-4892. | 1.6 | 136 |
| 21 | The Temperature-Dependent Spectrum of Methane Ice I between 0.7 and 5 μ m and Opportunities for Near-Infrared Remote Thermometry. <i>Icarus</i> , 2002, 155, 486-496. | 1.1 | 135 |
| 22 | Plausible condensates in Titan's stratosphere from Voyager infrared spectra. <i>Planetary and Space Science</i> , 1999, 47, 1305-1329. | 0.9 | 134 |
| 23 | Near-Infrared Spectra of Icy Outer Solar System Surfaces: Remote Determination of H ₂ O Ice Temperatures. <i>Icarus</i> , 1999, 142, 536-549. | 1.1 | 130 |
| 24 | Refractory and semi-volatile organics at the surface of comet 67P/Churyumov-Gerasimenko: Insights from the VIRTIS/Rosetta imaging spectrometer. <i>Icarus</i> , 2016, 272, 32-47. | 1.1 | 127 |
| 25 | The virtual atomic and molecular data centre (VAMDC) consortium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 074003. | 0.6 | 120 |
| 26 | Modeling of the thermal behavior and of the chemical differentiation of cometary nuclei. <i>Icarus</i> , 1991, 92, 350-365. | 1.1 | 116 |
| 27 | Ammonium salts are a reservoir of nitrogen on a cometary nucleus and possibly on some asteroids. <i>Science</i> , 2020, 367, . | 6.0 | 115 |
| 28 | Mapping SO ₂ Frost on Io by the Modeling of NIMS Hyperspectral Images. <i>Icarus</i> , 2001, 149, 107-132. | 1.1 | 114 |
| 29 | Transmission infrared spectra (2-25 μ m) of carbonaceous chondrites (CI, CM, CV, CK, CR, C2) Tj ETQq1 1 0.784314 rgBT/Overlaid | 1.1 | 114 |
| 30 | Initial results from the New Horizons exploration of 2014 MU ₆₉ , a small Kuiper Belt object. <i>Science</i> , 2019, 364, . | 6.0 | 113 |
| 31 | The Surface Composition and Temperature of Asteroid 21 Lutetia As Observed by Rosetta/VIRTIS. <i>Science</i> , 2011, 334, 492-494. | 6.0 | 110 |
| 32 | The abundance and stability of water in type 1 and 2 carbonaceous chondrites (CI, CM and CR). <i>Geochimica Et Cosmochimica Acta</i> , 2014, 137, 93-112. | 1.6 | 104 |
| 33 | Exposed water ice on the nucleus of comet 67P/Churyumov-Gerasimenko. <i>Nature</i> , 2016, 529, 368-372. | 13.7 | 104 |
| 34 | Physical state and distribution of materials at the surface of Pluto from New Horizons LEISA imaging spectrometer. <i>Icarus</i> , 2017, 287, 229-260. | 1.1 | 99 |
| 35 | High-accuracy measurements of snow Bidirectional Reflectance Distribution Function at visible and NIR wavelengths - comparison with modelling results. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 2507-2520. | 1.9 | 98 |
| 36 | Pluto's global surface composition through pixel-by-pixel Hapke modeling of New Horizons Ralph/LEISA data. <i>Icarus</i> , 2017, 287, 218-228. | 1.1 | 95 |

| # | ARTICLE | IF | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Optical Properties of Ices From UV to Infrared. Astrophysics and Space Science Library, 1998, , 199-240. | 1.0 | 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 Features in the [ITAL]Infrared Space Observatory[ITAL] Spectrum of the Carbon-rich Planetary Nebula CPD $\hat{\alpha}^2 56^{\circ} 8032$. Astrophysical Journal, 1999, 513, L135-L138. | 1.6 | 85 |
| 40 | Mid-infrared study of the molecular structure variability of insoluble organic matter from primitive chondrites. Icarus, 2013, 223, 534-543. | 1.1 | 85 |
| 41 | Reflectance spectra and chemical structure of Titan's tholins: Application to the analysis of Cassini's Huygens observations. Icarus, 2006, 185, 301-307. | 1.1 | 84 |
| 42 | The 3 $\hat{\alpha}$ 5MHz global reflectivity map of Mars by MARSIS/Mars Express: Implications for the current inventory of subsurface H ₂ O. Icarus, 2010, 210, 612-625. | 1.1 | 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. | 6.0 | 78 |
| 45 | TandEM: Titan and Enceladus mission. Experimental Astronomy, 2009, 23, 893-946. | 1.6 | 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. | 2.1 | 77 |
| 47 | Titan's 3-micron spectral region from ISO high-resolution spectroscopy. Icarus, 2006, 180, 176-185. | 1.1 | 74 |
| 48 | Virtis : an imaging spectrometer for the rosetta mission. Planetary and Space Science, 1998, 46, 1291-1304. | 0.9 | 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 Rosetta/VIRTIS-H observations. Monthly Notices of the Royal Astronomical Society, 2016, 462, S170-S183. | 1.6 | 72 |
| 50 | Photometric properties of comet 67P/Churyumov-Gerasimenko from VIRTIS-M onboard Rosetta. Astronomy and Astrophysics, 2015, 583, A31. | 2.1 | 71 |
| 51 | Detection of exposed H ₂ O ice on the nucleus of comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2016, 595, A102. | 2.1 | 67 |
| 52 | Water Ice on Triton. Icarus, 2000, 147, 309-316. | 1.1 | 66 |
| 53 | The complete ISO spectrum of NGC 6302. Astronomy and Astrophysics, 2001, 372, 165-172. | 2.1 | 65 |
| 54 | Color, composition, and thermal environment of Kuiper Belt object (486958) Arrokoth. Science, 2020, 367, . | 6.0 | 64 |

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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | The Temperature-Dependent Spectra of ^{14}N and ^{15}N Nitrogen Ice with Application to Triton. <i>Icarus</i> , 1993, 105, 254-258. | 1.1 | 63 |
| 56 | Pluto's Non-isothermal Surface. <i>Icarus</i> , 2000, 147, 220-250. | 1.1 | 63 |
| 57 | Water sorption on martian regolith analogs: Thermodynamics and near-infrared reflectance spectroscopy. <i>Icarus</i> , 2009, 204, 114-136. | 1.1 | 63 |
| 58 | Identification of Three Absorption Bands in the 2- $\frac{1}{4}$ m Spectrum of Io. <i>Icarus</i> , 1994, 111, 79-105. | 1.1 | 62 |
| 59 | Seasonal exposure of carbon dioxide ice on the nucleus of comet 67P/Churyumov-Gerasimenko. <i>Science</i> , 2016, 354, 1563-1566. | 6.0 | 61 |
| 60 | South Pole of Mars: Nature and composition of the icy terrains from Mars Express OMEGA observations. <i>Planetary and Space Science</i> , 2007, 55, 113-133. | 0.9 | 60 |
| 61 | The temperature dependence of the CO infrared band strength in CO:H ₂ O ices. <i>Astrophysical Journal</i> , 1989, 340, L33. | 1.6 | 60 |
| 62 | Photometry of meteorites. <i>Icarus</i> , 2012, 218, 364-377. | 1.1 | 58 |
| 63 | A Spectroscopic Study of CO Diluted in N ₂ Ice: Applications for Triton and Pluto. <i>Icarus</i> , 1997, 128, 181-188. | 1.1 | 57 |
| 64 | Sequestration of Ethane in the Cryovolcanic Subsurface of Titan. <i>Astrophysical Journal</i> , 2008, 677, L67-L70. | 1.6 | 57 |
| 65 | STRATIFICATION OF METHANE ICE ON ERIS' SURFACE. <i>Astronomical Journal</i> , 2009, 137, 315-328. | 1.9 | 55 |
| 66 | No signature of clear CO ₂ ice from the "cryptic" regions in Mars' south seasonal polar cap. <i>Nature</i> , 2006, 442, 790-792. | 13.7 | 54 |
| 67 | The global surface composition of 67P/CG nucleus by Rosetta/VIRTIS. (I) Prelanding mission phase. <i>Icarus</i> , 2016, 274, 334-349. | 1.1 | 54 |
| 68 | The Nitrogen Cycles on Pluto over seasonal and astronomical timescales. <i>Icarus</i> , 2018, 309, 277-296. | 1.1 | 54 |
| 69 | Spectrogonio radiometer for the study of the bidirectional reflectance and polarization functions of planetary surfaces 1 Design and tests. <i>Applied Optics</i> , 2004, 43, 1926. | 2.1 | 53 |
| 70 | A Decade with VAMDC: Results and Ambitions. <i>Atoms</i> , 2020, 8, 76. | 0.7 | 53 |
| 71 | A model for the overabundance of methane in the atmospheres of Pluto and Triton. <i>Planetary and Space Science</i> , 1996, 44, 1051-1063. | 0.9 | 52 |
| 72 | Geological mapping of Sputnik Planitia on Pluto. <i>Icarus</i> , 2017, 287, 261-286. | 1.1 | 52 |

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| 73 | Titan's 5- $\hat{1}$ / ₄ m window: observations with the Very Large Telescope. <i>Icarus</i> , 2003, 162, 125-142. | 1.1 | 51 |
| 74 | A TENTATIVE IDENTIFICATION OF HCN ICE ON TRITON. <i>Astrophysical Journal Letters</i> , 2010, 718, L53-L57. | 3.0 | 51 |
| 75 | Water vapor mapping on Mars using OMEGA/Mars Express. <i>Planetary and Space Science</i> , 2007, 55, 333-342. | 0.9 | 50 |
| 76 | Pluto's haze as a surface material. <i>Icarus</i> , 2018, 314, 232-245. | 1.1 | 50 |
| 77 | Very high resolution mass spectrometry of HCN polymers and tholins. <i>Faraday Discussions</i> , 2010, 147, 495. | 1.6 | 49 |
| 78 | Composition of Pluto's small satellites: Analysis of New Horizons spectral images. <i>Icarus</i> , 2018, 315, 30-45. | 1.1 | 49 |
| 79 | Detection of ammonia on Pluto's surface in a region of geologically recent tectonism. <i>Science Advances</i> , 2019, 5, eaav5731. | 4.7 | 49 |
| 80 | Titan's surface albedo variations over a Titan season from near-infrared CFHT/FTS spectra. <i>Planetary and Space Science</i> , 2006, 54, 1225-1246. | 0.9 | 47 |
| 81 | Pluto's Spectrum from 1.0 to 4.2 $\hat{1}$ / ₄ m: Implications for Surface Properties. <i>Astronomical Journal</i> , 2007, 133, 420-431. | 1.9 | 47 |
| 82 | Bladed Terrain on Pluto: Possible origins and evolution. <i>Icarus</i> , 2018, 300, 129-144. | 1.1 | 47 |
| 83 | Goethite as an alternative origin of the 3.1 $\hat{1}$ / ₄ m band on dark asteroids. <i>Astronomy and Astrophysics</i> , 2011, 526, A85. | 2.1 | 46 |
| 84 | Study of Titan's fall southern stratospheric polar cloud composition with Cassini/CIRS: Detection of benzene ice. <i>Icarus</i> , 2018, 310, 89-104. | 1.1 | 46 |
| 85 | Hydrogen/deuterium exchange in interstellar ice analogs. <i>Astronomy and Astrophysics</i> , 2009, 496, L21-L24. | 2.1 | 46 |
| 86 | Recent cryovolcanism in Virgil Fossae on Pluto. <i>Icarus</i> , 2019, 330, 155-168. | 1.1 | 45 |
| 87 | The formation of Charon's red poles from seasonally cold-trapped volatiles. <i>Nature</i> , 2016, 539, 65-68. | 13.7 | 44 |
| 88 | Aphelion water ice cloud mapping and property retrieval using the OMEGA imaging spectrometer onboard Mars Express. <i>Journal of Geophysical Research</i> , 2012, 117, . | 3.3 | 42 |
| 89 | WAVANGLLET: An Efficient Supervised Classifier for Hyperspectral Images. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007, 45, 1374-1385. | 2.7 | 41 |
| 90 | A cometary nucleus model taking into account all phase changes of water ice: amorphous, crystalline, and clathrate. <i>Astronomy and Astrophysics</i> , 2012, 542, A82. | 2.1 | 41 |

| # | ARTICLE | IF | CITATIONS |
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| 91 | Carbon dioxide clathrate hydrate FTIR spectrum. <i>Astronomy and Astrophysics</i> , 2009, 504, 869-873. | 2.1 | 40 |
| 92 | SHADOWS: a spectro-gonio radiometer for bidirectional reflectance studies of dark meteorites and terrestrial analogs: design, calibrations, and performances on challenging surfaces. <i>Applied Optics</i> , 2018, 57, 8279. | 0.9 | 40 |
| 93 | NIR spectral trends of HED meteorites: Can we discriminate between the magmatic evolution, mechanical mixing and observation geometry effects?. <i>Icarus</i> , 2011, 216, 560-571. | 1.1 | 39 |
| 94 | A Monte Carlo ray-tracing model for scattering and polarization by large particles with complex shapes. <i>Journal of Geophysical Research</i> , 2000, 105, 29291-29314. | 3.3 | 38 |
| 95 | Bidirectional reflectance spectroscopy of carbonaceous chondrites: Implications for water quantification and primary composition. <i>Icarus</i> , 2016, 264, 172-183. | 1.1 | 38 |
| 96 | The CH ₄ cycles on Pluto over seasonal and astronomical timescales. <i>Icarus</i> , 2019, 329, 148-165. | 1.1 | 38 |
| 97 | Spectroscopy of some ices of astrophysical interest: SO ₂ , N ₂ and N ₂ : CH ₄ mixtures. <i>Planetary and Space Science</i> , 1996, 44, 973-986. | 0.9 | 36 |
| 98 | The redox state of iron in the matrix of CI, CM and metamorphosed CM chondrites by XANES spectroscopy. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 99, 305-316. | 1.6 | 36 |
| 99 | How to link the relative abundances of gas species in coma of comets to their initial chemical composition?. <i>Icarus</i> , 2014, 242, 225-248. | 1.1 | 36 |
| 100 | Equilibrium Data of Methane, Carbon Dioxide, and Xenon Clathrate Hydrates below the Freezing Point of Water. Applications to Astrophysical Environments. <i>Journal of Chemical & Engineering Data</i> , 2010, 55, 5101-5108. | 1.0 | 34 |
| 101 | The changing temperature of the nucleus of comet 67P induced by morphological and seasonal effects. <i>Nature Astronomy</i> , 2019, 3, 649-658. | 4.2 | 34 |
| 102 | Dynamics and Evolution of SO ₂ Gas Condensation around Prometheus-like Volcanic Plumes on Io as Seen by the Near Infrared Mapping Spectrometer. <i>Icarus</i> , 2002, 158, 460-482. | 1.1 | 33 |
| 103 | The Spectral Nature of Titan's Major Geomorphological Units: Constraints on Surface Composition. <i>Journal of Geophysical Research É: Planets</i> , 2018, 123, 489-507. | 1.5 | 33 |
| 104 | Possible identification of local deposits of Cl ₂ SO ₂ on Io from NIMS/Galileo spectra. <i>Journal of Geophysical Research</i> , 2003, 108, 8-1-8-19. | 3.3 | 32 |
| 105 | Albedo control of seasonal South Polar cap recession on Mars. <i>Icarus</i> , 2009, 200, 374-394. | 1.1 | 32 |
| 106 | Kinetics of water adsorption on minerals and the breathing of the Martian regolith. <i>Journal of Geophysical Research</i> , 2010, 115, . | 3.3 | 32 |
| 107 | What is controlling the reflectance spectra (0.35â€“150â€“Åµm) of hydrated (and dehydrated) carbonaceous chondrites?. <i>Icarus</i> , 2018, 313, 124-138. | 1.1 | 32 |
| 108 | Titan's 5-micron lightcurve. <i>Icarus</i> , 2004, 168, 209-214. | 1.1 | 31 |

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|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 109 | Spectroscopy and detectability of liquid brines on mars. Planetary and Space Science, 2014, 92, 136-149. | 0.9 | 31 |
| 110 | On the origin & thermal stability of Arrokoth's and Pluto's ices. Icarus, 2021, 356, 114072. | 1.1 | 31 |
| 111 | Geology and activity around volcanoes on Io from the analysis of NIMS spectral images. Icarus, 2004, 169, 175-196. | 1.1 | 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. | 1.1 | 28 |
| 113 | VESPA: A community-driven Virtual Observatory in Planetary Science. Planetary and Space Science, 2018, 150, 65-85. | 0.9 | 28 |
| 114 | Photometric and spectroscopic observations of Sycorax, satellite of Uranus. Astronomy and Astrophysics, 2001, 376, 310-315. | 2.1 | 28 |
| 115 | CLATHRATE HYDRATES FORMATION IN SHORT-PERIOD COMETS. Astrophysical Journal, 2010, 708, 812-816. | 1.6 | 27 |
| 116 | Hydrogen isotope exchanges between water and methanol in interstellar ices. Astronomy and Astrophysics, 2015, 584, A98. | 2.1 | 27 |
| 117 | Prebiotic Chemistry of Pluto. Astrobiology, 2019, 19, 831-848. | 1.5 | 26 |
| 118 | Strength of the H ₂ O near-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. | 1.9 | 25 |
| 120 | Ions in grain mantles - A new explanation for the 6.86 micron absorption in W33A. Astrophysical Journal, 1989, 341, L87. | 1.6 | 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, , . | 0.3 | 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. | 1.8 | 24 |
| 123 | Pluto: Pits and mantles on uplands north and east of Sputnik Planitia. Icarus, 2017, 293, 218-230. | 1.1 | 24 |
| 124 | Laboratory simulations of the Vis-NIR spectra of comet 67P using sub-Åµm sized cosmochemical analogues. Icarus, 2018, 306, 306-318. | 1.1 | 23 |
| 125 | Some things special about NEAs: Geometric and environmental effects on the optical signatures of hydration. Icarus, 2019, 333, 415-428. | 1.1 | 23 |
| 126 | Strength of the H ₂ O near-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. <i>Meteoritics and Planetary Science</i> , 2014, 49, 2064-2073. | 0.7 | 21 |
| 128 | The distribution of H ₂ O, CH ₃ OH, and hydrocarbon-ices on Pluto: Analysis of New Horizons spectral images. <i>Icarus</i> , 2019, 331, 148-169. | 1.1 | 21 |
| 129 | S ₂ O, polysulfuroxide and sulfur polymer on lo's surface?. <i>Icarus</i> , 2008, 194, 647-659. | 1.1 | 20 |
| 130 | New laboratory measurements of CH ₄ in Titan's conditions and a reanalysis of the DISR near-surface spectra at the Huygens landing site. <i>Planetary and Space Science</i> , 2008, 56, 613-623. | 0.9 | 20 |
| 131 | Triton's surface ices: Distribution, temperature and mixing state from VLT/SINFONI observations. <i>Icarus</i> , 2018, 314, 274-293. | 1.1 | 20 |
| 132 | Style and intensity of hydration among C-complex asteroids: A comparison to desiccated carbonaceous chondrites. <i>Icarus</i> , 2020, 348, 113826. | 1.1 | 20 |
| 133 | On the stability of clathrate hydrates in comets 67P/Churyumov-Gerasimenko and 46P/Wirtanen. <i>Astronomy and Astrophysics</i> , 2011, 525, A144. | 2.1 | 18 |
| 134 | NIR reflectance spectroscopy of hydrated and anhydrous sodium carbonates at different temperatures. <i>Icarus</i> , 2019, 317, 388-411. | 1.1 | 18 |
| 135 | Water abundance at the surface of C-complex main-belt asteroids. <i>Icarus</i> , 2021, 357, 114125. | 1.1 | 18 |
| 136 | VIRTIS: Visible Infrared Thermal Imaging Spectrometer for the Rosetta mission. , 1996, , . | | 17 |
| 137 | Temperature-dependent VNIR spectroscopy of hydrated Mg-sulfates. <i>Icarus</i> , 2017, 281, 444-458. | 1.1 | 16 |
| 138 | Pluto's Beating Heart Regulates the Atmospheric Circulation: Results From High-Resolution and Multiyear Numerical Climate Simulations. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006120. | 1.5 | 16 |
| 139 | Search for Variations in Pluto's Millimeter-Wave Emission. <i>Icarus</i> , 2000, 147, 580-584. | 1.1 | 15 |
| 140 | Sublimation of the Martian CO ₂ Seasonal South Polar Cap. <i>Planetary and Space Science</i> , 2010, 58, 1129-1138. | 0.9 | 15 |
| 141 | Large-scale cryovolcanic resurfacing on Pluto. <i>Nature Communications</i> , 2022, 13, 1542. | 5.8 | 15 |
| 142 | A Predicted Dearth of Majority Hypervolatile Ices in Oort Cloud Comets. <i>Planetary Science Journal</i> , 2022, 3, 112. | 1.5 | 15 |
| 143 | Inflight radiometric calibration of New Horizons's Multispectral Visible Imaging Camera (MVIC). <i>Icarus</i> , 2017, 287, 140-151. | 1.1 | 14 |
| 144 | Methane distribution on Pluto as mapped by the New Horizons Ralph/MVIC instrument. <i>Icarus</i> , 2018, 314, 195-209. | 1.1 | 14 |

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|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 145 | Low-phase spectral reflectance and equivalent "geometric albedo" of meteorites powders. <i>Icarus</i> , 2021, 354, 114066. | 1.1 | 14 |
| 146 | Low-temperature reflectance spectra of brucite and the primitive surface of 1-Ceres?. <i>Icarus</i> , 2015, 257, 471-476. | 1.1 | 13 |
| 147 | Visible and near-infrared reflectance of hyperfine and hyperporous particulate surfaces. <i>Icarus</i> , 2021, 357, 114141. | 1.1 | 13 |
| 148 | Near-infrared study of Titan's resolved disk in spectro-imaging with CFHT/OASIS. <i>Planetary and Space Science</i> , 2005, 53, 535-556. | 0.9 | 12 |
| 149 | Hydrogen sulfide clathrate hydrate FTIR spectroscopy: A help gas for clathrate formation in the Solar System?. <i>Icarus</i> , 2012, 220, 427-434. | 1.1 | 12 |
| 150 | Kinetics of hydrogen/deuterium exchanges in cometary ices. <i>Icarus</i> , 2015, 261, 14-30. | 1.1 | 12 |
| 151 | Equatorial mountains on Pluto are covered by methane frosts resulting from a unique atmospheric process. <i>Nature Communications</i> , 2020, 11, 5056. | 5.8 | 12 |
| 152 | Equilibrium Pressure of Ethane, Acetylene, and Krypton Clathrate Hydrates below the Freezing Point of Water. <i>Journal of Chemical & Engineering Data</i> , 2012, 57, 3408-3415. | 1.0 | 11 |
| 153 | Martian atmosphere as observed by VIRTIS" on Rosetta spacecraft. <i>Journal of Geophysical Research</i> , 2010, 115, . | 3.3 | 10 |
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