Katrin Stephan

List of Publications by Year
in descending order

74 papers	3,182 citations	172457 29 h-index	149698 56 g-index
82 all docs	82 docs citations	82 times ranked	2222 citing authors

#	Article	IF	Citations
1	Saturnâ€™s icy satellites investigated by Cassini - VIMS. V. Spectrophotometry. Icarus, 2022, 375, 114803.	2.5	3
2	The Case for a New Frontiersâ€“Class Uranus Orbiter: System Science at an Underexplored and Unique World with a Mid-scale Mission. Planetary Science Journal, 2022, 3, 58.	3.6	12
3	Optimizing ExoMars Rover Remote Sensing Multispectral Science: Crossâ€Rover Comparison Using Laboratory and Orbital Data. Earth and Space Science, 2022, 9, .	2.6	1
4	Spectral and Petrographic Properties of Inclusions in Carbonaceous Chondrites and Comparison with In Situ Images from Asteroid Ryugu. Planetary Science Journal, 2021, 2, 188.	3.6	4
5	Regions of interest on Ganymede's and Callisto's surfaces as potential targets for ESA's JUICE mission. Planetary and Space Science, 2021, 208, 105324.	1.7	12
6	The unique spectral and geomorphological characteristics of pitted impact deposits associated with Marcia crater on Vesta. Icarus, 2021, 369, 114633.	2.5	1
7	VIS-NIR/SWIR Spectral Properties of H2O Ice Depending on Particle Size and Surface Temperature. Minerals (Basel, Switzerland), 2021, 11, 1328.	2.0	6
8	H2O-ice particle size variations across Ganymede's and Callisto's surface. Icarus, 2020, 337, 113440.	2.5	15
9	Surface roughness of asteroid (162173) Ryugu and comet 67P/Churyumovâ€“Gerasimenko inferred fromin situobservations. Monthly Notices of the Royal Astronomical Society, 2020, 500, 3178-3193.	4.4	11
10	Photometric modelling and VIS-IR albedo maps of Rhea from Cassini-VIMS. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 499, L62-L66.	3.3	3
11	The mineralogy of Ceresâ€™ Nawish quadrangle. Icarus, 2019, 318, 195-204.	2.5	1
12	Images from the surface of asteroid Ryugu show rocks similar to carbonaceous chondrite meteorites. Science, 2019, 365, 817-820.	12.6	99
13	Asymmetric Craters on the Dwarf Planet Ceresâ€”Results of Second Extended Mission Data Analysis. Geosciences (Switzerland), 2019, 9, 475.	2.2	3
14	Mineralogical analysis of the Ac-H-6 Haulani quadrangle of the dwarf planet Ceres. Icarus, 2019, 318, 170-187.	2.5	11
15	Mineralogical analysis of quadrangle Ac-H-10 Rongo on the dwarf planet Ceres. Icarus, 2019, 318, 212-229.	2.5	8
16	Mineralogy of the Occator quadrangle. Icarus, 2019, 318, 205-211.	2.5	11
17	Compositional differences among Bright Spots on the Ceres surface. Icarus, 2019, 320, 202-212.	2.5	33
18	Spectral investigation of quadrangle AC-H 3 of the dwarf planet Ceres â€“ The region of impact crater Dantu. Icarus, 2019, 318, 111-123.	2.5	5

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19	Mineralogical mapping of the Kerwan quadrangle on Ceres. Icarus, 2019, 318, 188-194.	2.5	8
20	Ceresâ€™ impact craters â€“ Relationships between surface composition and geology. Icarus, 2019, 318, 56-74.	2.5	11
21	Geological Evolution of Titan's Equatorial Regions: Possible Nature and Origin of the Dune Material. Journal of Geophysical Research E: Planets, 2018, 123, 1089-1112.	3.6	28
22	Mineralogy and temperature of crater Haulani on Ceres. Meteoritics and Planetary Science, 2018, 53, 1902-1924.	1.6	21
23	Photometric Modeling and VISâ€IR Albedo Maps of Dione From Cassiniâ€VIMS. Geophysical Research Letters, 2018, 45, 2184-2192.	4.0	7
24	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
25	The unique geomorphology and structural geology of the Haulani crater of dwarf planet Ceres as revealed by geological mapping of equatorial quadrangle Ac-6 Haulani. Icarus, 2018, 316, 84-98.	2.5	19
26	Geologic mapping of the Ac-11 Sintana quadrangle: Assessing diverse crater morphologies. Icarus, 2018, 316, 154-166.	2.5	7
27	Ceresâ€™ spectral link to carbonaceous chondritesâ€”Analysis of the dark background materials. Meteoritics and Planetary Science, 2018, 53, 1925-1945.	1.6	6
28	Dantu's mineralogical properties â€“ A view into the composition of Ceres' crust. Meteoritics and Planetary Science, 2018, 53, 1866-1883.	1.6	10
29	Photometric Modeling and VISâ€IR Albedo Maps of Tethys From Cassiniâ€VIMS. Geophysical Research Letters, 2018, 45, 6400-6407.	4.0	6
30	Ringâ€Mold Craters on Ceres: Evidence for Shallow Subsurface Water Ice Sources. Geophysical Research Letters, 2018, 45, 8121-8128.	4.0	3
31	An investigation of the bluish material on Ceres. Geophysical Research Letters, 2017, 44, 1660-1668.	4.0	29
32	Spectral analysis of Ahuna Mons from Dawn mission's visibleâ€infrared spectrometer. Geophysical Research Letters, 2017, 44, 97-104.	4.0	74
33	Timing of optical maturation of recently exposed material on Ceres. Geophysical Research Letters, 2016, 43, 11,987.	4.0	35
34	Cryogenic flow features on Ceres: Implications for craterâ€related cryovolcanism. Geophysical Research Letters, 2016, 43, 11,994.	4.0	48
35	The global surface composition of 67P/CG nucleus by Rosetta/VIRTIS. (I) Prelanding mission phase. Icarus, 2016, 274, 334-349.	2.5	54
36	Cassini's geological and compositional view of Tethys. Icarus, 2016, 274, 1-22.	2.5	13

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37	Saturnâ€™s icy satellites investigated by Cassini-VIMS. IV. Daytime temperature maps. Icarus, 2016, 271, 292-313.	2.5	23
38	Temporal variations of Titanâ€™s surface with Cassini/VIMS. Icarus, 2016, 270, 85-99.	2.5	29
39	MINERALOGICAL MAPPING OF THE OCCATOR QUADRANGLE. , 2016, , .		2
40	Mineralogical analysis of the Oppia quadrangle of asteroid (4) Vesta: Evidence for occurrence of moderate-reflectance hydrated minerals. Icarus, 2015, 259, 129-149.	2.5	15
41	The Sextilia-region on Asteroid 4Vesta â€“ Stratigraphy and variegation. Icarus, 2015, 259, 162-180.	2.5	8
42	Vestaâ€™s Pinaria region: Original basaltic achondrite material derived from mixing upper and lower crust. Icarus, 2015, 259, 150-161.	2.5	4
43	Global mapping and characterization of Titanâ€™s dune fields with Cassini: Correlation between RADAR and VIMS observations. Icarus, 2014, 230, 168-179.	2.5	68
44	Spectroscopic classification of icy satellites of Saturn II: Identification of terrain units on Rhea. Icarus, 2014, 234, 1-16.	2.5	26
45	Small fresh impact craters on asteroid 4 Vesta: A compositional and geological fingerprint. Journal of Geophysical Research E: Planets, 2014, 119, 771-797.	3.6	12
46	Spectroscopic classification of icy satellites of saturn â€” Identification of terrain units on dione and rhea. , 2014, , .		0
47	Spectroscopic classification of icy satellites of Saturn I: Identification of terrain units on Dione. Icarus, 2013, 226, 1331-1349.	2.5	22
48	Vesta's mineralogical composition as revealed by the visible and infrared spectrometer on Dawn. Meteoritics and Planetary Science, 2013, 48, 2166-2184.	1.6	87
49	Massâ€wasting features and processes in Vesta's south polar basinâ€‰Rheasilvia. Journal of Geophysical Research E: Planets, 2013, 118, 2279-2294.	3.6	30
50	Geology of Icy Bodies. Astrophysics and Space Science Library, 2013, , 279-367.	2.7	8
51	Water ice abundance and CO2 band strength on the saturnian satellite Phoebe from Cassini/VIMS observations. Icarus, 2012, 220, 331-338.	2.5	4
52	Saturnâ€™s icy satellites and rings investigated by Cassiniâ€“VIMS: III â€“ Radial compositional variability. Icarus, 2012, 220, 1064-1096.	2.5	86
53	Vestaâ€™s Shape and Morphology. Science, 2012, 336, 687-690.	12.6	222
54	The surface composition of Iapetus: Mapping results from Cassini VIMS. Icarus, 2012, 218, 831-860.	2.5	136

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55	Titan's fluvial valleys: Morphology, distribution, and spectral properties. Planetary and Space Science, 2012, 60, 34-51.	1.7	98
56	The Saturnian satellite Rhea as seen by Cassini VIMS. Planetary and Space Science, 2012, 61, 142-160.	1.7	38
57	Organic sedimentary deposits in Titanâ€™s dry lakebeds: Probable evaporite. Icarus, 2011, 216, 136-140.	2.5	96
58	Detection and mapping of hydrocarbon deposits on Titan. Journal of Geophysical Research, 2010, 115, .	3.3	147
59	Chemical Composition of Icy Satellite Surfaces. Space Science Reviews, 2010, 153, 113-154.	8.1	65
60	Carbon dioxide on the satellites of Saturn: Results from the Cassini VIMS investigation and revisions to the VIMS wavelength scale. Icarus, 2010, 206, 561-572.	2.5	78
61	Dioneâ€™s spectral and geological properties. Icarus, 2010, 206, 631-652.	2.5	61
62	Saturnâ€™s icy satellites investigated by Cassiniâ€“VIMS. Icarus, 2010, 206, 507-523.	2.5	47
63	Geology of the Selk crater region on Titan from Cassini VIMS observations. Icarus, 2010, 208, 905-912.	2.5	44
64	Specular reflection on Titan: Liquids in Kraken Mare. Geophysical Research Letters, 2010, 37, .	4.0	69
65	Chemical Composition of Icy Satellite Surfaces. Space Sciences Series of ISSI, 2010, , 111-152.	0.0	0
66	Cartographic Mapping of the Icy Satellites Using ISS and VIMS Data. , 2009, , 763-781.		15
67	Reduction of instrument-dependent noise in hyperspectral image data using the principal component analysis: Applications to Galileo NIMS data. Planetary and Space Science, 2008, 56, 406-419.	1.7	23
68	Compositional mapping of Saturn's satellite Dione with Cassini VIMS and implications of dark material in the Saturn system. Icarus, 2008, 193, 372-386.	2.5	135
69	Distribution of icy particles across Enceladus' surface as derived from Cassini-VIMS measurements. Icarus, 2008, 193, 407-419.	2.5	64
70	Fluvial erosion and post-erosional processes on Titan. Icarus, 2008, 197, 526-538.	2.5	88
71	The high-resolution stereo camera (HRSC) experiment on Mars Express: Instrument aspects and experiment conduct from interplanetary cruise through the nominal mission. Planetary and Space Science, 2007, 55, 928-952.	1.7	391
72	Surface composition of Hyperion. Nature, 2007, 448, 54-56.	27.8	56

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73	High-resolution CASSINI-VIMS mosaics of Titan and the icy Saturnian satellites. Planetary and Space Science, 2006, 54, 1146-1155.	1.7	24
74	Release of volatiles from a possible cryovolcano from near-infrared imaging of Titan. Nature, 2005, 435, 786-789.	27.8	208