

Scott L Murchie

List of Publications by Year in descending order

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242
papers

22,533
citations

4960

84
h-index

9345

143
g-index

245
all docs

245
docs citations

245
times ranked

6461
citing authors

#	ARTICLE	IF	CITATIONS
1	Compact Reconnaissance Imaging Spectrometer for Mars (CRISM) on Mars Reconnaissance Orbiter (MRO). <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	796
2	Subsurface water and clay mineral formation during the early history of Mars. <i>Nature</i> , 2011, 479, 53-60.	27.8	651
3	Hydrated silicate minerals on Mars observed by the Mars Reconnaissance Orbiter CRISM instrument. <i>Nature</i> , 2008, 454, 305-309.	27.8	630
4	Orbital Identification of Carbonate-Bearing Rocks on Mars. <i>Science</i> , 2008, 322, 1828-1832.	12.6	560
5	Spectral evidence for hydrated salts in recurring slope lineae on Mars. <i>Nature Geoscience</i> , 2015, 8, 829-832.	12.9	513
6	Identification of hydrated silicate minerals on Mars using MRO's CRISM: Geologic context near Nili Fossae and implications for aqueous alteration. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	483
7	Seasonal Flows on Warm Martian Slopes. <i>Science</i> , 2011, 333, 740-743.	12.6	451
8	A synthesis of Martian aqueous mineralogy after 1 Mars year of observations from the Mars Reconnaissance Orbiter. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	445
9	Hydrous minerals on Mars as seen by the CRISM and OMEGA imaging spectrometers: Updated global view. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 831-858.	3.6	420
10	The MESSENGER mission to Mercury: scientific objectives and implementation. <i>Planetary and Space Science</i> , 2001, 49, 1445-1465.	1.7	361
11	Phyllosilicate Diversity and Past Aqueous Activity Revealed at Mawrth Vallis, Mars. <i>Science</i> , 2008, 321, 830-833.	12.6	328
12	CRISM multispectral summary products: Parameterizing mineral diversity on Mars from reflectance. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	304
13	Opaline silica in young deposits on Mars. <i>Geology</i> , 2008, 36, 847.	4.4	303
14	Geologic setting of serpentine deposits on Mars. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	299
15	Clay minerals in delta deposits and organic preservation potential on Mars. <i>Nature Geoscience</i> , 2008, 1, 355-358.	12.9	293
16	Revised CRISM spectral parameters and summary products based on the currently detected mineral diversity on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 1403-1431.	3.6	280
17	Distribution of Mid-Latitude Ground Ice on Mars from New Impact Craters. <i>Science</i> , 2009, 325, 1674-1676.	12.6	279
18	Mineralogic and compositional properties of Martian soil and dust: Results from Mars Pathfinder. <i>Journal of Geophysical Research</i> , 2000, 105, 1721-1755.	3.3	274

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19	NEAR at Eros: Imaging and Spectral Results. <i>Science</i> , 2000, 289, 2088-2097.	12.6	250
20	Recurring slope lineae in equatorial regions of Mars. <i>Nature Geoscience</i> , 2014, 7, 53-58.	12.9	248
21	Results from the Mars Pathfinder Camera. <i>Science</i> , 1997, 278, 1758-1765.	12.6	242
22	The Mercury Dual Imaging System on the MESSENGER Spacecraft. <i>Space Science Reviews</i> , 2007, 131, 247-338.	8.1	242
23	Chemical, multispectral, and textural constraints on the composition and origin of rocks at the Mars Pathfinder landing site. <i>Journal of Geophysical Research</i> , 1999, 104, 8679-8715.	3.3	226
24	Flood Volcanism in the Northern High Latitudes of Mercury Revealed by MESSENGER. <i>Science</i> , 2011, 333, 1853-1856.	12.6	225
25	Wavelength dependence of dust aerosol single scattering albedo as observed by the Compact Reconnaissance Imaging Spectrometer. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	196
26	The Evolution of Mercury's Crust: A Global Perspective from MESSENGER. <i>Science</i> , 2009, 324, 613-618.	12.6	194
27	Galileo Encounter with 951 Gaspra: First Pictures of an Asteroid. <i>Science</i> , 1992, 257, 1647-1652.	12.6	193
28	The distribution and origin of smooth plains on Mercury. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 891-907.	3.6	193
29	The landing of the NEAR-Shoemaker spacecraft on asteroid 433 Eros. <i>Nature</i> , 2001, 413, 390-393.	27.8	190
30	NEAR's Flyby of 253 Mathilde: Images of a C Asteroid. <i>Science</i> , 1997, 278, 2109-2114.	12.6	185
31	A Closer Look at Water-Related Geologic Activity on Mars. <i>Science</i> , 2007, 317, 1706-1709.	12.6	185
32	Compact Reconnaissance Imaging Spectrometer for Mars investigation and data set from the Mars Reconnaissance Orbiter's primary science phase. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	178
33	Ancient Aqueous Environments at Endeavour Crater, Mars. <i>Science</i> , 2014, 343, 1248097.	12.6	176
34	Silica deposits in the Nili Patera caldera on the Syrtis Major volcanic complex on Mars. <i>Nature Geoscience</i> , 2010, 3, 838-841.	12.9	173
35	Return to Mercury: A Global Perspective on MESSENGER's First Mercury Flyby. <i>Science</i> , 2008, 321, 59-62.	12.6	170
36	Volcanism on Mercury: Evidence from the First MESSENGER Flyby. <i>Science</i> , 2008, 321, 69-72.	12.6	169

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37	Reflectance and Color Variations on Mercury: Regolith Processes and Compositional Heterogeneity. <i>Science</i> , 2008, 321, 66-69.	12.6	167
38	An improvement to the volcano-scan algorithm for atmospheric correction of CRISM and OMEGA spectral data. <i>Planetary and Space Science</i> , 2009, 57, 809-815.	1.7	166
39	The nature of ponded deposits on Eros. <i>Nature</i> , 2001, 413, 396-400.	27.8	162
40	Evidence for the origin of layered deposits in Candor Chasma, Mars, from mineral composition and hydrologic modeling. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	159
41	Mineralogy of Juventae Chasma: Sulfates in the light-toned mounds, mafic minerals in the bedrock, and hydrated silica and hydroxylated ferric sulfate on the plateau. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	156
42	Eros: Shape, Topography, and Slope Processes. <i>Icarus</i> , 2002, 155, 18-37.	2.5	154
43	Columbus crater and other possible groundwater-fed paleolakes of Terra Sirenum, Mars. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	148
44	Imaging of Small-Scale Features on 433 Eros from NEAR: Evidence for a Complex Regolith. <i>Science</i> , 2001, 292, 484-488.	12.6	147
45	Composition, Morphology, and Stratigraphy of Noachian Crust around the Isidis basin. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	144
46	The geology of 433 Eros. <i>Meteoritics and Planetary Science</i> , 2002, 37, 1651-1684.	1.6	142
47	Diverse aqueous environments on ancient Mars revealed in the southern highlands. <i>Geology</i> , 2009, 37, 1043-1046.	4.4	142
48	Geology of the Caloris Basin, Mercury: A View from MESSENGER. <i>Science</i> , 2008, 321, 73-76.	12.6	140
49	Compact Reconnaissance Imaging Spectrometer observations of water vapor and carbon monoxide. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	137
50	Hollows on Mercury: MESSENGER Evidence for Geologically Recent Volatile-Related Activity. <i>Science</i> , 2011, 333, 1856-1859.	12.6	136
51	The tectonics of Mercury: The view after MESSENGER's first flyby. <i>Earth and Planetary Science Letters</i> , 2009, 285, 283-296.	4.4	135
52	Volcanism on Mercury: Evidence from the first MESSENGER flyby for extrusive and explosive activity and the volcanic origin of plains. <i>Earth and Planetary Science Letters</i> , 2009, 285, 227-242.	4.4	135
53	Detection of Hydrated Silicates in Crustal Outcrops in the Northern Plains of Mars. <i>Science</i> , 2010, 328, 1682-1686.	12.6	134
54	Remote sensing evidence for an ancient carbon-bearing crust on Mercury. <i>Nature Geoscience</i> , 2016, 9, 273-276.	12.9	134

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55	Lunar impact basins: New data for the western limb and far side (Orientale and South Pole-Aitken) Tj ETQq1 1 0.784314 rgBT /Overl	3.3	131
56	Stratigraphy, mineralogy, and origin of layered deposits inside Terby crater, Mars. <i>Icarus</i> , 2011, 211, 273-304.	2.5	131
57	Prolonged magmatic activity on Mars inferred from the detection of felsic rocks. <i>Nature Geoscience</i> , 2013, 6, 1013-1017.	12.9	131
58	Explosive volcanic eruptions on Mercury: Eruption conditions, magma volatile content, and implications for interior volatile abundances. <i>Earth and Planetary Science Letters</i> , 2009, 285, 263-271.	4.4	128
59	NEAR Encounter with Asteroid 253 Mathilde: Overview. <i>Icarus</i> , 1999, 140, 3-16.	2.5	121
60	Overview of the Mars Pathfinder Mission: Launch through landing, surface operations, data sets, and science results. <i>Journal of Geophysical Research</i> , 1999, 104, 8523-8553.	3.3	121
61	Hydrated mineral stratigraphy of Ius Chasma, Valles Marineris. <i>Icarus</i> , 2010, 206, 253-268.	2.5	119
62	The MESSENGER mission to Mercury: scientific payload. <i>Planetary and Space Science</i> , 2001, 49, 1467-1479.	1.7	118
63	Galileo Photometry of Asteroid 951 Gaspra. <i>Icarus</i> , 1994, 107, 37-60.	2.5	117
64	Characterization of phyllosilicates observed in the central Mawrth Vallis region, Mars, their potential formational processes, and implications for past climate. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	117
65	A hematite-bearing layer in Gale Crater, Mars: Mapping and implications for past aqueous conditions. <i>Geology</i> , 2013, 41, 1103-1106.	4.4	113
66	Shoemaker crater as the source of most ejecta blocks on the asteroid 433 Eros. <i>Nature</i> , 2001, 413, 394-396.	27.8	111
67	NEAR Photometry of Asteroid 253 Mathilde. <i>Icarus</i> , 1999, 140, 53-65.	2.5	109
68	Orbital evidence for more widespread carbonate-bearing rocks on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 652-677.	3.6	109
69	Evidence for low-grade metamorphism, hydrothermal alteration, and diagenesis on Mars from phyllosilicate mineral assemblages. <i>Clays and Clay Minerals</i> , 2011, 59, 359-377.	1.3	107
70	The global distribution of pyroclastic deposits on Mercury: The view from MESSENGER flybys 1-3. <i>Planetary and Space Science</i> , 2011, 59, 1895-1909.	1.7	105
71	Mineralogy and stratigraphy of phyllosilicate-bearing and dark mantling units in the greater Mawrth Vallis/west Arabia Terra area: Constraints on geological origin. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	104
72	Spirit Mars Rover Mission to the Columbia Hills, Gusev Crater: Mission overview and selected results from the Cumberland Ridge to Home Plate. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	99

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73	What the ancient phyllosilicates at Mawrth Vallis can tell us about possible habitability on early Mars. <i>Planetary and Space Science</i> , 2013, 86, 130-149.	1.7	99
74	In situ compositions of Martian volcanics: Implications for the mantle. <i>Journal of Geophysical Research</i> , 1997, 102, 25605-25615.	3.3	97
75	The Geology of Gaspra. <i>Icarus</i> , 1994, 107, 61-71.	2.5	96
76	Orbital multispectral mapping of Mercury with the MESSENGER Mercury Dual Imaging System: Evidence for the origins of plains units and low-reflectance material. <i>Icarus</i> , 2015, 254, 287-305.	2.5	95
77	Spectroscopic Observations of Mercury's Surface Reflectance During MESSENGER's First Mercury Flyby. <i>Science</i> , 2008, 321, 62-65.	12.6	94
78	Galileo imaging observations of lunar maria and related deposits. <i>Journal of Geophysical Research</i> , 1993, 98, 17183-17205.	3.3	92
79	Spectral Properties and Heterogeneity of Phobos from Measurements by Phobos 2. <i>Icarus</i> , 1996, 123, 63-86.	2.5	91
80	Spatial Variations in the Spectral Properties of Bright Regions on Mars. <i>Icarus</i> , 1993, 105, 454-468.	2.5	89
81	Space weathering on Eros: Constraints from albedo and spectral measurements of Psyche crater. <i>Meteoritics and Planetary Science</i> , 2001, 36, 1617-1637.	1.6	89
82	Mineralogic constraints on sulfur-rich soils from Pancam spectra at Gusev crater, Mars. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	89
83	Phyllosilicates and sulfates at Endeavour Crater, Meridiani Planum, Mars. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	88
84	Mathilde: Size, Shape, and Geology. <i>Icarus</i> , 1999, 140, 17-27.	2.5	86
85	Crustal diversity of the moon: Compositional analyses of Galileo solid state imaging data. <i>Journal of Geophysical Research</i> , 1993, 98, 17127-17148.	3.3	85
86	Caloris impact basin: Exterior geomorphology, stratigraphy, morphometry, radial sculpture, and smooth plains deposits. <i>Earth and Planetary Science Letters</i> , 2009, 285, 297-308.	4.4	84
87	Exposure of spectrally distinct material by impact craters on Mercury: Implications for global stratigraphy. <i>Icarus</i> , 2010, 209, 210-223.	2.5	82
88	The low-iron, reduced surface of Mercury as seen in spectral reflectance by MESSENGER. <i>Icarus</i> , 2014, 228, 364-374.	2.5	82
89	Near-Infrared Spectral Variations of Martian Surface Materials from ISM Imaging Spectrometer Data. <i>Icarus</i> , 2000, 147, 444-471.	2.5	81
90	Near-tropical subsurface ice on Mars. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	79

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91	Global inventory and characterization of pyroclastic deposits on Mercury: New insights into pyroclastic activity from MESSENGER orbital data. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 635-658.	3.6	79
92	Color Variations on Eros from NEAR Multispectral Imaging. <i>Icarus</i> , 2002, 155, 145-168.	2.5	78
93	Testing evidence of recent hydration state change in sulfates on Mars. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	78
94	New Horizons: Anticipated Scientific Investigations at the Pluto System. <i>Space Science Reviews</i> , 2008, 140, 93-127.	8.1	74
95	Stratigraphy of hydrated sulfates in the sedimentary deposits of Aram Chaos, Mars. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	74
96	Most Mars minerals in a nutshell: Various alteration phases formed in a single environment in Noctis Labyrinthus. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	74
97	Vertical distribution of dust and water ice aerosols from CRISM limb geometry observations. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 321-334.	3.6	74
98	Mineral abundances at the final four curiosity study sites and implications for their formation. <i>Icarus</i> , 2014, 231, 65-76.	2.5	74
99	Spectral and stratigraphic mapping of hydrated sulfate and phyllosilicate-bearing deposits in northern Sinus Meridiani, Mars. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	73
100	Definitive evidence of Hesperian basalt in Acidalia and Chryse planitiae. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	73
101	Preliminary results on photometric properties of materials at the Sagan Memorial Station, Mars. <i>Journal of Geophysical Research</i> , 1999, 104, 8809-8830.	3.3	71
102	Near-IR Reflectance Spectroscopy of 433 Eros from the NIS Instrument on the NEAR Mission. <i>Icarus</i> , 2002, 155, 119-144.	2.5	70
103	Evidence for intrusive activity on Mercury from the first MESSENGER flyby. <i>Earth and Planetary Science Letters</i> , 2009, 285, 251-262.	4.4	67
104	Images of surface volatiles in Mercury's polar craters acquired by the MESSENGER spacecraft. <i>Geology</i> , 2014, 42, 1051-1054.	4.4	67
105	Spectral properties and rotational spectral heterogeneity of 433 Eros. <i>Journal of Geophysical Research</i> , 1996, 101, 2201-2214.	3.3	66
106	Spectral absorptions on Phobos and Deimos in the visible/near infrared wavelengths and their compositional constraints. <i>Icarus</i> , 2014, 229, 196-205.	2.5	66
107	New near-IR observations of mesospheric CO ₂ and H ₂ O clouds on Mars. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	65
108	Color heterogeneity of the surface of Phobos: Relationships to geologic features and comparison to meteorite analogs. <i>Journal of Geophysical Research</i> , 1991, 96, 5925-5945.	3.3	64

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109	A model for formation of dust, soil, and rock coatings on Mars: Physical and chemical processes on the Martian surface. <i>Journal of Geophysical Research</i> , 2002, 107, 7-17-17.	3.3	64
110	Phyllosilicate and sulfate hematite deposits within Miyamoto crater in southern Sinus Meridiani, Mars. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	63
111	Diagenetic haematite and sulfate assemblages in Valles Marineris. <i>Icarus</i> , 2010, 207, 659-674.	2.5	63
112	Imaging of Asteroid 433 Eros During NEAR's Flyby Reconnaissance. <i>Science</i> , 1999, 285, 562-564.	12.6	61
113	An Estimate of Eros's Porosity and Implications for Internal Structure. <i>Icarus</i> , 2002, 155, 94-103.	2.5	61
114	Mineralogy of the MSL Curiosity landing site in Gale crater as observed by MRO/CRISM. <i>Geophysical Research Letters</i> , 2014, 41, 4880-4887.	4.0	59
115	Compact Reconnaissance Imaging Spectrometer for Mars (CRISM) south polar mapping: First Mars year of observations. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	58
116	Vertical profiles of Mars 1.27 μm O ₂ dayglow from MRO CRISM limb spectra: Seasonal/global behaviors, comparisons to LMDGCM simulations, and a global definition for Mars water vapor profiles. <i>Icarus</i> , 2017, 293, 132-156.	2.5	58
117	Constraints on the abundance of carbon in near-surface materials on Mercury: Results from the MESSENGER Gamma-Ray Spectrometer. <i>Planetary and Space Science</i> , 2015, 108, 98-107.	1.7	57
118	Evidence from MESSENGER for sulfur- and carbon-driven explosive volcanism on Mercury. <i>Geophysical Research Letters</i> , 2016, 43, 3653-3661.	4.0	57
119	Mineralogy and morphology of geologic units at Libya Montes, Mars: Ancient aqueously derived outcrops, mafic flows, fluvial features, and impacts. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 487-513.	3.6	56
120	Martian Aerosols: Near-Infrared Spectral Properties and Effects on the Observation of the Surface. <i>Icarus</i> , 1994, 111, 317-337.	2.5	55
121	The transition from complex crater to peak-ring basin on Mercury: New observations from MESSENGER flyby data and constraints on basin formation models. <i>Planetary and Space Science</i> , 2011, 59, 1932-1948.	1.7	54
122	First detection of Mars atmospheric hydroxyl: CRISM Near-IR measurement versus LMD GCM simulation of OH Meinel band emission in the Mars polar winter atmosphere. <i>Icarus</i> , 2013, 226, 272-281.	2.5	54
123	Emplacement and tectonic deformation of smooth plains in the Caloris basin, Mercury. <i>Earth and Planetary Science Letters</i> , 2009, 285, 309-319.	4.4	53
124	The morphology of craters on Mercury: Results from MESSENGER flybys. <i>Icarus</i> , 2012, 219, 414-427.	2.5	53
125	Calibration, Projection, and Final Image Products of MESSENGER's Mercury Dual Imaging System. <i>Space Science Reviews</i> , 2018, 214, 1.	8.1	53
126	Analysis of disk-resolved OMEGA and CRISM spectral observations of Phobos and Deimos. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	52

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127	Extensive MRO CRISM observations of 1.27 μm O ₂ airglow in Mars polar night and their comparison to MRO MCS temperature profiles and LMD GCM simulations. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	51
128	Discovery of alunite in Cross crater, Terra Sirenum, Mars: Evidence for acidic, sulfurous waters. <i>American Mineralogist</i> , 2016, 101, 1527-1542.	1.9	51
129	Stratigraphy of the Caloris basin, Mercury: Implications for volcanic history and basin impact melt. <i>Icarus</i> , 2015, 250, 413-429.	2.5	49
130	Mars Pathfinder spectral measurements of Phobos and Deimos: Comparison with previous data. <i>Journal of Geophysical Research</i> , 1999, 104, 9069-9079.	3.3	47
131	Evolution of the Rembrandt Impact Basin on Mercury. <i>Science</i> , 2009, 324, 618-621.	12.6	46
132	Mineralogical interpretation of reflectance spectra of Eros from NEAR near-infrared spectrometer low phase flyby. <i>Meteoritics and Planetary Science</i> , 2001, 36, 1711-1726.	1.6	45
133	An Unusual Spectral Unit in West Candor Chasma: Evidence for Aqueous or Hydrothermal Alteration in the Martian Canyons. <i>Icarus</i> , 1993, 106, 380-391.	2.5	44
134	The NEAR shoemaker mission to asteroid 433 eros. <i>Acta Astronautica</i> , 2002, 51, 491-500.	3.2	44
135	Areas of permanent shadow in Mercury's south polar region ascertained by MESSENGER orbital imaging. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	43
136	Automated processing of planetary hyperspectral datasets for the extraction of weak mineral signatures and applications to CRISM observations of hydrated silicates on Mars. <i>Planetary and Space Science</i> , 2013, 76, 53-67.	1.7	43
137	An overview of the NEAR multispectral imager-near-infrared spectrometer investigation. <i>Journal of Geophysical Research</i> , 1997, 102, 23709-23727.	3.3	42
138	Characterization of hydrated silicate-bearing outcrops in Tyrrhena Terra, Mars: Implications to the alteration history of Mars. <i>Icarus</i> , 2012, 219, 476-497.	2.5	42
139	Embedded clays and sulfates in Meridiani Planum, Mars. <i>Icarus</i> , 2015, 248, 269-288.	2.5	42
140	Mineralogical indicators of Mercury's hollows composition in MESSENGER color observations. <i>Geophysical Research Letters</i> , 2016, 43, 1450-1456.	4.0	42
141	Television observations of Phobos. <i>Nature</i> , 1989, 341, 585-587.	27.8	41
142	MRO/CRISM Retrieval of Surface Lambert Albedos for Multispectral Mapping of Mars With DISORT-Based Radiative Transfer Modeling: Phase 1 Using Historical Climatology for Temperatures, Aerosol Optical Depths, and Atmospheric Pressures. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2008, 46, 4020-4040.	6.3	41
143	Global Distribution and Spectral Properties of Low-Reflectance Material on Mercury. <i>Geophysical Research Letters</i> , 2018, 45, 2945-2953.	4.0	41
144	Composition of Surface Materials on the Moons of Mars. <i>Planetary and Space Science</i> , 2014, 102, 144-151.	1.7	40

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145	Application of multiple photometric models to disk-resolved measurements of Mercury's surface: Insights into Mercury's regolith characteristics. <i>Icarus</i> , 2016, 268, 172-203.	2.5	40
146	Compositional and structural constraints on the geologic history of eastern Tharsis Rise, Mars. <i>Icarus</i> , 2017, 284, 43-58.	2.5	40
147	Challenges in the Search for Perchlorate and Other Hydrated Minerals With 2.1- μ m Absorptions on Mars. <i>Geophysical Research Letters</i> , 2018, 45, 12180-12189.	4.0	40
148	The distribution, composition, and particle properties of Mars mesospheric aerosols: An analysis of CRISM visible/near-IR limb spectra with context from near-coincident MCS and MARCI observations. <i>Icarus</i> , 2019, 328, 246-273.	2.5	40
149	A Late Amazonian alteration layer related to local volcanism on Mars. <i>Icarus</i> , 2010, 207, 265-276.	2.5	39
150	Compact Reconnaissance Imaging Spectrometer for Mars (CRISM) north polar springtime recession mapping: First 3 Mars years of observations. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	39
151	Smectite deposits in Marathon Valley, Endeavour Crater, Mars, identified using CRISM hyperspectral reflectance data. <i>Geophysical Research Letters</i> , 2016, 43, 4885-4892.	4.0	39
152	Results of TV imaging of phobos (experiment VSK-FREGAT). <i>Planetary and Space Science</i> , 1991, 39, 281-295.	1.7	38
153	Laser Altimetry of Small-Scale Features on 433 Eros from NEAR-Shoemaker. <i>Science</i> , 2001, 292, 488-491.	12.6	38
154	Insights into the subsurface structure of the Caloris basin, Mercury, from assessments of mechanical layering and changes in long-wavelength topography. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 2030-2044.	3.6	37
155	Terrain types and local-scale stratigraphy of grooved terrain on Ganymede. <i>Journal of Geophysical Research</i> , 1986, 91, E222.	3.3	36
156	Craters hosting radar-bright deposits in Mercury's north polar region: Areas of persistent shadow determined from MESSENGER images. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 26-36.	3.6	36
157	High spatial and temporal resolution sampling of Martian gas abundances from CRISM spectra. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 89-104.	3.6	36
158	Inflight Calibration of the NEAR Multispectral Imager. <i>Icarus</i> , 1999, 140, 66-91.	2.5	35
159	Whole-disk spectrophotometric properties of Mercury: Synthesis of MESSENGER and ground-based observations. <i>Icarus</i> , 2010, 209, 101-124.	2.5	35
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