Vishnu Reddy

List of Publications by Year
in descending order

98	3,004	172457	182427
papers	citations	29 h-index	51 g-index

99	99	99	1897
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Elemental Mapping by Dawn Reveals Exogenic H in Vestaâ€™s Regolith. Science, 2012, 338, 242-246.	12.6	201
2	Dawn; the Vestaâ€“<scp>HED</scp> connection; and the geologic context for eucrites, diogenites, and howardites. Meteoritics and Planetary Science, 2013, 48, 2090-2104.	1.6	185
3	Color and Albedo Heterogeneity of Vesta from Dawn. Science, 2012, 336, 700-704.	12.6	166
4	Delivery of dark material to Vesta via carbonaceous chondritic impacts. Icarus, 2012, 221, 544-559.	2.5	152
5	Phase reddening on near-Earth asteroids: Implications for mineralogical analysis, space weathering and taxonomic classification. Icarus, 2012, 220, 36-50.	2.5	150
6	Radar observations and shape model of asteroid 16 Psyche. Icarus, 2017, 281, 388-403.	2.5	87
7	Composition of the Rheasilvia basin, a window into Vesta's interior. Journal of Geophysical Research E: Planets, 2013, 118, 335-346.	3.6	84
8	Geomorphological evidence for ground ice on dwarf planet Ceres. Nature Geoscience, 2017, 10, 338-343.	12.9	83
9	Photometric, spectral phase and temperature effects on 4 Vesta and HED meteorites: Implications for the Dawn mission. Icarus, 2012, 217, 153-168.	2.5	76
10	Global photometric properties of Asteroid (4) Vesta observed with Dawn Framing Camera. Icarus, 2013, 226, 1252-1274.	2.5	68
11	Chelyabinsk meteorite explains unusual spectral properties of Baptistina Asteroid Family. Icarus, 2014, 237, 116-130.	2.5	54
12	Compositional variability on the surface of 4 Vesta revealed through <scp>GR</scp>a<scp>ND</scp> measurements of highâ€energy gamma rays. Meteoritics and Planetary Science, 2013, 48, 2252-2270.	1.6	53
13	Olivine-dominated asteroids: Mineralogy and origin. Icarus, 2014, 228, 288-300.	2.5	52
14	Spectral reflectance â€œdeconstructionâ€•of the Murchison CM2 carbonaceous chondrite and implications for spectroscopic investigations of dark asteroids. Icarus, 2018, 305, 203-224.	2.5	52
15	Spectral reflectance properties of ureilites. Meteoritics and Planetary Science, 2010, 45, 1668-1694.	1.6	49
16	Compositional heterogeneity of Asteroid 4 Vestaâ€™s southern hemisphere: Implications for the Dawn mission. Icarus, 2010, 210, 693-706.	2.5	48
17	Olivine or impact melt: Nature of the â€œOrangeâ€•material on Vesta from Dawn. Icarus, 2013, 226, 1568-1594.	2.5	47
18	Neutron absorption constraints on the composition of 4 Vesta. Meteoritics and Planetary Science, 2013, 48, 2211-2236.	1.6	47

#	Article	IF	Citations
19	The Mâ€/Xâ€asteroid menagerie: Results of an NIR spectral survey of 45 mainâ€belt asteroids. Meteoritics and Planetary Science, 2011, 46, 1910-1938.	1.6	42
20	Surface composition and taxonomic classification of a group of near-Earth and Mars-crossing asteroids. Icarus, 2013, 225, 131-140.	2.5	42
21	Geomorphological evidence for transient water flow on Vesta. Earth and Planetary Science Letters, 2015, 411, 151-163.	4.4	42
22	SURFACE ALBEDO AND SPECTRAL VARIABILITY OF CERES. Astrophysical Journal Letters, 2016, 817, L22.	8.3	42
23	Composition of 298 Baptistina: Implications for the K/T impactor link. Meteoritics and Planetary Science, 2009, 44, 1917-1927.	1.6	40
24	Comparing Dawn, Hubble Space Telescope, and ground-based interpretations of (4) Vesta. Icarus, 2013, 226, 1103-1114.	2.5	37
25	DETECTION OF WATER AND/OR HYDROXYL ON ASTEROID (16) Psyche. Astronomical Journal, 2017, 153, 31.	4.7	37
26	The geology of the Marcia quadrangle of asteroid Vesta: Assessing the effects of large, young craters. Icarus, 2014, 244, 74-88.	2.5	36
27	Mineralogical characterization of Baptistina Asteroid Family: Implications for K/T impactor source. Icarus, 2011, 216, 184-197.	2.5	34
28	Detection of serpentine in exogenic carbonaceous chondrite material on Vesta from Dawn FC data. Icarus, 2014, 239, 222-237.	2.5	34
29	Exploring exogenic sources for the olivine on Asteroid (4) Vesta. Icarus, 2015, 258, 483-499.	2.5	33
30	The SariÃ§iÃ§ek howardite fall in Turkey: Source crater of <scp>HED</scp> meteorites on Vesta and impact risk of Vestoids. Meteoritics and Planetary Science, 2019, 54, 953-1008.	1.6	30
31	More chips off of Asteroid (4) Vesta: Characterization of eight Vestoids and their HED meteorite analogs. Icarus, 2014, 242, 269-282.	2.5	29
32	Olivineâ€“metal mixtures: Spectral reflectance properties and application to asteroid reflectance spectra. Icarus, 2015, 252, 39-82.	2.5	29
33	How to characterize terrains on 4 Vesta using Dawn Framing Camera color bands?. Icarus, 2011, 216, 376-386.	2.5	28
34	Exogenic olivine on Vesta from Dawn Framing Camera color data. Icarus, 2015, 258, 467-482.	2.5	28
35	First fragment of Asteroid 4 Vestaâ€™s mantle detected. Icarus, 2011, 212, 175-179.	2.5	26
36	Lithologic mapping of <scp>HED</scp> terrains on Vesta using Dawn Framing Camera color data. Meteoritics and Planetary Science, 2013, 48, 2199-2210.	1.6	26

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37	DETECTION OF ROTATIONAL SPECTRAL VARIATION ON THE M-TYPE ASTEROID (16) PSYCHE. Astronomical Journal, 2017, 153, 29.	4.7	25
38	Connecting asteroids and meteorites with visible and near-infrared spectroscopy. Icarus, 2022, 380, 114971.	2.5	25
39	Carbon Chain Depletion of 2I/Borisov. Astrophysical Journal Letters, 2020, 889, L38.	8.3	24
40	Rotationally Resolved Spectroscopic Characterization of Near-Earth Object (3200) Phaethon. Astronomical Journal, 2018, 156, 287.	4.7	23
41	Near-infrared spectral observations and interpretations for S-asteroids 138 Tolosa, 306 Unitas, 346 Hermentaria, and 480 Hansa. Icarus, 2006, 181, 94-106.	2.5	22
42	Constraining albedo, diameter and composition of near-Earth asteroids via near-infrared spectroscopy. Icarus, 2012, 219, 382-392.	2.5	21
43	Ground-based characterization of Hayabusa2 mission target asteroid 162173 Ryugu: constraining mineralogical composition in preparation for spacecraft operations. Monthly Notices of the Royal Astronomical Society, 2018, 475, 614-623.	4.4	21
44	Near-infrared observations of active asteroid (3200) Phaethon reveal no evidence for hydration. Nature Communications, 2020, 11, 2050.	12.8	21
45	The Maria asteroid family: Genetic relationships and a plausible source of mesosiderites near the 3:1 Kirkwood Gap. Icarus, 2011, 213, 524-537.	2.5	20
46	Mineralogical characterization of potential targets for the ASTEX mission scenario. Planetary and Space Science, 2011, 59, 772-778.	1.7	20
47	Composition of near-Earth Asteroid (4179) Toutatis. Icarus, 2012, 221, 1177-1179.	2.5	20
48	Olivineâ€rich exposures at Bellicia and Arruntia craters on (4) Vesta from Dawn <scp>FC</scp>. Meteoritics and Planetary Science, 2014, 49, 1831-1850.	1.6	20
49	Photometric properties of Ceres from telescopic observations using Dawn Framing Camera color filters. Icarus, 2015, 260, 332-345.	2.5	20
50	The triaxial ellipsoid size, density, and rotational pole of asteroid (16) Psyche from Keck and Gemini AO observations 2004â€“2015. Icarus, 2018, 305, 174-185.	2.5	20
51	Basalt or Not? Near-infrared Spectra, Surface Mineralogical Estimates, and Meteorite Analogs for 33 V_p-type Asteroids. Astronomical Journal, 2018, 156, 11.	4.7	20
52	Spectral diversity and photometric behavior of main-belt and near-Earth vestoids and (4) Vesta: A study in preparation for the Dawn encounter. Icarus, 2014, 235, 60-74.	2.5	19
53	COMPOSITION OF POTENTIALLY HAZARDOUS ASTEROID (214869) 2007 PA8: AN H CHONDRITE FROM THE OUTER ASTEROID BELT. Astrophysical Journal, 2015, 808, 93.	4.5	19
54	Composition of near-Earth Asteroid 2008 EV5: Potential target for robotic and human exploration. Icarus, 2012, 221, 678-681.	2.5	16

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55	Physical Characterization of Active Asteroid (6478) Gault. Astrophysical Journal Letters, 2019, 881, L6.	8.3	16
56	Compositional Constraints for Lucy Mission Trojan Asteroids via Near-infrared Spectroscopy. Astronomical Journal, 2019, 158, 204.	4.7	16
57	Hungaria asteroid region telescopic spectral survey (HARTSS) II: Spectral homogeneity among Hungaria family asteroids. Icarus, 2019, 322, 227-250.	2.5	16
58	Imprint of the Rheasilvia impact on Vesta â€“ Geologic mapping of quadrangles Gegania and Lucaria. Icarus, 2014, 244, 60-73.	2.5	15
59	Near-infrared spectroscopy of 3:1 Kirkwood Gap asteroids: Mineralogical diversity and plausible meteorite parent bodies. Icarus, 2012, 221, 593-602.	2.5	14
60	Physical Characterization of the 2017 December Outburst of the Centaur 174P/Echeclus. Astronomical Journal, 2019, 158, 255.	4.7	14
61	Geologic mapping of ejecta deposits in Oppia Quadrangle, Asteroid (4) Vesta. Icarus, 2014, 244, 104-119.	2.5	13
62	PHYSICAL CHARACTERIZATION OF â^¼2 m DIAMETER NEAR-EARTH ASTEROID 2015 TC25: A POSSIBLE BOULDER FROM E-TYPE ASTEROID (44) NYSA. Astronomical Journal, 2016, 152, 162.	4.7	13
63	Search for the H Chondrite Parent Body among the Three Largest S-type Asteroids: (3) Juno, (7) Iris, and (25) Phocaea. Astronomical Journal, 2019, 158, 213.	4.7	13
64	VESTOIDS, PART II: THE BASALTIC NATURE AND HED METEORITE ANALOGS FOR EIGHTV_p-TYPE ASTEROIDS AND THEIR ASSOCIATIONS WITH (4) VESTA. Astrophysical Journal, Supplement Series, 2015, 221, 19.	7.7	12
65	Fitting the curve in ExcelÂ®: Systematic curve fitting of laboratory and remotely sensed planetary spectra. Computers and Geosciences, 2017, 100, 103-114.	4.2	12
66	Investigating the Relationship between (3200) Phaethon and (155140) 2005 UD through Telescopic and Laboratory Studies. Planetary Science Journal, 2021, 2, 190.	3.6	12
67	Link between the potentially hazardous Asteroid (86039) 1999 NC43 and the Chelyabinsk meteoroid tenuous. Icarus, 2015, 252, 129-143.	2.5	11
68	Do L chondrites come from the Gefion family?. Monthly Notices of the Royal Astronomical Society, 2018, 476, 630-634.	4.4	11
69	Surface Composition of (99942) Apophis. Astronomical Journal, 2018, 155, 140.	4.7	11
70	A New Method for Deriving Composition of S-type Asteroids from Noisy and Incomplete Near-infrared Spectra. Astronomical Journal, 2020, 159, 146.	4.7	11
71	Distinguishing between Shock-darkening and Space-weathering Trends in Ordinary Chondrite Reflectance Spectra. Planetary Science Journal, 2020, 1, 37.	3.6	11
72	Detection and rapid recovery of the Sutter's Mill meteorite fall as a model for future recoveries worldwide. Meteoritics and Planetary Science, 2014, 49, 1989-1996.	1.6	10

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73	Contemporaneous Multiwavelength and Precovery Observations of the Active Centaur P/2019 LD2 (ATLAS). Planetary Science Journal, 2021, 2, 48.	3.6	10
74	Near-earth asteroid (66391) Moshup (1999 KW4) observing campaign: Results from a global planetary defense characterization exercise. Icarus, 2022, 374, 114790.	2.5	10
75	Asteroid (354) Eleonora: Plucking an odd duck. Icarus, 2015, 250, 623-638.	2.5	9
76	Optical space weathering on Vesta: Radiative-transfer models and Dawn observations. Icarus, 2016, 265, 161-174.	2.5	9
77	Constraining the Regolith Composition of Asteroid (16) Psyche via Laboratory Visible Near-infrared Spectroscopy. Planetary Science Journal, 2021, 2, 95.	3.6	9
78	Lunar-like silicate material forms the Earth quasi-satellite (469219) 2016 HO3 KamoÊ»oalewa. Communications Earth & Environment, 2021, 2, .	6.8	9
79	An Extremely Temporary Co-orbital: The Dynamical State of Active Centaur 2019 LD2. Research Notes of the AAS, 2020, 4, 74.	0.7	8
80	THE PHYSICAL CHARACTERIZATION OF THE POTENTIALLY HAZARDOUS ASTEROID 2004 BL86: A FRAGMENT OF A DIFFERENTIATED ASTEROID. Astrophysical Journal, 2015, 811, 65.	4.5	6
81	Goldstone radar evidence for short-axis mode non-principal-axis rotation of near-Earth asteroid (214869) 2007 PA8. Icarus, 2017, 286, 314-329.	2.5	6
82	Physical Characterization of Metal-rich Near-Earth Asteroids 6178 (1986 DA) and 2016 ED85. Planetary Science Journal, 2021, 2, 205.	3.6	6
83	International Asteroid Warning Network Timing Campaign: 2019 XS. Planetary Science Journal, 2022, 3, 156.	3.6	6
84	Constraining ordinary chondrite composition via near-infrared spectroscopy. Icarus, 2020, 336, 113426.	2.5	5
85	Surfaces of (Nearly) Dormant Comets and the Recent History of the Quadrantid Meteor Shower. Planetary Science Journal, 2021, 2, 31.	3.6	5
86	Characterization of Exogenic Boulders on the Near-Earth Asteroid (101955) Bennu from OSIRIS-REx Color Images. Planetary Science Journal, 2021, 2, 114.	3.6	5
87	Evidence for Differentiation among Asteroid Families. , 0, , 298-320.		4
88	Apophis Planetary Defense Campaign. Planetary Science Journal, 2022, 3, 123.	3.6	4
89	PANIC â€“ A surface science package for the in situ characterization of a near-Earth asteroid. Acta Astronautica, 2011, 68, 1800-1810.	3.2	3
90	Surface composition of near-Earth Asteroid (4953) 1990 MU: Possible fragment of (6) Hebe. Icarus, 2014, 233, 61-65.	2.5	3

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91	The ungrouped achondrite Northwest Africa (NWA) 7325: Spectral reflectance properties and implications for parent body identification. Icarus, 2018, 311, 384-393.	2.5	3
92	Probable Detection of Water Ice in the Coma of the Inbound Long-period Comet C/2017 K2 (PanSTARRS). Research Notes of the AAS, 2021, 5, 153.	0.7	2
93	Complex Water-ice Mixtures on NII Nereid: Constraints from NIR Reflectance. Planetary Science Journal, 2021, 2, 143.	3.6	2
94	Spectral calibration for deriving surface mineralogy of Asteroid (25143) Itokawa from Hayabusa Near-Infrared Spectrometer (NIRS) data. Icarus, 2015, 262, 124-130.	2.5	1
95	Spectral Analyses of Asteroids. , 2019, , 393-412.		1
96	Near-earth asteroid: (285263) 1998 QE2. Icarus, 2020, 347, 113807.	2.5	1
97	Mineralogical Criteria for the Parent Asteroid of the â€œCarbonaceousâ€•Achondrite NWA 6704. Astronomical Journal, 2020, 159, 107.	4.7	1
98	Near-infrared Spectroscopy of the Nucleus of Low-activity Comet P/2016 BA₁₄ during Its 2016 Close Approach. Planetary Science Journal, 2022, 3, 105.	3.6	0