

Vishnu Reddy

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6101030/publications.pdf>

Version: 2024-02-01

98
papers

3,004
citations

172207

29
h-index

182168

51
g-index

99
all docs

99
docs citations

99
times ranked

1897
citing authors

#	ARTICLE	IF	CITATIONS
1	Elemental Mapping by Dawn Reveals Exogenic H in Vesta's Regolith. <i>Science</i> , 2012, 338, 242-246.	6.0	201
2	Dawn; the Vesta-HED connection; and the geologic context for eucrites, diogenites, and howardites. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2090-2104.	0.7	185
3	Color and Albedo Heterogeneity of Vesta from Dawn. <i>Science</i> , 2012, 336, 700-704.	6.0	166
4	Delivery of dark material to Vesta via carbonaceous chondritic impacts. <i>Icarus</i> , 2012, 221, 544-559.	1.1	152
5	Phase reddening on near-Earth asteroids: Implications for mineralogical analysis, space weathering and taxonomic classification. <i>Icarus</i> , 2012, 220, 36-50.	1.1	150
6	Radar observations and shape model of asteroid 16 Psyche. <i>Icarus</i> , 2017, 281, 388-403.	1.1	87
7	Composition of the Rheasilvia basin, a window into Vesta's interior. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 335-346.	1.5	84
8	Geomorphological evidence for ground ice on dwarf planet Ceres. <i>Nature Geoscience</i> , 2017, 10, 338-343.	5.4	83
9	Photometric, spectral phase and temperature effects on 4 Vesta and HED meteorites: Implications for the Dawn mission. <i>Icarus</i> , 2012, 217, 153-168.	1.1	76
10	Global photometric properties of Asteroid (4) Vesta observed with Dawn Framing Camera. <i>Icarus</i> , 2013, 226, 1252-1274.	1.1	68
11	Chelyabinsk meteorite explains unusual spectral properties of Baptistina Asteroid Family. <i>Icarus</i> , 2014, 237, 116-130.	1.1	54
12	Compositional variability on the surface of 4 Vesta revealed through GRaND measurements of high-energy gamma rays. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2252-2270.	0.7	53
13	Olivine-dominated asteroids: Mineralogy and origin. <i>Icarus</i> , 2014, 228, 288-300.	1.1	52
14	Spectral reflectance deconstruction of the Murchison CM2 carbonaceous chondrite and implications for spectroscopic investigations of dark asteroids. <i>Icarus</i> , 2018, 305, 203-224.	1.1	52
15	Spectral reflectance properties of ureilites. <i>Meteoritics and Planetary Science</i> , 2010, 45, 1668-1694.	0.7	49
16	Compositional heterogeneity of Asteroid 4 Vesta's southern hemisphere: Implications for the Dawn mission. <i>Icarus</i> , 2010, 210, 693-706.	1.1	48
17	Olivine or impact melt: Nature of the 'Orange' material on Vesta from Dawn. <i>Icarus</i> , 2013, 226, 1568-1594.	1.1	47
18	Neutron absorption constraints on the composition of 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2211-2236.	0.7	47

#	ARTICLE	IF	CITATIONS
19	The Main Asteroid Menagerie: Results of an NIR Spectral Survey of 45 Main Belt Asteroids. <i>Meteoritics and Planetary Science</i> , 2011, 46, 1910-1938.	0.7	42
20	Surface Composition and Taxonomic Classification of a Group of Near-Earth and Mars-Crossing Asteroids. <i>Icarus</i> , 2013, 225, 131-140.	1.1	42
21	Geomorphological Evidence for Transient Water Flow on Vesta. <i>Earth and Planetary Science Letters</i> , 2015, 411, 151-163.	1.8	42
22	SURFACE ALBEDO AND SPECTRAL VARIABILITY OF CERES. <i>Astrophysical Journal Letters</i> , 2016, 817, L22.	3.0	42
23	Composition of 298 Baptistina: Implications for the K/T Impactor Link. <i>Meteoritics and Planetary Science</i> , 2009, 44, 1917-1927.	0.7	40
24	Comparing Dawn, Hubble Space Telescope, and Ground-Based Interpretations of (4) Vesta. <i>Icarus</i> , 2013, 226, 1103-1114.	1.1	37
25	DETECTION OF WATER AND/OR HYDROXYL ON ASTEROID (16) PSYCHE. <i>Astronomical Journal</i> , 2017, 153, 31.	1.9	37
26	The Geology of the Marcia Quadrangle of Asteroid Vesta: Assessing the Effects of Large, Young Craters. <i>Icarus</i> , 2014, 244, 74-88.	1.1	36
27	Mineralogical Characterization of Baptistina Asteroid Family: Implications for K/T Impactor Source. <i>Icarus</i> , 2011, 216, 184-197.	1.1	34
28	Detection of Serpentine in Exogenic Carbonaceous Chondrite Material on Vesta from Dawn FC Data. <i>Icarus</i> , 2014, 239, 222-237.	1.1	34
29	Exploring Exogenic Sources for the Olivine on Asteroid (4) Vesta. <i>Icarus</i> , 2015, 258, 483-499.	1.1	33
30	The SariÅsiÅsek Howardite Fall in Turkey: Source Crater of <sc>HED</sc> Meteorites on Vesta and Impact Risk of Vestoids. <i>Meteoritics and Planetary Science</i> , 2019, 54, 953-1008.	0.7	30
31	More Chips Off of Asteroid (4) Vesta: Characterization of Eight Vestoids and Their HED Meteorite Analogs. <i>Icarus</i> , 2014, 242, 269-282.	1.1	29
32	Olivine-Metal Mixtures: Spectral Reflectance Properties and Application to Asteroid Reflectance Spectra. <i>Icarus</i> , 2015, 252, 39-82.	1.1	29
33	How to Characterize Terrains on 4 Vesta Using Dawn Framing Camera Color Bands?. <i>Icarus</i> , 2011, 216, 376-386.	1.1	28
34	Exogenic Olivine on Vesta from Dawn Framing Camera Color Data. <i>Icarus</i> , 2015, 258, 467-482.	1.1	28
35	First Fragment of Asteroid 4 Vesta's Mantle Detected. <i>Icarus</i> , 2011, 212, 175-179.	1.1	26
36	Lithologic Mapping of <sc>HED</sc> Terrains on Vesta Using Dawn Framing Camera Color Data. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2199-2210.	0.7	26

#	ARTICLE	IF	CITATIONS
37	DETECTION OF ROTATIONAL SPECTRAL VARIATION ON THE M-TYPE ASTEROID (16) PSYCHE. <i>Astronomical Journal</i> , 2017, 153, 29.	1.9	25
38	Connecting asteroids and meteorites with visible and near-infrared spectroscopy. <i>Icarus</i> , 2022, 380, 114971.	1.1	25
39	Carbon Chain Depletion of 21/Borisov. <i>Astrophysical Journal Letters</i> , 2020, 889, L38.	3.0	24
40	Rotationally Resolved Spectroscopic Characterization of Near-Earth Object (3200) Phaethon. <i>Astronomical Journal</i> , 2018, 156, 287.	1.9	23
41	Near-infrared spectral observations and interpretations for S-asteroids 138 Tolosa, 306 Unitas, 346 Hermentaria, and 480 Hansa. <i>Icarus</i> , 2006, 181, 94-106.	1.1	22
42	Constraining albedo, diameter and composition of near-Earth asteroids via near-infrared spectroscopy. <i>Icarus</i> , 2012, 219, 382-392.	1.1	21
43	Ground-based characterization of Hayabusa2 mission target asteroid 162173 Ryugu: constraining mineralogical composition in preparation for spacecraft operations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 475, 614-623.	1.6	21
44	Near-infrared observations of active asteroid (3200) Phaethon reveal no evidence for hydration. <i>Nature Communications</i> , 2020, 11, 2050.	5.8	21
45	The Maria asteroid family: Genetic relationships and a plausible source of mesosiderites near the 3:1 Kirkwood Gap. <i>Icarus</i> , 2011, 213, 524-537.	1.1	20
46	Mineralogical characterization of potential targets for the ASTEX mission scenario. <i>Planetary and Space Science</i> , 2011, 59, 772-778.	0.9	20
47	Composition of near-Earth Asteroid (4179) Toutatis. <i>Icarus</i> , 2012, 221, 1177-1179.	1.1	20
48	Olivine-rich exposures at Bellicia and Arruntia craters on (4) Vesta from Dawn <i>Meteoritics and Planetary Science</i> , 2014, 49, 1831-1850.	0.7	20
49	Photometric properties of Ceres from telescopic observations using Dawn Framing Camera color filters. <i>Icarus</i> , 2015, 260, 332-345.	1.1	20
50	The triaxial ellipsoid size, density, and rotational pole of asteroid (16) Psyche from Keck and Gemini AO observations 2004-2015. <i>Icarus</i> , 2018, 305, 174-185.	1.1	20
51	Basalt or Not? Near-infrared Spectra, Surface Mineralogical Estimates, and Meteorite Analogs for 33 V-type Asteroids. <i>Astronomical Journal</i> , 2018, 156, 11.	1.9	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. <i>Icarus</i> , 2014, 235, 60-74.	1.1	19
53	COMPOSITION OF POTENTIALLY HAZARDOUS ASTEROID (214869) 2007 PA8: AN H CHONDRITE FROM THE OUTER ASTEROID BELT. <i>Astrophysical Journal</i> , 2015, 808, 93.	1.6	19
54	Composition of near-Earth Asteroid 2008 EV5: Potential target for robotic and human exploration. <i>Icarus</i> , 2012, 221, 678-681.	1.1	16

#	ARTICLE	IF	CITATIONS
55	Physical Characterization of Active Asteroid (6478) Gault. <i>Astrophysical Journal Letters</i> , 2019, 881, L6.	3.0	16
56	Compositional Constraints for Lucy Mission Trojan Asteroids via Near-infrared Spectroscopy. <i>Astronomical Journal</i> , 2019, 158, 204.	1.9	16
57	Hungaria asteroid region telescopic spectral survey (HARTSS) II: Spectral homogeneity among Hungaria family asteroids. <i>Icarus</i> , 2019, 322, 227-250.	1.1	16
58	Imprint of the Rheasilvia impact on Vesta – Geologic mapping of quadrangles Gegania and Lucaria. <i>Icarus</i> , 2014, 244, 60-73.	1.1	15
59	Near-infrared spectroscopy of 3:1 Kirkwood Gap asteroids: Mineralogical diversity and plausible meteorite parent bodies. <i>Icarus</i> , 2012, 221, 593-602.	1.1	14
60	Physical Characterization of the 2017 December Outburst of the Centaur 174P/Echeclus. <i>Astronomical Journal</i> , 2019, 158, 255.	1.9	14
61	Geologic mapping of ejecta deposits in Oppia Quadrangle, Asteroid (4) Vesta. <i>Icarus</i> , 2014, 244, 104-119.	1.1	13
62	PHYSICAL CHARACTERIZATION OF $\approx 1/2$ m DIAMETER NEAR-EARTH ASTEROID 2015 TC25: A POSSIBLE BOULDER FROM E-TYPE ASTEROID (44) NYSA. <i>Astronomical Journal</i> , 2016, 152, 162.	1.9	13
63	Search for the H Chondrite Parent Body among the Three Largest S-type Asteroids: (3) Juno, (7) Iris, and (25) Phoocaea. <i>Astronomical Journal</i> , 2019, 158, 213.	1.9	13
64	VESTOIDS, PART II: THE BASALTIC NATURE AND HED METEORITE ANALOGS FOR EIGHT <i>V</i> _p -TYPE ASTEROIDS AND THEIR ASSOCIATIONS WITH (4) VESTA. <i>Astrophysical Journal, Supplement Series</i> , 2015, 221, 19.	3.0	12
65	Fitting the curve in Excel®: Systematic curve fitting of laboratory and remotely sensed planetary spectra. <i>Computers and Geosciences</i> , 2017, 100, 103-114.	2.0	12
66	Investigating the Relationship between (3200) Phaethon and (155140) 2005 UD through Telescopic and Laboratory Studies. <i>Planetary Science Journal</i> , 2021, 2, 190.	1.5	12
67	Link between the potentially hazardous Asteroid (86039) 1999 NC43 and the Chelyabinsk meteoroid tenuous. <i>Icarus</i> , 2015, 252, 129-143.	1.1	11
68	Do L chondrites come from the Gefion family?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 476, 630-634.	1.6	11
69	Surface Composition of (99942) Apophis. <i>Astronomical Journal</i> , 2018, 155, 140.	1.9	11
70	A New Method for Deriving Composition of S-type Asteroids from Noisy and Incomplete Near-infrared Spectra. <i>Astronomical Journal</i> , 2020, 159, 146.	1.9	11
71	Distinguishing between Shock-darkening and Space-weathering Trends in Ordinary Chondrite Reflectance Spectra. <i>Planetary Science Journal</i> , 2020, 1, 37.	1.5	11
72	Detection and rapid recovery of the Sutter's Mill meteorite fall as a model for future recoveries worldwide. <i>Meteoritics and Planetary Science</i> , 2014, 49, 1989-1996.	0.7	10

#	ARTICLE	IF	CITATIONS
73	Contemporaneous Multiwavelength and Precursor Observations of the Active Centaur P/2019 LD2 (ATLAS). <i>Planetary Science Journal</i> , 2021, 2, 48.	1.5	10
74	Near-earth asteroid (66391) Moshup (1999 KW4) observing campaign: Results from a global planetary defense characterization exercise. <i>Icarus</i> , 2022, 374, 114790.	1.1	10
75	Asteroid (354) Eleonora: Plucking an odd duck. <i>Icarus</i> , 2015, 250, 623-638.	1.1	9
76	Optical space weathering on Vesta: Radiative-transfer models and Dawn observations. <i>Icarus</i> , 2016, 265, 161-174.	1.1	9
77	Constraining the Regolith Composition of Asteroid (16) Psyche via Laboratory Visible Near-infrared Spectroscopy. <i>Planetary Science Journal</i> , 2021, 2, 95.	1.5	9
78	Lunar-like silicate material forms the Earth quasi-satellite (469219) 2016 HO3 KamoÊ»oalewa. <i>Communications Earth & Environment</i> , 2021, 2, .	2.6	9
79	An Extremely Temporary Co-orbital: The Dynamical State of Active Centaur 2019 LD2. <i>Research Notes of the AAS</i> , 2020, 4, 74.	0.3	8
80	THE PHYSICAL CHARACTERIZATION OF THE POTENTIALLY HAZARDOUS ASTEROID 2004 BL86: A FRAGMENT OF A DIFFERENTIATED ASTEROID. <i>Astrophysical Journal</i> , 2015, 811, 65.	1.6	6
81	Goldstone radar evidence for short-axis mode non-principal-axis rotation of near-Earth asteroid (214869) 2007 PA8. <i>Icarus</i> , 2017, 286, 314-329.	1.1	6
82	Physical Characterization of Metal-rich Near-Earth Asteroids 6178 (1986 DA) and 2016 ED85. <i>Planetary Science Journal</i> , 2021, 2, 205.	1.5	6
83	International Asteroid Warning Network Timing Campaign: 2019 XS. <i>Planetary Science Journal</i> , 2022, 3, 156.	1.5	6
84	Constraining ordinary chondrite composition via near-infrared spectroscopy. <i>Icarus</i> , 2020, 336, 113426.	1.1	5
85	Surfaces of (Nearly) Dormant Comets and the Recent History of the Quadrantid Meteor Shower. <i>Planetary Science Journal</i> , 2021, 2, 31.	1.5	5
86	Characterization of Exogenic Boulders on the Near-Earth Asteroid (101955) Bennu from OSIRIS-REx Color Images. <i>Planetary Science Journal</i> , 2021, 2, 114.	1.5	5
87	Evidence for Differentiation among Asteroid Families. , 0, , 298-320.		4
88	Apophis Planetary Defense Campaign. <i>Planetary Science Journal</i> , 2022, 3, 123.	1.5	4
89	PANIC â€œ A surface science package for the in situ characterization of a near-Earth asteroid. <i>Acta Astronautica</i> , 2011, 68, 1800-1810.	1.7	3
90	Surface composition of near-Earth Asteroid (4953) 1990 MU: Possible fragment of (6) Hebe. <i>Icarus</i> , 2014, 233, 61-65.	1.1	3

#	ARTICLE	IF	CITATIONS
91	The ungrouped achondrite Northwest Africa (NWA) 7325: Spectral reflectance properties and implications for parent body identification. <i>Icarus</i> , 2018, 311, 384-393.	1.1	3
92	Probable Detection of Water Ice in the Coma of the Inbound Long-period Comet C/2017 K2 (PanSTARRS). <i>Research Notes of the AAS</i> , 2021, 5, 153.	0.3	2
93	Complex Water-ice Mixtures on NII Nereid: Constraints from NIR Reflectance. <i>Planetary Science Journal</i> , 2021, 2, 143.	1.5	2
94	Spectral calibration for deriving surface mineralogy of Asteroid (25143) Itokawa from Hayabusa Near-Infrared Spectrometer (NIRS) data. <i>Icarus</i> , 2015, 262, 124-130.	1.1	1
95	Spectral Analyses of Asteroids. , 2019, , 393-412.		1
96	Near-earth asteroid: (285263) 1998 QE2. <i>Icarus</i> , 2020, 347, 113807.	1.1	1
97	Mineralogical Criteria for the Parent Asteroid of the "Carbonaceous" Achondrite NWA 6704. <i>Astronomical Journal</i> , 2020, 159, 107.	1.9	1
98	Near-infrared Spectroscopy of the Nucleus of Low-activity Comet P/2016 BA ₁₄ during Its 2016 Close Approach. <i>Planetary Science Journal</i> , 2022, 3, 105.	1.5	0