

Spectroscopic Characterization of Mineralogy and Its D

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Distinctive space weathering on Vesta from regolith mixing processes. <i>Nature</i> , 2012, 491, 79-82.	27.8	120
2	Dark material on Vesta from the infall of carbonaceous volatile-rich material. <i>Nature</i> , 2012, 491, 83-86.	27.8	151
4	Ordinary (mesostasis) and notâ€soâ€ordinary (symplectites) lateâ€stage assemblages in howardites. <i>Meteoritics and Planetary Science</i> , 2012, 47, 1475-1490.	1.6	21
5	Development of 3D hyperspectral camera using compressive sensing. , 2012, , .		3
6	An Ancient Core Dynamo in Asteroid Vesta. <i>Science</i> , 2012, 338, 238-241.	12.6	81
7	Elemental Mapping by Dawn Reveals Exogenic H in Vestaâ€™s Regolith. <i>Science</i> , 2012, 338, 242-246.	12.6	201
8	A Golden Spike for Planetary Science. <i>Science</i> , 2012, 338, 203-204.	12.6	6
9	Abundance, distribution, and origin of ⁶⁰ Fe in the solar protoplanetary disk. <i>Earth and Planetary Science Letters</i> , 2012, 359-360, 248-263.	4.4	174
10	DETECTION OF WIDESPREAD HYDRATED MATERIALS ON VESTA BY THE VIR IMAGING SPECTROMETER ON BOARD THE <i>DAWN</i> MISSION. <i>Astrophysical Journal Letters</i> , 2012, 758, L36.	8.3	117
11	Volcanic activity on differentiated asteroids: A review and analysis. <i>Chemie Der Erde</i> , 2012, 72, 289-321.	2.0	58
12	Dawn at Vesta: Testing the Protoplanetary Paradigm. <i>Science</i> , 2012, 336, 684-686.	12.6	422
13	Space missions trigger map wars. <i>Nature</i> , 2012, 488, 442-443.	27.8	0
14	Companies set to fight food-label plan. <i>Nature</i> , 2012, 488, 443-443.	27.8	2
16	Vesta confirmed as a venerable planet progenitor. <i>Nature</i> , 2012, , .	27.8	0
17	The Geologically Recent Giant Impact Basins at Vestaâ€™s South Pole. <i>Science</i> , 2012, 336, 694-697.	12.6	194
18	The Violent Collisional History of Asteroid 4 Vesta. <i>Science</i> , 2012, 336, 690-694.	12.6	209
19	Color and Albedo Heterogeneity of Vesta from Dawn. <i>Science</i> , 2012, 336, 700-704.	12.6	166
20	Global photometric properties of Asteroid (4) Vesta observed with Dawn Framing Camera. <i>Icarus</i> , 2013, 226, 1252-1274.	2.5	68

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21	The quest for regolithic howardites. Part 1: Two trends uncovered using noble gases. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 105, 395-421.	3.9	31
22	Space-Weathering of Solar System Bodies: A Laboratory Perspective. <i>Chemical Reviews</i> , 2013, 113, 9086-9150.	47.7	130
23	On the chronology of lunar origin and evolution. <i>Astronomy and Astrophysics Review</i> , 2013, 21, 1.	25.5	25
24	The structure of the asteroid 4 Vesta as revealed by models of planet-scale collisions. <i>Nature</i> , 2013, 494, 207-210.	27.8	85
25	The 2.5–5.1 μm reflectance spectra of HED meteorites and their constituent minerals: Implications for Dawn. <i>Icarus</i> , 2013, 225, 581-601.	2.5	8
26	Surface composition and taxonomic classification of a group of near-Earth and Mars-crossing asteroids. <i>Icarus</i> , 2013, 225, 131-140.	2.5	42
27	High-velocity collisions from the lunar cataclysm recorded in asteroidal meteorites. <i>Nature Geoscience</i> , 2013, 6, 303-307.	12.9	113
28	Differentiated Planetesimals and the Parent Bodies of Chondrites. <i>Annual Review of Earth and Planetary Sciences</i> , 2013, 41, 529-560.	11.0	118
29	Redox state during core formation on asteroid 4-Vesta. <i>Earth and Planetary Science Letters</i> , 2013, 373, 75-82.	4.4	50
30	Classes in howardites: Impact melts or pyroclasts?. <i>Meteoritics and Planetary Science</i> , 2013, 48, 715-729.	1.6	11
31	Dawn completes its mission at 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2076-2089.	1.6	54
32	Projectile remnants in central peaks of lunar impact craters. <i>Nature Geoscience</i> , 2013, 6, 435-437.	12.9	60
33	Disequilibrium melting and melt migration driven by impacts: Implications for rapid planetesimal core formation. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 100, 41-59.	3.9	41
34	Distribution of iron on Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2237-2251.	1.6	35
35	The Vestan cataclysm: Impact melt clasts in howardites and the bombardment history of 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 771-785.	1.6	32
36	Lithologic mapping of HED terrains on Vesta using Dawn Framing Camera color data. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2199-2210.	1.6	26
37	Composition and petrology of HED polymict breccias: The regolith of (4) Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2105-2134.	1.6	42
38	Challenges in detecting olivine on the surface of 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2155-2165.	1.6	43

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39	Constraints on Vesta's elemental composition: Fast neutron measurements by Dawn's gamma ray and neutron detector. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2271-2288.	1.6	28
40	Mixing relations of the howardite-eucrite-diogenite suite: A new statistical approach of independent component analysis for the Dawn mission. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2289-2299.	1.6	12
41	The origin of eucrites, diogenites, and olivine diogenites: Magma ocean crystallization and shallow magma chamber processes on Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2333-2349.	1.6	121
42	Vestan lithologies mapped by the visual and infrared spectrometer on Dawn. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2185-2198.	1.6	75
43	The heating history of Vesta and the onset of differentiation. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2316-2332.	1.6	27
44	Vesta's mineralogical composition as revealed by the visible and infrared spectrometer on Dawn. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2166-2184.	1.6	87
45	Compositional variability on the surface of 4 Vesta revealed through <i>GR</i> <i>ND</i> measurements of high-energy gamma rays. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2252-2270.	1.6	53
46	Dawn; the Vesta-HED connection; and the geologic context for eucrites, diogenites, and howardites. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2090-2104.	1.6	185
47	Chondritic models of 4 Vesta: Implications for geochemical and geophysical properties. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2300-2315.	1.6	66
48	Neutron absorption constraints on the composition of 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2211-2236.	1.6	47
49	Olivine in an unexpected location on Vesta's surface. <i>Nature</i> , 2013, 504, 122-125.	27.8	82
50	Vesta, vestoids, and the HED meteorites: Interconnections and differences based on <i>Dawn</i> Framing Camera observations. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 1991-2003.	3.6	11
51	Mass-wasting features and processes in Vesta's south polar basin-Rheasilvia. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 2279-2294.	3.6	30
52	Composition of the Rheasilvia basin, a window into Vesta's interior. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 335-346.	3.6	84
53	Thermal analysis of unusual local-scale features on the surface of Vesta. , 2013, , .		0
54	Detections and geologic context of local enrichments in olivine on Vesta with <i>VIR</i> / <i>Dawn</i> data. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 2078-2108.	3.6	33
55	MULTIPLE AND FAST: THE ACCRETION OF ORDINARY CHONDRITE PARENT BODIES. <i>Astrophysical Journal</i> , 2014, 791, 120.	4.5	75
56	Discovery of coesite and stishovite in eucrite. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10939-10942.	7.1	36

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57	More chips off of Asteroid (4) Vesta: Characterization of eight Vestoids and their HED meteorite analogs. <i>Icarus</i> , 2014, 242, 269-282.	2.5	29
58	Olivine-rich exposures at Bellicia and Arruntia craters on (4) Vesta from Dawn <sc>FC</sc>. <i>Meteoritics and Planetary Science</i> , 2014, 49, 1831-1850.	1.6	20
59	Mineralogy of V-type asteroids as a constraining tool of their past history. <i>Planetary and Space Science</i> , 2014, 104, 295-309.	1.7	2
60	Mid-infrared optical constants of clinopyroxene and orthoclase derived from oriented single-crystal reflectance spectra. <i>American Mineralogist</i> , 2014, 99, 1942-1955.	1.9	12
61	The Formation of Jupiter, the Jovian Early Bombardment and the Delivery of Water to the Asteroid Belt: The Case of (4) Vesta. <i>Life</i> , 2014, 4, 4-34.	2.4	22
62	Spectroscopy and surface properties of (809) Lundia. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 437, 176-184.	4.4	10
63	Composition and mineralogy of dark material units on Vesta. <i>Icarus</i> , 2014, 240, 58-72.	2.5	41
64	Lithium systematics in howardite-eucrite-diogenite meteorites: Implications for crust-mantle evolution of planetary embryos. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 125, 131-145.	3.9	13
65	Thermal measurements of dark and bright surface features on Vesta as derived from Dawn/VIR. <i>Icarus</i> , 2014, 240, 36-57.	2.5	52
66	Geomorphology and structural geology of Saturnalia Fossae and adjacent structures in the northern hemisphere of Vesta. <i>Icarus</i> , 2014, 244, 23-40.	2.5	27
67	The geological nature of dark material on Vesta and implications for the subsurface structure. <i>Icarus</i> , 2014, 240, 3-19.	2.5	28
68	Gravity field expansion in ellipsoidal harmonic and polyhedral internal representations applied to Vesta. <i>Icarus</i> , 2014, 240, 118-132.	2.5	48
69	Introduction: The geologic mapping of Vesta. <i>Icarus</i> , 2014, 244, 1-12.	2.5	43
70	The fate of magmas in planetesimals and the retention of primitive chondritic crusts. <i>Earth and Planetary Science Letters</i> , 2014, 390, 128-137.	4.4	48
71	Unique, Antique Vesta. <i>Elements</i> , 2014, 10, 39-44.	0.5	8
72	Geologic mapping of ejecta deposits in Oppia Quadrangle, Asteroid (4) Vesta. <i>Icarus</i> , 2014, 244, 104-119.	2.5	13
73	A deep crust-mantle boundary in the asteroid 4 Vesta. <i>Nature</i> , 2014, 511, 303-306.	27.8	54
74	Imprint of the Rheasilvia impact on Vesta - Geologic mapping of quadrangles Gegania and Lucaria. <i>Icarus</i> , 2014, 244, 60-73.	2.5	15

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75	The chronostratigraphy of protoplanet Vesta. <i>Icarus</i> , 2014, 244, 158-165.	2.5	26
76	Asteroids. , 2014, , 365-415.		28
77	Mercury's Weather-Beaten Surface: Understanding Mercury in the Context of Lunar and Asteroidal Space Weathering Studies. <i>Space Science Reviews</i> , 2014, 181, 121-214.	8.1	108
78	Icarus special issue: Dark and bright materials on Vesta. <i>Icarus</i> , 2014, 240, 1-2.	2.5	0
79	Efficient early global relaxation of asteroid Vesta. <i>Icarus</i> , 2014, 240, 133-145.	2.5	22
80	The primordial collisional history of Vesta: crater saturation, surface evolution and survival of the basaltic crust. <i>Planetary and Space Science</i> , 2014, 103, 82-95.	1.7	14
81	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.	2.5	19
82	Geologic map of the northern hemisphere of Vesta based on Dawn Framing Camera (FC) images. <i>Icarus</i> , 2014, 244, 41-59.	2.5	29
83	The unique geomorphology and physical properties of the Vestalia Terra plateau. <i>Icarus</i> , 2014, 244, 89-103.	2.5	33
84	The oxygen isotope composition of diogenites: Evidence for early global melting on a single, compositionally diverse, HED parent body. <i>Earth and Planetary Science Letters</i> , 2014, 390, 165-174.	4.4	50
85	The contamination of the surface of Vesta by impacts and the delivery of the dark material. <i>Icarus</i> , 2014, 240, 86-102.	2.5	28
86	Photometric behavior of spectral parameters in Vesta dark and bright regions as inferred by the Dawn VIR spectrometer. <i>Icarus</i> , 2014, 240, 20-35.	2.5	51
87	Spectral analysis of the bright materials on the asteroid Vesta. <i>Icarus</i> , 2014, 240, 73-85.	2.5	26
88	Differentiation of Vesta: Implications for a shallow magma ocean. <i>Earth and Planetary Science Letters</i> , 2014, 395, 267-280.	4.4	117
89	Vesta's north pole quadrangle Av-1 (Albana): Geologic map and the nature of the south polar basin antipodes. <i>Icarus</i> , 2014, 244, 13-22.	2.5	14
90	Constraints on Vesta's interior structure using gravity and shape models from the Dawn mission. <i>Icarus</i> , 2014, 240, 146-160.	2.5	55
91	The quest for regolithic howardites. Part 2: Surface origins highlighted by noble gases. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 140, 488-508.	3.9	18
92	Lobate and flow-like features on asteroid Vesta. <i>Planetary and Space Science</i> , 2014, 103, 24-35.	1.7	42

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93	Small fresh impact craters on asteroid 4 Vesta: A compositional and geological fingerprint. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 771-797.	3.6	12
94	Compositional evidence of magmatic activity on Vesta. <i>Geophysical Research Letters</i> , 2014, 41, 3038-3044.	4.0	12
95	Testing linear spectral unmixing on laboratory mixtures: Application to VIR data for asteroid Vesta. , 2014, , .		0
96	Vesta surface thermal properties map. <i>Geophysical Research Letters</i> , 2014, 41, 1438-1443.	4.0	46
97	Reflectance properties and hydrated material distribution on Vesta: Global investigation of variations and their relationship using improved calibration of Dawn VIR mapping spectrometer. <i>Icarus</i> , 2015, 259, 21-38.	2.5	21
98	Eucritic crust remnants and the effect of in-falling hydrous carbonaceous chondrites characterizing the composition of Vesta's Marcia region. <i>Icarus</i> , 2015, 259, 91-115.	2.5	8
99	Mineralogical analysis of the Oppia quadrangle of asteroid (4) Vesta: Evidence for occurrence of moderate-reflectance hydrated minerals. <i>Icarus</i> , 2015, 259, 129-149.	2.5	15
100	Near infrared spectroscopy of HED meteorites: Effects of viewing geometry and compositional variations. <i>Icarus</i> , 2015, 258, 384-401.	2.5	12
101	Mineralogic mapping of the Av-9 Numisia quadrangle of Vesta. <i>Icarus</i> , 2015, 259, 116-128.	2.5	6
102	Estimating the modal mineralogy of eucrite and diogenite meteorites using visible–near infrared reflectance spectroscopy. <i>Meteoritics and Planetary Science</i> , 2015, 50, 1821-1850.	1.6	24
103	The 1925 meteorite fall near Ellemeet and Serooskerke, the Netherlands. <i>Meteoritics and Planetary Science</i> , 2015, 50, E1.	1.6	1
104	VESTOIDS, PART II: THE BASALTIC NATURE AND HED METEORITE ANALOGS FOR EIGHT V-TYPE ASTEROIDS AND THEIR ASSOCIATIONS WITH (4) VESTA. <i>Astrophysical Journal, Supplement Series</i> , 2015, 221, 19.	7.7	12
105	Petrology and geochemistry of Northwest Africa 5480 diogenite and evidence for a basin-forming event on Vesta. <i>Meteoritics and Planetary Science</i> , 2015, 50, 1260-1270.	1.6	6
106	Using HED meteorites to interpret neutron and gamma-ray data from asteroid 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2015, 50, 1311-1337.	1.6	24
107	Spin-forbidden pyroxene absorptions in the vir-spectra of 4Vesta. , 2015, , .		1
108	Compositional variations in the Vestan Rheasilvia basin. <i>Icarus</i> , 2015, 259, 194-202.	2.5	8
109	Tectonism and magmatism identified on asteroids. <i>Geological Society Special Publication</i> , 2015, 401, 423-441.	1.3	5
110	VNIR spectral characteristics of terrestrial igneous effusive rocks: mineralogical composition and the influence of texture. <i>Geological Society Special Publication</i> , 2015, 401, 139-158.	1.3	18

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111	Mineralogical and spectral analysis of Vesta's Gegeria and Lucaria quadrangles and comparative analysis of their key features. <i>Icarus</i> , 2015, 259, 72-90.	2.5	19
112	Formation of the "ponds" on asteroid (433) Eros by fluidization. <i>Planetary and Space Science</i> , 2015, 117, 106-118.	1.7	5
113	Spectral analysis of the quadrangles Av-13 and Av-14 on Vesta. <i>Icarus</i> , 2015, 259, 181-193.	2.5	9
114	The Sextilia-region on Asteroid 4Vesta " Stratigraphy and variegation. <i>Icarus</i> , 2015, 259, 162-180.	2.5	8
115	Detection of new olivine-rich locations on Vesta. <i>Icarus</i> , 2015, 258, 120-134.	2.5	37
116	Vesta's Pinaria region: Original basaltic achondrite material derived from mixing upper and lower crust. <i>Icarus</i> , 2015, 259, 150-161.	2.5	4
117	Concentrations of potassium and thorium within Vesta's regolith. <i>Icarus</i> , 2015, 259, 39-52.	2.5	33
118	Maskelynite in asteroidal, lunar and planetary basaltic meteorites: An indicator of shock pressure during impact ejection from their parent bodies. <i>Icarus</i> , 2015, 257, 221-229.	2.5	64
119	Asteroids and Comets. , 2015, , 487-528.		2
120	Is Vesta an intact and pristine protoplanet?. <i>Icarus</i> , 2015, 254, 190-201.	2.5	30
121	Mineralogy of some evolved LL chondrites with reference to asteroid materials and solar system evolution. <i>Earth, Planets and Space</i> , 2015, 67, 5.	2.5	7
122	The composition of Vesta from the Dawn mission. <i>Icarus</i> , 2015, 259, 1-9.	2.5	8
123	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
124	Composition of the northern regions of Vesta analyzed by the Dawn mission. <i>Icarus</i> , 2015, 259, 53-71.	2.5	25
125	The Explored Asteroids: Science and Exploration in the Space Age. <i>Space Science Reviews</i> , 2015, 194, 139-235.	8.1	5
126	Dielectric properties of Asteroid Vesta's surface as constrained by Dawn VIR observations. <i>Icarus</i> , 2015, 262, 93-101.	2.5	10
127	Asteroid (4) Vesta II: Exploring a geologically and geochemically complex world with the Dawn Mission. <i>Chemie Der Erde</i> , 2015, 75, 273-285.	2.0	18
128	Likely detection of water-rich asteroid debris in a metal-polluted white dwarf. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 450, 2083-2093.	4.4	85

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129	The role of particle size in the laboratory reflectance spectra of pyroxenes: The case of the 670-nm minor feature. <i>Planetary and Space Science</i> , 2015, 117, 96-105.	1.7	1
130	Mineralogy of Marcia, the youngest large crater of Vesta: Character and distribution of pyroxenes and hydrated material. <i>Icarus</i> , 2015, 248, 392-406.	2.5	9
131	Timing of global crustal metamorphism on Vesta as revealed by high-precision U-Pb dating and trace element chemistry of eucrite zircon. <i>Earth and Planetary Science Letters</i> , 2015, 409, 182-192.	4.4	39
132	Constraining geologic properties and processes through the use of impact craters. <i>Geomorphology</i> , 2015, 240, 18-33.	2.6	14
133	Using VSWIR microimaging spectroscopy to explore the mineralogical diversity of HED meteorites. , 2016, , .		2
134	Petrology and oxygen isotopic compositions of clasts in HED polymict breccia NWA 5232. <i>Meteoritics and Planetary Science</i> , 2016, 51, 1184-1200.	1.6	6
135	Three-dimensional spectral analysis of compositional heterogeneity at Arruntia crater on (4) Vesta using Dawn FC. <i>Icarus</i> , 2016, 267, 344-363.	2.5	4
136	Prolonged magmatism on 4 Vesta inferred from Hf-W analyses of eucrite zircon. <i>Earth and Planetary Science Letters</i> , 2016, 452, 216-226.	4.4	38
137	Asteroid 4 Vesta: Dynamical and collisional evolution during the Late Heavy Bombardment. <i>Icarus</i> , 2016, 271, 170-179.	2.5	5
138	Hiding in the howardites: Unequilibrated eucrite clasts as a guide to the formation of Vesta's crust. <i>Meteoritics and Planetary Science</i> , 2016, 51, 2387-2402.	1.6	6
139	Grosvenor Mountains 95 howardite pairing group: Insights into the surface regolith of asteroid 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2016, 51, 167-194.	1.6	13
140	Olivine on Vesta as exogenous contaminants brought by impacts: Constraints from modeling Vesta's collisional history and from impact simulations. <i>Icarus</i> , 2016, 280, 328-339.	2.5	17
141	The stability of the crust of the dwarf planet Ceres. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 463, 520-528.	4.4	13
142	Space weathering on airless bodies. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 1865-1884.	3.6	302
143	CV and CM chondrite impact melts. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 189, 338-358.	3.9	51
144	Disk-resolved photometry of Vesta and Lutetia and comparison with other asteroids. <i>Icarus</i> , 2016, 267, 204-216.	2.5	11
145	Lithologic variation within bright material on Vesta revealed by linear spectral unmixing. <i>Icarus</i> , 2016, 272, 16-31.	2.5	9
146	Spectral characterization of V-type asteroids - I. Space weathering effects and implications for V-type NEAs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 455, 584-595.	4.4	15

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147	Spectral characterization of V-type asteroids – II. A statistical analysis. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 455, 2871-2888.	4.4	32
148	The Dawn exploration of (4) Vesta as the “ground truth” to interpret asteroid polarimetry. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 456, 248-262.	4.4	15
149	Advances in determining asteroid chemistries and mineralogies. <i>Chemie Der Erde</i> , 2016, 76, 181-195.	2.0	9
150	Optical space weathering on Vesta: Radiative-transfer models and Dawn observations. <i>Icarus</i> , 2016, 265, 161-174.	2.5	9
151	Igneous lithologies on asteroid (4) Vesta mapped using gamma-ray and neutron data. <i>Icarus</i> , 2017, 286, 35-45.	2.5	11
152	Melting and differentiation of early-formed asteroids: The perspective from high precision oxygen isotope studies. <i>Chemie Der Erde</i> , 2017, 77, 1-43.	2.0	132
153	The petrology and chronology of NWA 8009 impact melt breccia: Implication for early thermal and impact histories of Vesta. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 204, 159-178.	3.9	14
154	Reconciliation of the excess ¹⁷⁶ Hf conundrum in meteorites: Recent disturbances of the Lu-Hf and Sm-Nd isotope systematics. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 212, 303-323.	3.9	9
156	The ungrouped chondrite El Mâdano 301 and its comparison with other reduced ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 218, 98-113.	3.9	13
158	Spectral characterization of V-type asteroids outside the Vesta family. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 464, 1718-1726.	4.4	16
159	The late accretion and erosion of Vesta’s crust recorded by eucrites and diogenites as an astrochemical window into the formation of Jupiter and the early evolution of the Solar System. <i>Icarus</i> , 2018, 311, 224-241.	2.5	3
160	Spectroscopy of five V-type asteroids in the middle and outer main belt. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 475, 353-358.	4.4	10
161	Mg-rich harzburgites from Vesta: Mantle residua or cumulates from planetary differentiation?. <i>Meteoritics and Planetary Science</i> , 2018, 53, 514-546.	1.6	8
162	Origin and implications of troilite-orthopyroxene intergrowths in the brecciated diogenite Northwest Africa 7183. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 220, 125-145.	3.9	12
163	Non-destructive characterisation of the Elephant Moraine 83227 meteorite using confocal Raman, micro-energy-dispersive X-ray fluorescence and Raman-scanning electron microscope-energy-dispersive X-ray microscopies. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 7477-7488.	3.7	7
164	Serra Pelada: the first Amazonian Meteorite fall is a Eucrite (basalt) from Asteroid 4-Vesta. <i>Anais Da Academia Brasileira De Ciencias</i> , 2018, 90, 3-16.	0.8	5
165	Exploring the Possible Continuum Between Comets and Asteroids. , 2018, , 409-438.		3
166	Statistical analysis of the spectral properties of V-type asteroids: A review on what we known and what is still missing. <i>Planetary and Space Science</i> , 2018, 164, 37-43.	1.7	7

#	ARTICLE	IF	CITATIONS
167	Elemental composition and mineralogy of Vesta and Ceres: Distribution and origins of hydrogen-bearing species. <i>Icarus</i> , 2019, 318, 42-55.	2.5	34
168	A Taxonomic Study of Asteroid Families from KMTNET-SAAO Multiband Photometry. <i>Astrophysical Journal, Supplement Series</i> , 2019, 242, 15.	7.7	11
169	Retrieving magma composition from TIR spectra: implications for terrestrial planets investigations. <i>Scientific Reports</i> , 2019, 9, 15200.	3.3	13
170	Compositional characterization of V-type candidate asteroids identified using the MOVIS catalogue. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 3866-3875.	4.4	9
171	The geologic history of Vesta inferred from combined $^{207}\text{Pb}/^{206}\text{Pb}$ and $^{40}\text{Ar}/^{39}\text{Ar}$ chronology of basaltic eucrites. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 267, 275-299.	3.9	14
172	Electronic Spectra of Minerals in the Visible and Near-Infrared Regions. , 2019, , 3-20.		3
173	Geochemistry and Sm-Nd chronology of a Stannernâ€group eucrite, Northwest Africa 7188. <i>Meteoritics and Planetary Science</i> , 2019, 54, 2710-2728.	1.6	3
174	Investigating magmatic processes in the early Solar System using the Cl isotopic systematics of eucrites. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 266, 582-597.	3.9	17
175	Bombardment history of asteroid 4 Vesta recorded by brecciated eucrites: Large impact event clusters at 4.50â€Ga and discreet bombardment until 3.47â€Ga . <i>Geochimica Et Cosmochimica Acta</i> , 2019, 260, 99-123.	3.9	18
176	Mesosiderite formation on asteroid 4 Vesta by a hit-and-run collision. <i>Nature Geoscience</i> , 2019, 12, 510-515.	12.9	51
177	Visible and Near-Infrared Spectral Analyses of Asteroids and Comets from Dawn and Rosetta. , 2019, , 413-427.		0
178	Spectral Analyses of Asteroids. , 2019, , 393-412.		1
179	Midâ€Infrared Optical Constants of Labradorite, a Triclinic Plagioclase Mineral. <i>Earth and Space Science</i> , 2019, 6, 2410-2422.	2.6	9
180	Absolute spectral modelling of asteroid (4) Vesta. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 483, 1952-1956.	4.4	5
181	Core formation, mantle differentiation and core-mantle interaction within Earth and the terrestrial planets. <i>Tectonophysics</i> , 2019, 760, 165-198.	2.2	67
182	Early Solar System Materials, Processes, and Chronology. , 2019, , 3-26.		0
183	Ac-H-11 Sintana and Ac-H-12 Toharu quadrangles: Assessing the large and small scale heterogeneities of Ceresâ€™ surface. <i>Icarus</i> , 2019, 318, 230-240.	2.5	9
184	Distribution and spectrophotometric classification of basaltic asteroids. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 491, 5966-5979.	4.4	10

#	ARTICLE	IF	CITATIONS
185	Compositional Heterogeneity of Impact Melt Rocks at the Haughton Impact Structure, Canada: Implications for Planetary Processes and Remote Sensing. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006218.	3.6	6
186	Disk-integrated Thermal Properties of Ceres Measured at Millimeter Wavelengths. <i>Astronomical Journal</i> , 2020, 159, 215.	4.7	3
187	NanoSIMS isotopic investigation of xenolithic carbonaceous clasts from the kapoeta howardite. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 283, 243-264.	3.9	6
188	Modeling the Dielectric Properties of Minerals From Crystals to Bulk Powders for Improved Interpretation of Asteroid Radar Observations. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006141.	3.6	7
189	Determination of Size, Albedo, and Thermal Inertia of 10 Vesta Family Asteroids with WISE/NEOWISE Observations. <i>Astronomical Journal</i> , 2020, 159, 264.	4.7	7
190	The brecciated texture of polymict eucrites: Petrographic investigations of unequilibrated meteorites from the Antarctic Yamato collection. <i>Meteoritics and Planetary Science</i> , 2020, 55, 558-574.	1.6	5
191	Merging spatial and spectral datasets to place olivine in stratigraphic context at Arruntia crater, a rare window into Vesta's northern hemispheric crust. <i>Icarus</i> , 2020, 345, 113718.	2.5	4
192	Optical Imaging Instruments and Main Science Results of Small Body Exploration: A Review. <i>IEEE Access</i> , 2021, 9, 78973-78992.	4.2	1
193	Characterization of D δ -Type Spectra Based on Hyperspectral Remote Sensing of the Lunar Surface. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, .	3.6	2
194	End of magmatism in the upper crust of asteroid 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2021, 56, 619-641.	1.6	6
195	Water abundance at the surface of C-complex main-belt asteroids. <i>Icarus</i> , 2021, 357, 114125.	2.5	18
196	Special Crater Types on Vesta and Ceres as Revealed by Dawn. , 0, , .		0
197	The impact and recovery of asteroid 2018 LA. <i>Meteoritics and Planetary Science</i> , 2021, 56, 844-893.	1.6	21
198	How do secondary iron enrichments form within basaltic eucrites? An experimental approach. <i>Meteoritics and Planetary Science</i> , 2021, 56, 911.	1.6	2
199	Compositional control on impact crater formation on mid-sized planetary bodies: Dawn at Ceres and Vesta, Cassini at Saturn. <i>Icarus</i> , 2021, 359, 114343.	2.5	14
200	The Brittle Boulders of Dwarf Planet Ceres. <i>Planetary Science Journal</i> , 2021, 2, 111.	3.6	10
201	Complicated pressure-temperature path recorded in the eucrite Padvarninkai. <i>Meteoritics and Planetary Science</i> , 2021, 56, 1443-1458.	1.6	3
202	The astrophysical context of collision processes in meteorites. <i>Meteoritics and Planetary Science</i> , 2021, 56, 1406-1421.	1.6	5

#	ARTICLE	IF	CITATIONS
203	Impacts on Ceres and Vesta: Source regions, cratering, and fragmentation. <i>Astronomy and Astrophysics</i> , 2021, 652, A122.	5.1	2
204	The surface of (4) Vesta in visible light as seen by Dawn/VIR. <i>Astronomy and Astrophysics</i> , 2021, 653, A118.	5.1	1
205	The unique spectral and geomorphological characteristics of pitted impact deposits associated with Marcia crater on Vesta. <i>Icarus</i> , 2021, 369, 114633.	2.5	1
206	Iron rich basaltic eucrites, implication on spectral properties and parental bodies. <i>Icarus</i> , 2022, 371, 114653.	2.5	2
207	Mineralogy and Surface Composition of Asteroids. , 2015, , .		21
208	Asteroid Thermophysical Modeling. , 2015, , .		55
209	Experimental Investigation of Oxidation of Pyroxene and Basalt: Implications for Spectroscopic Analyses of the Surface of Venus and the Ages of Lava Flows. <i>Planetary Science Journal</i> , 2020, 1, 21.	3.6	20
210	Asteroids Close-Up: What We Have Learned from Twenty Years of Space Exploration. , 2013, , 1-33.		0
211	Meteorites, Asteroids and the Age and Origin of the Solar System. <i>Astronomy and Astrophysics Library</i> , 2014, , 647-711.	0.1	0
212	Effusive silicate volcanism: Observations and processes. , 2022, , 5-75.		1
213	The impact of asteroid shapes and topographies on their reflectance spectroscopy. <i>Icarus</i> , 2022, 376, 114806.	2.5	3
214	Protoplanet Vesta and HED Meteorites. , 2022, , 41-52.		2
215	Geomorphology of Ceres. , 2022, , 143-158.		0
216	The Psyche Topography and Geomorphology Investigation. <i>Space Science Reviews</i> , 2022, 218, 1.	8.1	4
217	Collisional Evolution of the Main Belt as Recorded by Vesta. , 2022, , 250-261.		1
218	Visible to Midâ€Infrared Optical Constants of Orthopyroxenes. <i>Earth and Space Science</i> , 2022, 9, .	2.6	1
219	Remote Observations of the Main Belt. , 2022, , 3-25.		0
220	Geomorphology of Vesta. , 2022, , 67-80.		0

#	ARTICLE	IF	CITATIONS
221	Isotopic Constraints on the Formation of the Main Belt. , 2022, , 212-226.		1
222	Exploring Vesta and Ceres. , 2022, , 26-38.		0
224	The unusual low Mg rock clasts from Lohawat Howardite, India: Petrogenetic implications. Journal of Earth System Science, 2022, 131, .	1.3	0
225	The Spectral Properties of Pitted Impact Deposits on Vesta as Seen by the Dawn VIR Instrument. Planetary Science Journal, 2022, 3, 182.	3.6	0
226	A new prospect to analyse the spectral properties of v-type asteroids. Icarus, 2023, 390, 115320.	2.5	3
227	Physical processes leading to surface erosion and dust particles dynamics of airless bodies. Physics of Plasmas, 2022, 29, .	1.9	4
228	Birth and Decline of Magma Oceans in Planetesimals: 2. Structure and Thermal History of Early Accreted Small Planetary Bodies. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	0
229	Pristinity and petrogenesis of eucrites. Meteoritics and Planetary Science, 2023, 58, 275-295.	1.6	1
230	<i>Gaia</i> search for early-formed andesitic asteroidal crusts. Astronomy and Astrophysics, 2023, 671, A40.	5.1	3
231	What is mineral informatics?. American Mineralogist, 2023, 108, 1242-1257.	1.9	5
232	Lead-lead (Pb-Pb) dating of eucrites and mesosiderites: Implications for the formation and evolution of Vesta. Geochimica Et Cosmochimica Acta, 2023, 348, 369-380.	3.9	2
233	Determining the Pyroxene Mineralogies of Vestoids. Planetary Science Journal, 2023, 4, 96.	3.6	1
234	Intermediate Infrared Spectroscopy of Pyroxene: Determination of Ca&Mg&Fe Composition in the 4&8 Micron Wavelength Range. Earth and Space Science, 2023, 10, .	2.6	2
235	Pyroxene and Hydroxyl Signatures in Vesta Newly Calibrated Data from Dawn Mission. Universe, 2023, 9, 296.	2.5	0
236	Peculiarities of the Extraterrestrial Basalts of the Solar System with Reference to the Exoplanet Science: a Brief Review. Geochemistry International, 2023, 61, 453-467.	0.7	0
237	A Geologic Map of Vesta Produced Using a Hybrid Method for Incorporating Spectroscopic and Morphologic Data. Planetary Science Journal, 2023, 4, 157.	3.6	1
238	Compositional characterization of a primordial S-type asteroid family of the inner main belt. Astronomy and Astrophysics, 0, , .	5.1	0
239	Small icy bodies in the inner Solar System. , 2024, , 261-281.		1

#	ARTICLE	IF	CITATIONS
240	History and Implications of Asteroid Exploration. Kongjian Kexue Xuebao, 2024, 44, 19.	0.4	0