Marco Delbo

List of Publications by Year
in descending order

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53 papers	2,741 citations	172457 29 h-index	189892 50 g-index
65 all docs	65 docs citations	65 times ranked	1962 citing authors

#	Article	IF	Citations
1	Thermal fatigue as the origin of regolith on small asteroids. Nature, 2014, 508, 233-236.	27.8	280
2	The OSIRISâ€REx target asteroid (101955) Bennu: Constraints on its physical, geological, and dynamical nature from astronomical observations. Meteoritics and Planetary Science, 2015, 50, 834-849.	1.6	168
3	Super-catastrophic disruption of asteroids at small perihelion distances. Nature, 2016, 530, 303-306.	27.8	161
4	Keck observations of near-Earth asteroids in the thermal infrared. Icarus, 2003, 166, 116-130.	2.5	146
5	In search of the source of asteroid (101955) Bennu: Applications of the stochastic YORP model. Icarus, 2015, 247, 191-217.	2.5	125
6	Low thermal conductivity boulder with high porosity identified on C-type asteroid (162173) Ryugu. Nature Astronomy, 2019, 3, 971-976.	10.1	124
7	Introducing the Eulalia and new Polana asteroid families: Re-assessing primitive asteroid families in the inner Main Belt. Icarus, 2013, 225, 283-297.	2.5	105
8	Highly porous nature of a primitive asteroid revealed by thermal imaging. Nature, 2020, 579, 518-522.	27.8	100
9	Science case for the Asteroid Impact Mission (AIM): A component of the Asteroid Impact & Deflection Assessment (AIDA) mission. Advances in Space Research, 2016, 57, 2529-2547.	2.6	95
10	Thermal inertia of main belt asteroids smaller than 100km from IRAS data. Planetary and Space Science, 2009, 57, 259-265.	1.7	93
11	Variations in color and reflectance on the surface of asteroid (101955) Bennu. Science, 2020, 370, .	12.6	84
12	Asteroid (101955) Bennuâ€™s weak boulders and thermally anomalous equator. Science Advances, 2020, 6, .	10.3	83
13	Identification of a primordial asteroid family constrains the original planetesimal population. Science, 2017, 357, 1026-1029.	12.6	81
14	ExploreNEOs. V. AVERAGE ALBEDO BY TAXONOMIC COMPLEX IN THE NEAR-EARTH ASTEROID POPULATION. Astronomical Journal, 2011, 142, 85.	4.7	69
15	Physical properties of nearâ€Earth asteroids from thermal infrared observations and thermal modeling. Meteoritics and Planetary Science, 2002, 37, 1929-1936.	1.6	68
16	Evidence of a metal-rich surface for the Asteroid (16) Psyche from interferometric observations in the thermal infrared. Icarus, 2013, 226, 419-427.	2.5	68
17	Bennuâ€™s near-Earth lifetime of 1.75 million years inferred from craters on its boulders. Nature, 2020, 587, 205-209.	27.8	62
18	Albedo and size determination of potentially hazardous asteroids: (99942) Apophisâ˜†. Icarus, 2007, 188, 266-269.	2.5	57

#	Article	IF	Citations
19	Exogenic basalt on asteroid (101955) Bennu. Nature Astronomy, 2021, 5, 31-38.	10.1	57
20	Asteroid Thermophysical Modeling. , 2015, , .		55
21	Fine-regolith production on asteroids controlled by rock porosity. Nature, 2021, 598, 49-52.	27.8	45
22	TEMPERATURE HISTORY AND DYNAMICAL EVOLUTION OF (101955) 1999 RQ 36: A POTENTIAL TARGET FOR SAMPLE RETURN FROM A PRIMITIVE ASTEROID. Astrophysical Journal Letters, 2011, 728, L42.	8.3	36
23	3D shape of asteroid (6) Hebe from VLT/SPHERE imaging: Implications for the origin of ordinary H chondrites. Astronomy and Astrophysics, 2017, 604, A64.	5.1	35
24	Thermophysical properties of near-Earth asteroid (341843) 2008 EV₅from WISE data. Astronomy and Astrophysics, 2014, 561, A45.	5.1	33
25	Visible spectroscopy of the Polanaâ€“Eulalia family complex: Spectral homogeneity. Icarus, 2016, 266, 57-75.	2.5	33
26	Yarkovsky V-shape identification of asteroid families. Icarus, 2017, 282, 290-312.	2.5	32
27	Near-zero cohesion and loose packing of Bennuâ€™s near subsurface revealed by spacecraft contact. Science Advances, 2022, 8, .	10.3	31
28	The cool surfaces of binary near-Earth asteroids. Icarus, 2011, 212, 138-148.	2.5	30
29	Anomalously porous boulders on (162173) Ryugu as primordial materials from its parent body. Nature Astronomy, 2021, 5, 766-774.	10.1	30
30	Asteroid occultations today and tomorrow: toward the GAIA era. Astronomy and Astrophysics, 2007, 474, 1015-1022.	5.1	29
31	Ancient and primordial collisional families as the main sources of X-type asteroids of the inner main belt. Astronomy and Astrophysics, 2019, 624, A69.	5.1	28
32	The origins of Asteroidal rock disaggregation: Interplay of thermal fatigue and microstructure. Icarus, 2018, 304, 172-182.	2.5	27
33	Unraveling the Mechanics of Thermal Stress Weathering: Rateâ€Effects, Sizeâ€Effects, and Scaling Laws. Journal of Geophysical Research E: Planets, 2019, 124, 3304-3328.	3.6	25
34	Portrait of the Polanaâ€“Eulalia family complex: Surface homogeneity revealed from near-infrared spectroscopy. Icarus, 2016, 274, 231-248.	2.5	24
35	FIRST VLTI-MIDI DIRECT DETERMINATIONS OF ASTEROID SIZES. Astrophysical Journal, 2009, 694, 1228-1236.	4.5	23
36	The efficiency of thermal fatigue in regolith generation on small airless bodies. Icarus, 2019, 333, 356-370.	2.5	23

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37	Determination of physical properties of the Asteroid (41) Daphne from interferometric observations in the thermal infrared. Icarus, 2011, 215, 47-56.	2.5	22
38	Fullâ€Field Modeling of Heat Transfer in Asteroid Regolith: 1. Radiative Thermal Conductivity of Polydisperse Particulates. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006100.	3.6	22
39	Very weak carbonaceous asteroid simulants I: Mechanical properties and response to hypervelocity impacts. Icarus, 2020, 341, 113648.	2.5	17
40	PHYSICAL CHARACTERIZATION AND ORIGIN OF BINARY NEAR-EARTH ASTEROID (175706) 1996 FG3. Astrophysical Journal, 2012, 748, 104.	4.5	15
41	MIRS: an imaging spectrometer for the MMX mission. Earth, Planets and Space, 2021, 73, .	2.5	13
42	The small binary asteroid (939) Isberga. Icarus, 2015, 248, 516-525.	2.5	12
43	Network of thermal cracks in meteorites due to temperature variations: new experimental evidence and implications for asteroid surfaces. Monthly Notices of the Royal Astronomical Society, 2020, 500, 1905-1920.	4.4	12
44	Assessing the Sampleability of Bennuâ€™s Surface for the OSIRIS-REx Asteroid Sample Return Mission. Space Science Reviews, 2022, 218, 20.	8.1	12
45	Alignment of fractures on Bennuâ€™s boulders indicative of rapid asteroid surface evolution. Nature Geoscience, 2022, 15, 453-457.	12.9	11
46	Characterisation of the main belt asteroid (223) Rosa. Astronomy and Astrophysics, 2021, 656, L18.	5.1	9
47	Efficiency characterization of the V-shape asteroid family detection method. Icarus, 2021, 357, 114218.	2.5	7
48	Fullâ€Field Modeling of Heat Transfer in Asteroid Regolith: 2. Effects of Porosity. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	7
49	Diurnal temperature variation as the source of the preferential direction of fractures on asteroids: Theoretical model for the case of Bennu. Icarus, 2021, 360, 114347.	2.5	5
50	The astrophysical context of collision processes in meteorites. Meteoritics and Planetary Science, 2021, 56, 1406-1421.	1.6	5
51	Formation of Main Belt Asteroids. , 2022, , 199-211.		3
52	Eâ€“ELT: Expected Applications to Asteroid Observations in the Thermal Infrared. Earth, Moon and Planets, 2009, 105, 235-247.	0.6	1
53	Science with MATISSE. , 2016, , .		0