Rosario Brunetto

List of Publications by Year
in descending order

37 papers	1,763 citations	331670 21 h-index	345221 36 g-index
38 all docs	38 docs citations	38 times ranked	1304 citing authors

#	Article	IF	Citations
1	The surface composition of asteroid 162173 Ryugu from Hayabusa2 near-infrared spectroscopy. Science, 2019, 364, 272-275.	12.6	262
2	Ion irradiation of carbonaceous chondrites: A new view of space weathering on primitive asteroids. Icarus, 2017, 285, 43-57.	2.5	136
3	Preliminary analysis of the Hayabusa2 samples returned from C-type asteroid Ryugu. Nature Astronomy, 2022, 6, 214-220.	10.1	136
4	Elastic collisions in ion irradiation experiments: A mechanism for space weathering of silicates. Icarus, 2005, 179, 265-273.	2.5	106
5	Modeling asteroid surfaces from observations and irradiation experiments: The case of 832 Karin. Icarus, 2006, 184, 327-337.	2.5	92
6	Space weathering of near-Earth and main belt silicate-rich asteroids: observations and ion irradiation experiments. Astronomy and Astrophysics, 2005, 443, 769-775.	5.1	85
7	INTERPLANETARY DUST PARTICLES AS SAMPLES OF ICY ASTEROIDS. Astrophysical Journal, 2015, 806, 204.	4.5	85
8	Space Weathering in the Main Asteroid Belt: The Big Picture. Astrophysical Journal, 2006, 647, L179-L182.	4.5	80
9	Paucity of Tagish Lake-like parent bodies in the Asteroid Belt and among Jupiter Trojans. Icarus, 2013, 225, 517-525.	2.5	74
10	First compositional analysis of Ryugu samples by the MicrOmega hyperspectral microscope. Nature Astronomy, 2022, 6, 221-225.	10.1	65
11	Asteroid colors: a novel tool for magnetic field detection? The case of Vesta. Astronomy and Astrophysics, 2006, 451, L43-L46.	5.1	62
12	Ion irradiation of Allende meteorite probed by visible, IR, and Raman spectroscopies. Icarus, 2014, 237, 278-292.	2.5	60
13	Ion irradiation of the Murchison meteorite: Visible to mid-infrared spectroscopic results. Astronomy and Astrophysics, 2015, 577, A41.	5.1	59
14	Comparison of the Raman spectra of ion irradiated soot and collected extraterrestrial carbon. Icarus, 2009, 200, 323-337.	2.5	55
15	DIFFERENT ORIGINS OR DIFFERENT EVOLUTIONS? DECODING THE SPECTRAL DIVERSITY AMONG C-TYPE ASTEROIDS. Astronomical Journal, 2017, 153, 72.	4.7	55
16	Mid-IR, Far-IR, Raman micro-spectroscopy, and FESEMâ€“EDX study of IDP L2021C5: Clues to its origin. Icarus, 2011, 212, 896-910.	2.5	53
17	Thermally altered subsurface material of asteroid (162173) Ryugu. Nature Astronomy, 2021, 5, 246-250.	10.1	47
18	Optical characterization of laser ablated silicates. Icarus, 2007, 191, 381-393.	2.5	31

#	Article	IF	Citations
19	Space weathering of Vesta and V-type asteroids: new irradiation experiments on HED meteorites. Astronomy and Astrophysics, 2012, 537, L11.	5.1	30
20	Visibleâ€<scp>IR</scp> and Raman microspectroscopic investigation of three Itokawa particles collected by Hayabusa: Mineralogy and degree of space weathering based on nondestructive analyses. Meteoritics and Planetary Science, 2015, 50, 1562-1576.	1.6	24
21	Spectrally blue hydrated parent body of asteroid (162173) Ryugu. Nature Communications, 2021, 12, 5837.	12.8	23
22	Characterizing irradiated surfaces using IR spectroscopy. Icarus, 2020, 345, 113722.	2.5	22
23	Organic and mineralogic heterogeneity of the Paris meteorite followed by <scp>FTIR</scp> hyperspectral imaging. Meteoritics and Planetary Science, 2018, 53, 2608-2623.	1.6	18
24	Testing space weathering models on A-type asteroid (1951) Lick. Astronomy and Astrophysics, 2007, 472, 653-656.	5.1	14
25	Hyperspectral FTIR imaging of irradiated carbonaceous meteorites. Planetary and Space Science, 2018, 158, 38-45.	1.7	12
26	Comparison of space weathering spectral changes induced by solar wind and micrometeoroid impacts using ion- and femtosecond-laser-irradiated olivine and pyroxene. Astronomy and Astrophysics, 2021, 654, A143.	5.1	11
27	Space Weathering Affects the Remote Near-IR Identification of Phyllosilicates. Planetary Science Journal, 2020, 1, 61.	3.6	11
28	A Mineralogical Context for the Organic Matter in the Paris Meteorite Determined by A Multi-Technique Analysis. Life, 2019, 9, 44.	2.4	10
29	Near-infrared Methanol Bands Probe Energetic Processing of Icy Outer Solar System Objects. Astrophysical Journal Letters, 2020, 894, L3.	8.3	8
30	Performance comparison of aperture-less and confocal infrared microscopes. Journal of Spectral Imaging, 0, , .	0.0	8
31	NORTHWEST AFRICA (NWA) 12563 and ungrouped C2 chondrites: Alteration styles and relationships to asteroids. Geochimica Et Cosmochimica Acta, 2021, 311, 238-273.	3.9	7
32	Calibration and performances of the MicrOmega instrument for the characterization of asteroid Ryugu returned samples. Review of Scientific Instruments, 2022, 93, .	1.3	5
33	Visâ€“NIR Reflectance Microspectroscopy of IDPs. Planetary Science Journal, 2020, 1, 62.	3.6	4
34	Multiscale correlated analysis of the Aguas Zarcas CM chondrite. Meteoritics and Planetary Science, 2022, 57, 965-988.	1.6	4
35	Spectrophotometric Properties of 162173 Ryuguâ€™s Surface from the NIRS3 Opposition Observations. Planetary Science Journal, 2021, 2, 178.	3.6	3
36	Geometry induced bias in the remote near-IR identification of phyllosilicates on space weathered bodies. Icarus, 2022, 376, 114887.	2.5	3

#	Article	IF	Citations
37	Polyaromatic Units Set the Albedo of Dark Extraterrestrial Materials. Planetary Science Journal, 2022, 3, 10.	3.6	1