Yves Marrocchi

List of Publications by Year
in descending order

83	2,527	186265	223800
papers	citations	28 h-index	46 g-index

85	85	85	1764
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Redox controls during magma ocean degassing. Earth and Planetary Science Letters, 2022, 577, 117255.	4.4	43
2	Formation of chondrule fineâ€grained rims from local nebular reservoirs. Meteoritics and Planetary Science, 2022, 57, 1004-1017.	1.6	6
3	Spinel in CV chondrules: Investigating precursor legacy and chondrule thermal histories. Meteoritics and Planetary Science, 2022, 57, 1018-1037.	1.6	4
4	In-situ O-isotope analysis of relict spinel and forsterite in small (<200ÂÎ¼m) Antarctic micrometeorites â€“ Samples of chondrules & CAIs from carbonaceous chondrites. Geochimica Et Cosmochimica Acta, 2022, 325, 1-24.	3.9	6
5	Oxygen isotope systematics of chondrules in Rumuruti chondrites: Formation conditions and genetic link with ordinary chondrites. Meteoritics and Planetary Science, 2022, 57, 122-135.	1.6	5
6	16O-rich anhydrous silicates in CI chondrites: Implications for the nature and dynamics of dust in the solar accretion disk. Geochimica Et Cosmochimica Acta, 2022, 332, 203-219.	3.9	10
7	Heterogeneous nature of the carbonaceous chondrite breccia Aguas Zarcas â€“ Cosmochemical characterization and origin of new carbonaceous chondrite lithologies. Geochimica Et Cosmochimica Acta, 2022, 334, 155-186.	3.9	7
8	Isotopic evidence for two chondrule generations in CR chondrites and their relationships to other carbonaceous chondrites. Earth and Planetary Science Letters, 2022, 593, 117683.	4.4	10
9	Origin of isolated olivine grains in carbonaceous chondrites. Meteoritics and Planetary Science, 2021, 56, 13-33.	1.6	32
10	A roadmap for a European extraterrestrial sample curation facility â€“ the EURO CARES project. , 2021, , 249-268.		8
11	The Diverse Planetary Ingassing/Outgassing Paths Produced over Billions of Years of Magmatic Activity. Space Science Reviews, 2021, 217, 1.	8.1	32
12	Apatite halogen and hydrogen isotope constraints on the conditions of hydrothermal alteration in carbonaceous chondrites. Meteoritics and Planetary Science, 2021, 56, 809-828.	1.6	8
13	Triple Oxygen Isotope Measurements by Multi-Collector Secondary Ion Mass Spectrometry. Frontiers in Earth Science, 2021, 8, .	1.8	21
14	The Tarda Meteorite: A Window into the Formation of D-type Asteroids. Astrophysical Journal Letters, 2021, 913, L9.	8.3	20
15	Nitrogen solubility in basaltic silicate melt - Implications for degassing processes. Chemical Geology, 2021, 573, 120192.	3.3	21
16	The astrophysical context of collision processes in meteorites. Meteoritics and Planetary Science, 2021, 56, 1406-1421.	1.6	5
17	Origin of hydrogen isotopic variations in chondritic water and organics. Earth and Planetary Science Letters, 2021, 567, 117008.	4.4	26
18	Constraints on Planetesimal Accretion Inferred from Particle-size Distribution in CO Chondrites. Astrophysical Journal Letters, 2021, 917, L25.	8.3	13

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19	Conditions of chondrule formation in ordinary chondrites. Geochimica Et Cosmochimica Acta, 2021, 313, 295-312.	3.9	15
20	The Pecora Escarpment (PCA) 91020 EL3 chondrite and deformation on the EL3 asteroid. Meteoritics and Planetary Science, 2021, 56, 2144-2154.	1.6	1
21	Primordial water and dust of the Solar System: Insights from in situ oxygen measurements of CI chondrites. Geochimica Et Cosmochimica Acta, 2020, 269, 451-464.	3.9	21
22	Early evolution of the solar accretion disk inferred from Cr-Ti-O isotopes in individual chondrules. Earth and Planetary Science Letters, 2020, 551, 116585.	4.4	49
23	Oxygen fugacity and melt composition controls on nitrogen solubility in silicate melts. Geochimica Et Cosmochimica Acta, 2020, 284, 120-133.	3.9	28
24	The Piancaldoli meteorite: A forgotten primitive LL3.10 ordinary chondrite. Meteoritics and Planetary Science, 2020, 55, .	1.6	11
25	Earthâ€™s water may have been inherited from material similar to enstatite chondrite meteorites. Science, 2020, 369, 1110-1113.	12.6	164
26	An unusual compound object in Yamato 793408 (H3.2â€an): The missing link between compound chondrules and macrochondrules?. Meteoritics and Planetary Science, 2020, 55, 1458-1470.	1.6	0
27	Effect of deformation on helium storage and diffusion in polycrystalline forsterite. Geochimica Et Cosmochimica Acta, 2020, 273, 226-243.	3.9	2
28	The isotopic composition of volatiles in the unique Bench Crater carbonaceous chondrite impactor found in the Apollo 12 regolith. Earth and Planetary Science Letters, 2020, 540, 116265.	4.4	14
29	Silicon isotopic compositions of chondrule silicates in carbonaceous chondrites and the formation of primordial solids in the accretion disk. Earth and Planetary Science Letters, 2020, 542, 116318.	4.4	17
30	Hydrogen in chondrites: Influence of parent body alteration and atmospheric contamination on primordial components. Geochimica Et Cosmochimica Acta, 2020, 281, 53-66.	3.9	58
31	Sectioning effects of porphyritic chondrules: Implications for the PP/POP/PO classification and correcting modal abundances of mineralogically zoned chondrules. Meteoritics and Planetary Science, 2020, 55, 993-999.	1.6	11
32	Highâ€precision in situ silicon isotopic analyses by multiâ€collector secondary ion mass spectrometry in olivine and lowâ€calcium pyroxene. Rapid Communications in Mass Spectrometry, 2019, 33, 1589-1597.	1.5	12
33	Thermal Evolution of Hydrated Asteroids Inferred from Oxygen Isotopes. Astrophysical Journal Letters, 2019, 882, L20.	8.3	26
34	Rapid condensation of the first Solar System solids. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23461-23466.	7.1	28
35	Syneruptive incorporation of martian surface sulphur in the nakhlite lava flows revealed by S and Os isotopes and highly siderophile elements: implication for mantle sources in Mars. Geochimica Et Cosmochimica Acta, 2019, 266, 416-434.	3.9	12
36	The tumultuous childhood of the Solar System. Nature Astronomy, 2019, 3, 889-890.	10.1	2

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37	Deciphering the conditions of tochilinite and cronstedtite formation in <scp>CM</scp> chondrites from low temperature hydrothermal experiments. Meteoritics and Planetary Science, 2019, 54, 1870-1889.	1.6	61
38	Testing the genetic relationship between fluid alteration and brecciation in <scp>CM</scp> chondrites. Meteoritics and Planetary Science, 2019, 54, 1692-1709.	1.6	18
39	Oxygen isotopic and chemical composition of chromites in micrometeorites: Evidence of ordinary chondrite precursors. Meteoritics and Planetary Science, 2019, 54, 1347-1361.	1.6	9
40	Argon storage and diffusion in Earthâ€™s upper mantle. Geochimica Et Cosmochimica Acta, 2019, 253, 1-18.	3.9	6
41	Formation of CV chondrules by recycling of amoeboid olivine aggregate-like precursors. Geochimica Et Cosmochimica Acta, 2019, 247, 121-141.	3.9	64
42	Primordial heavy noble gases in the pristine Paris carbonaceous chondrite. Meteoritics and Planetary Science, 2019, 54, 395-414.	1.6	15
43	Helium incorporation and diffusion in polycrystalline olivine. Chemical Geology, 2018, 488, 105-124.	3.3	10
44	Origin and abundance of water in carbonaceous asteroids. Earth and Planetary Science Letters, 2018, 482, 23-32.	4.4	59
45	Hydrogen isotopic composition of water in CV-type carbonaceous chondrites. Earth and Planetary Science Letters, 2018, 504, 64-71.	4.4	14
46	High-temperature Ionization-induced Synthesis of Biologically Relevant Molecules in the Protosolar Nebula. Astrophysical Journal, 2018, 859, 142.	4.5	12
47	Collisional and alteration history of the CM parent body. Geochimica Et Cosmochimica Acta, 2018, 239, 213-234.	3.9	28
48	Oxygen isotopic diversity of chondrule precursors and the nebular origin of chondrules. Earth and Planetary Science Letters, 2018, 496, 132-141.	4.4	58
49	Cronstedtite polytypes in the Paris meteorite. European Journal of Mineralogy, 2018, 30, 349-354.	1.3	16
50	Mineralogical, crystallographic and redox features of the earliest stages of fluid alteration in CM chondrites. Geochimica Et Cosmochimica Acta, 2017, 209, 106-122.	3.9	45
51	Chondrule heritage and thermal histories from trace element and oxygen isotope analyses of chondrules and amoeboid olivine aggregates. Meteoritics and Planetary Science, 2017, 52, 2672-2694.	1.6	24
52	Processes of noble gas elemental and isotopic fractionations in plasma-produced organic solids: Cosmochemical implications. Geochimica Et Cosmochimica Acta, 2017, 217, 219-230.	3.9	13
53	Young asteroid mixing revealed in ordinary chondrites: The case of <scp>NWA</scp> 5764, a polymict <scp>LL</scp> breccia with L clasts. Meteoritics and Planetary Science, 2017, 52, 2289-2304.	1.6	6
54	Petrographic and C & O isotopic characteristics of the earliest stages of aqueous alteration of CM chondrites. Geochimica Et Cosmochimica Acta, 2017, 213, 271-290.	3.9	35

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55	Oxygen isotope constraints on the alteration temperatures of CM chondrites. Earth and Planetary Science Letters, 2017, 458, 273-281.	4.4	75
56	Multiple precursors of secondary mineralogical assemblages in <scp>CM</scp> chondrites. Meteoritics and Planetary Science, 2016, 51, 785-805.	1.6	43
57	Early scattering of the solar protoplanetary disk recorded in meteoritic chondrules. Science Advances, 2016, 2, e1601001.	10.3	21
58	Magmatic sulfides in the porphyritic chondrules of EH enstatite chondrites. Geochimica Et Cosmochimica Acta, 2016, 195, 84-99.	3.9	37
59	INWARD RADIAL MIXING OF INTERSTELLAR WATER ICES IN THE SOLAR PROTOPLANETARY DISK. Astrophysical Journal Letters, 2016, 827, L1.	8.3	41
60	Irreversible adsorption of atmospheric helium on olivine: A lobster pot analogy. Geochimica Et Cosmochimica Acta, 2016, 179, 76-88.	3.9	28
61	Comment on â€œHydrothermal preparation of analogous matrix minerals of CM carbonaceous chondrites from metal alloy particlesâ€•by Y. Peng and Y. Jing [Earth Planet. Sci. Lett. 408 (2014) 252â€“262]. Earth and Planetary Science Letters, 2015, 428, 304-306.	4.4	3
62	Multiple carriers of Q noble gases in primitive meteorites. Geophysical Research Letters, 2015, 42, 2093-2099.	4.0	15
63	Comprehensive study of carbon and oxygen isotopic compositions, trace element abundances, and cathodoluminescence intensities of calcite in the Murchison CM chondrite. Geochimica Et Cosmochimica Acta, 2015, 161, 101-117.	3.9	31
64	Synthesis of refractory organic matter in the ionized gas phase of the solar nebula. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7129-7134.	7.1	43
65	The role of grain boundaries in the storage and transport of noble gases in the mantle. Earth and Planetary Science Letters, 2015, 430, 260-270.	4.4	20
66	A systematic for oxygen isotopic variation in meteoritic chondrules. Earth and Planetary Science Letters, 2015, 430, 308-315.	4.4	32
67	The Paris <scp>CM</scp> chondrite: Secondary minerals and asteroidal processing. Meteoritics and Planetary Science, 2014, 49, 1232-1249.	1.6	75
68	The Paris meteorite, the least altered CM chondrite so far. Geochimica Et Cosmochimica Acta, 2014, 124, 190-222.	3.9	163
69	Nitrogen isotopic fractionation during abiotic synthesis of organic solid particles. Earth and Planetary Science Letters, 2014, 393, 2-13.	4.4	26
70	Experimental determination of the xenon isotopic fractionation during adsorption. Geophysical Research Letters, 2013, 40, 4165-4170.	4.0	19
71	Sulfur and sulfides in chondrules. Geochimica Et Cosmochimica Acta, 2013, 119, 117-136.	3.9	47
72	Structure, composition, and location of organic matter in the enstatite chondrite Sahara 97096 (EH3). Meteoritics and Planetary Science, 2012, 47, 8-29.	1.6	33

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73	Plumeâ€“ridge interaction along the Galapagos Spreading Center: discerning between gas loss and source effects using neon isotopic compositions and 4Heâ€“40Arâˆ—â€“CO2 relative abundances. Geochimica Et Cosmochimica Acta, 2011, 75, 1145-1160.	3.9	18
74	Adsorption of xenon ions onto defects in organic surfaces: Implications for the origin and the nature of organics in primitive meteorites. Geochimica Et Cosmochimica Acta, 2011, 75, 6255-6266.	3.9	34
75	Implications of in situ calcification for photosynthesis in a ~3.3Ga-old microbial biofilm from the Barberton greenstone belt, South Africa. Earth and Planetary Science Letters, 2011, 310, 468-479.	4.4	75
76	⁵³Mnâ€⁵³Cr ages of Kaidun carbonates. Meteoritics and Planetary Science, 2011, 46, 275-283.	1.6	31
77	Extreme Deuterium Excesses in Ultracarbonaceous Micrometeorites from Central Antarctic Snow. Science, 2010, 328, 742-745.	12.6	160
78	Pristine extraterrestrial material with unprecedented nitrogen isotopic variation. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10522-10527.	7.1	72
79	Nanostructural and Geochemical Features of the Jurassic Isocrinid Columnal Ossicles. Acta Palaeontologica Polonica, 2009, 54, 69-75.	0.4	22
80	Constraints on Neon and Argon Isotopic Fractionation in Solar Wind. Science, 2007, 318, 433-435.	12.6	48
81	Low-pressure adsorption of Ar, Kr, and Xe on carbonaceous materials (kerogen and carbon blacks), ferrihydrite, and montmorillonite: Implications for the trapping of noble gases onto meteoritic matter. Geochimica Et Cosmochimica Acta, 2005, 69, 2419-2430.	3.9	25
82	Experimental determination of argon solubility in silicate melts: An assessment of the effects of liquid composition and temperature. Geochimica Et Cosmochimica Acta, 2005, 69, 5765-5776.	3.9	21
83	Interlayer trapping of noble gases in insoluble organic matter of primitive meteorites. Earth and Planetary Science Letters, 2005, 236, 569-578.	4.4	25