Thomas J Zega

List of Publications by Year
in descending order

43 papers	1,926 citations	471509 17 h-index	361022 35 g-index
43 all docs	43 docs citations	43 times ranked	1609 citing authors

#	Article	IF	Citations
1	A nanometric window on fullerene formation in the interstellar medium: insights from molecular dynamics studies. Journal of Chemical Physics, 2022, 156, 154704.	3.0	2
2	Earliest evidence of nebular shock waves recorded in a calcium-aluminum-rich Inclusion. Geochimica Et Cosmochimica Acta, 2022, 332, 369-388.	3.9	3
3	Destructive Processing of Silicon Carbide Grains: Experimental Insights into the Formation of Interstellar Fullerenes and Carbon Nanotubes. Journal of Physical Chemistry A, 2022, 126, 5761-5767.	2.5	4
4	Density Functional Theory Driven Analysis of the Interplay among Structure, Composition, and Oxidation State of Titanium in Hibonite, Spinel, and Perovskite. ACS Earth and Space Chemistry, 2021, 5, 544-552.	2.7	3
5	Atomic-scale Evidence for Open-system Thermodynamics in the Early Solar Nebula. Planetary Science Journal, 2021, 2, 115.	3.6	5
6	The Fe/S ratio of pyrrhotite group sulfides in chondrites: An indicator of oxidation and implications for return samples from asteroids Ryugu and Bennu. Geochimica Et Cosmochimica Acta, 2021, 303, 66-91.	3.9	24
7	An inÂsitu investigation on the origins and processing of circumstellar oxide and silicate grains in carbonaceous chondrites. Meteoritics and Planetary Science, 2020, 55, 1207-1227.	1.6	7
8	The effects of secondary processing in the unique carbonaceous chondrite Miller Range 07687. Meteoritics and Planetary Science, 2020, 55, 1228-1256.	1.6	8
9	Formation of Interstellar C₆₀ from Silicon Carbide Circumstellar Grains. Astrophysical Journal Letters, 2019, 883, L43.	8.3	25
10	Petrographic and compositional indicators of formation and alteration conditions from LL chondrite sulfides. Geochimica Et Cosmochimica Acta, 2019, 264, 165-179.	3.9	12
11	Calculation of Chemical Shift for Ti via EELS White-Line-Ratio Method. Microscopy and Microanalysis, 2019, 25, 662-663.	0.4	2
12	In situ Ion Irradiation and Heating Experiments in the Transmission Electron Microscope: Simulations of Dust Processing in Circumstellar Environments. Microscopy and Microanalysis, 2019, 25, 2454-2455.	0.4	0
13	Coordinated Analyses of a Supernova Polycrystalline Olivine Aggregate in the CO Chondrite Dominion Range 08006. Microscopy and Microanalysis, 2019, 25, 2490-2491.	0.4	1
14	Laboratory evidence for co-condensed oxygen- and carbon-rich meteoritic stardust from nova outbursts. Nature Astronomy, 2019, 3, 626-630.	10.1	6
15	Presolar silicates in the matrix and fine-grained rims around chondrules in primitive CO3.0 chondrites: Evidence for pre-accretionary aqueous alteration of the rims in the solar nebula. Geochimica Et Cosmochimica Acta, 2018, 221, 379-405.	3.9	44
16	Mass-Thickness Measurements in the TEM via EDS: A New Approach to Quantitative Chemical Analysis of Planetary Materials?. Microscopy and Microanalysis, 2018, 24, 2084-2085.	0.4	1
17	Aberration-corrected STEM/TEM Chemical Analysis and Imaging of Meteoritic Refractory Oxide Assemblages. Microscopy and Microanalysis, 2018, 24, 2090-2091.	0.4	0
18	Nanoscale Investigation of Thermal Alteration of Chondritic Meteorites via Simultaneous Secondary and Transmitted Electron Imaging during In Situ Heating up to 1000 oC. Microscopy and Microanalysis, 2018, 24, 2102-2103.	0.4	1

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19	Toward Quantification of Ti-Oxidation States in Planetary Materials via Application of the EELS White-Line Ratio Technique. Microscopy and Microanalysis, 2018, 24, 2086-2087.	0.4	1
20	Low-Voltage Energy-Dispersive X-ray Spectroscopy and Electron Energy-Loss Spectroscopy Analysis of Presolar Graphite Spherules. Microscopy and Microanalysis, 2018, 24, 2110-2111.	0.4	0
21	Investigation of the Nature of Capping Layer Materials for FIB-SEM Preparation: Implications for the Study of Carbonaceous Material in Extraterrestrial Samples. Microscopy and Microanalysis, 2017, 23, 1820-1821.	0.4	0
22	Collection Efficiency of the Twin EDS Detectors for Quantitative X-ray Analysis on A New Probe-Corrected TEM/STEM. Microscopy and Microanalysis, 2017, 23, 520-521.	0.4	2
23	The Structure and Electronic States of Self-Assembled C60 Crystals. Microscopy and Microanalysis, 2017, 23, 1818-1819.	0.4	0
24	Atomic-Resolution Analysis of Perovskite from the Early Solar System. Microscopy and Microanalysis, 2016, 22, 1778-1779.	0.4	0
25	Microstructural analysis of Warkâ€Lovering rims in the Allende and Axtell <scp>CV</scp>3 chondrites: Implications for highâ€temperature nebular processes. Meteoritics and Planetary Science, 2016, 51, 743-756.	1.6	17
26	The First Solar System Solids as Revealed Through Slice-and-View Imaging. Microscopy and Microanalysis, 2015, 21, 2105-2106.	0.4	1
27	CIRCUMSTELLAR MAGNETITE FROM THE LAP 031117 CO3.0 CHONDRITE. Astrophysical Journal, 2015, 808, 55.	4.5	17
28	The formation and alteration of the Renazzoâ€like carbonaceous chondrites <scp>III</scp>: Toward understanding the genesis of ferromagnesian chondrules. Meteoritics and Planetary Science, 2015, 50, 15-50.	1.6	64
29	Testing variations within the Tagish Lake meteoriteâ€"I: Mineralogy and petrology of pristine samples. Meteoritics and Planetary Science, 2014, 49, 473-502.	1.6	45
30	A transmission electron microscopy study of presolar spinel. Geochimica Et Cosmochimica Acta, 2014, 124, 152-169.	3.9	29
31	Assessment of alteration processes on circumstellar and interstellar grains in Queen Alexandra Range 97416. Earth and Planetary Science Letters, 2014, 399, 128-138.	4.4	14
32	Isotopic and chemical variation of organic nanoglobules in primitive meteorites. Meteoritics and Planetary Science, 2013, 48, 904-928.	1.6	78
33	Brearleyite, Ca12Al14O32Cl2, a new alteration mineral from the NWA 1934 meteorite. American Mineralogist, 2011, 96, 1199-1206.	1.9	39
34	Evidence for aqueous activity on comet 81P/Wild 2 from sulfide mineral assemblages in Stardust samples and CI chondrites. Geochimica Et Cosmochimica Acta, 2011, 75, 3501-3513.	3.9	87
35	A TRANSMISSION ELECTRON MICROSCOPY STUDY OF PRESOLAR HIBONITE. Astrophysical Journal, 2011, 730, 83.	4.5	23
36	Isotopic anomalies in organic nanoglobules from Comet 81P/Wild 2: Comparison to Murchison nanoglobules and isotopic anomalies induced in terrestrial organics by electron irradiation. Geochimica Et Cosmochimica Acta, 2010, 74, 4454-4470.	3.9	100

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37	Mineral associations and character of isotopically anomalous organic material in the Tagish Lake carbonaceous chondrite. Geochimica Et Cosmochimica Acta, 2010, 74, 5966-5983.	3.9	40
38	Ultra-primitive interplanetary dust particles from the comet 26P/Griggâ€“Skjellerup dust stream collection. Earth and Planetary Science Letters, 2009, 288, 44-57.	4.4	187
39	A TEM study of thermally modified comet 81P/Wild 2 dust particles by interactions with the aerogel matrix during the Stardust capture process. Meteoritics and Planetary Science, 2008, 43, 97-120.	1.6	73
40	Coordinated isotopic and mineralogic analyses of planetary materials enabled by in situ liftâ€out with a focused ion beam scanning electron microscope. Meteoritics and Planetary Science, 2007, 42, 1373-1386.	1.6	74
41	Comet 81P/Wild 2 Under a Microscope. Science, 2006, 314, 1711-1716.	12.6	848
42	Polyhedral serpentine grains in CM chondrites. Meteoritics and Planetary Science, 2006, 41, 681-688.	1.6	36
43	Coordinated chemical and microstructural analyses of presolar silicate grains from AGB/RGB stars and supernovae in the CO3.0 chondrite Dominion Range 08006. Meteoritics and Planetary Science, 0, , .	1.6	3