Reto Trappitsch

List of Publications by Year
in descending order

40 papers	1,118 citations	331670 21 h-index	395702 33 g-index
44 all docs	44 docs citations	44 times ranked	1236 citing authors

#	Article	IF	Citations
1	Simultaneous Isotopic Analysis of U, Pu, and Am in Spent Nuclear Fuel by Resonance Ionization Mass Spectrometry. Analytical Chemistry, 2021, 93, 9505-9512.	6.5	11
2	Cosmic ray effects on the isotope composition of hydrogen and noble gases in lunar samples: Insights from Apollo 12018. Earth and Planetary Science Letters, 2020, 550, 116550.	4.4	10
3	The fall, recovery, classification, and initial characterization of the Hamburg, Michigan H4 chondrite. Meteoritics and Planetary Science, 2020, 55, 2341-2359.	1.6	4
4	Lifetimes of interstellar dust from cosmic ray exposure ages of presolar silicon carbide. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1884-1889.	7.1	57
5	Origin of Large Meteoritic SiC Stardust Grains in Metal-rich AGB Stars. Astrophysical Journal, 2020, 898, 96.	4.5	21
6	Mixed messages from a nova outburst. Nature Astronomy, 2019, 3, 583-584.	10.1	0
7	NuGrid stellar data set â€“ III. Updated low-mass AGB models and s-process nucleosynthesis with metallicities Z=Â0.01, ZÂ=Â0.02, and ZÂ=Â0.03. Monthly Notices of the Royal Astronomical Society, 2019, 489, 1082-1098.	4.4	46
8	Presolar Silicon Carbide Grains of Types Y and Z: Their Molybdenum Isotopic Compositions and Stellar Origins. Astrophysical Journal, 2019, 881, 28.	4.5	23
9	Molybdenum Isotopes in Presolar Silicon Carbide Grains: Details of s-process Nucleosynthesis in Parent Stars and Implications for r- and p-processes. Astrophysical Journal, 2019, 877, 101.	4.5	27
10	60Fe in core-collapse supernovae and prospects for X-ray and gamma-ray detection in supernova remnants. Monthly Notices of the Royal Astronomical Society, 2019, 485, 4287-4310.	4.4	22
11	New Constraints on the Abundance of ⁶⁰Fe in the Early Solar System. Astrophysical Journal Letters, 2018, 857, L15.	8.3	40
12	Effects of Plume Hydrodynamics and Oxidation on the Composition of a Condensing Laser-Induced Plasma. Journal of Physical Chemistry A, 2018, 122, 1584-1591.	2.5	25
13	The neutron capture process in the He shell in core-collapse supernovae: Presolar silicon carbide grains as a diagnostic tool for nuclear astrophysics. Geochimica Et Cosmochimica Acta, 2018, 221, 37-46.	3.9	18
14	Strontium and barium isotopes in presolar silicon carbide grains measured with CHILIâ€”two types of X grains. Geochimica Et Cosmochimica Acta, 2018, 221, 109-126.	3.9	31
15	Simultaneous iron and nickel isotopic analyses of presolar silicon carbide grains. Geochimica Et Cosmochimica Acta, 2018, 221, 87-108.	3.9	27
16	New Constraints on the Major Neutron Source in Low-mass AGB Stars. Astrophysical Journal, 2018, 865, 112.	4.5	29
17	Resonance ionization of titanium: high useful yield and new autoionizing states. Journal of Analytical Atomic Spectrometry, 2018, 33, 1962-1969.	3.0	6
18	Electronic excitation of uranium atoms sputtered from uranium metal and oxides. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 149, 214-221.	2.9	8

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19	Chronology of martian breccia NWA 7034 and the formation of the martian crustal dichotomy. Science Advances, 2018, 4, eaap8306.	10.3	38
20	Common Occurrence of Explosive Hydrogen Burning in Type II Supernovae. Astrophysical Journal, 2018, 855, 144.	4.5	15
21	New Resonance Ionization Mass Spectrometry Scheme for Improved Uranium Analysis. Analytical Chemistry, 2018, 90, 10551-10558.	6.5	11
22	Potassic, high-silica Hadean crust. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6353-6356.	7.1	33
23	Iron and nickel isotope compositions of presolar silicon carbide grains from supernovae. Geochimica Et Cosmochimica Acta, 2018, 221, 127-144.	3.9	11
24	Corrigendum to â€œDiffusion of helium in SiC and implications for retention of cosmogenic Heâ€• [Geochim. Cosmochim. acta 192 (2016) 248â€“257]. Geochimica Et Cosmochimica Acta, 2017, 196, 403.	3.9	0
25	High Useful Yield and Isotopic Analysis of Uranium by Resonance Ionization Mass Spectrometry. Analytical Chemistry, 2017, 89, 6224-6231.	6.5	22
26	Neon produced by solar cosmic rays in ordinary chondrites. Meteoritics and Planetary Science, 2017, 52, 1155-1172.	1.6	6
27	J-type Carbon Stars: A Dominant Source of ¹⁴N-rich Presolar SiC Grains of Type AB. Astrophysical Journal Letters, 2017, 844, L12.	8.3	25
28	The production rate of cosmogenic deuterium at the Moon's surface. Earth and Planetary Science Letters, 2017, 474, 76-82.	4.4	30
29	APPLICATION OF A THEORY AND SIMULATION-BASED CONVECTIVE BOUNDARY MIXING MODEL FOR AGB STAR EVOLUTION AND NUCLEOSYNTHESIS. Astrophysical Journal, 2016, 827, 30.	4.5	62
30	Noble gases in 18 Martian meteorites and angrite Northwest Africa 7812â€”Exposure ages, trapped gases, and a reâ€evaluation of the evidence for solar cosmic rayâ€produced neon in shergottites and other achondrites. Meteoritics and Planetary Science, 2016, 51, 407-428.	1.6	36
31	PRODUCTION AND RECOIL LOSS OF COSMOGENIC NUCLIDES IN PRESOLAR GRAINS. Astrophysical Journal, 2016, 823, 12.	4.5	7
32	NUGRID STELLAR DATA SET. I. STELLAR YIELDS FROM H TO BI FOR STARS WITH METALLICITIES Z = 0.02 and Z = 0.01. Astrophysical Journal, Supplement Series, 2016, 225, 24.	7.7	172
33	CHILI â€“ the Chicago Instrument for Laser Ionization â€“ a new tool for isotope measurements in cosmochemistry. International Journal of Mass Spectrometry, 2016, 407, 1-15.	1.5	68
34	CHILI, a Nanobeam Secondary Neutral Mass Spectrometer with Extraordinary Spatial Resolution, Sensitivity, and Selectivity: First Results. Microscopy and Microanalysis, 2015, 21, 1143-1144.	0.4	0
35	SOLAR COSMIC-RAY INTERACTION WITH PROTOPLANETARY DISKS: PRODUCTION OF SHORT-LIVED RADIONUCLIDES AND AMORPHIZATION OF CRYSTALLINE MATERIAL. Astrophysical Journal, 2015, 805, 5.	4.5	5
36	CARBON-RICH PRESOLAR GRAINS FROM MASSIVE STARS: SUBSOLAR ¹² C/ ¹³ C AND ¹⁴ N/ ¹⁵ N RATIOS AND THE MYSTERY OF ¹⁵ N. Astrophysical Journal Letters, 2015, 808, L43.	8.3	61

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37	MESA and NuGrid simulations of classical novae: CO and ONe nova nucleosynthesis. Monthly Notices of the Royal Astronomical Society, 2014, 442, 2058-2074.	4.4	45
38	He and Ne in individual chromite grains from the regolith breccia Ghubara (L5): Exploring the history of the L chondrite parent body regolith. Meteoritics and Planetary Science, 2014, 49, 576-594.	1.6	11
39	Cosmogenic production rates and recoil loss effects in micrometeorites and interplanetary dust particles. Meteoritics and Planetary Science, 2013, 48, 195-210.	1.6	26
40	SILICON CARBIDE GRAINS OF TYPE C PROVIDE EVIDENCE FOR THE PRODUCTION OF THE UNSTABLE ISOTOPE ³² Si IN SUPERNOVAE. Astrophysical Journal Letters, 2013, 771, L7.	8.3	29