Anna L Butterworth

List of Publications by Year
in descending order

33 papers	1,276 citations	566801 15 h-index	454577 30 g-index
33 all docs	33 docs citations	33 times ranked	1327 citing authors

#	Article	IF	Citations
1	Mineralogy and Petrology of Comet 81P/Wild 2 Nucleus Samples. Science, 2006, 314, 1735-1739.	6.0	589
2	Evidence for interstellar origin of seven dust particles collected by the Stardust spacecraft. Science, 2014, 345, 786-791.	6.0	152
3	Low-cost volcano surveillance from space: case studies from Etna, Krafla, Cerro Negro, Fogo, Lascar and Erebus. Bulletin of Volcanology, 1997, 59, 49-64.	1.1	116
4	Combined element (H and C) stable isotope ratios of methane in carbonaceous chondrites. Monthly Notices of the Royal Astronomical Society, 2004, 347, 807-812.	1.6	42
5	Oxygen isotopic composition of coarse- and fine-grained material from comet 81P/Wild 2. Geochimica Et Cosmochimica Acta, 2015, 166, 74-91.	1.6	31
6	Constraints on the formation environment of two chondruleâ€like igneous particles from comet 81P/Wild 2. Meteoritics and Planetary Science, 2015, 50, 976-1004.	0.7	30
7	Final reports of the Stardust Interstellar Preliminary Examination. Meteoritics and Planetary Science, 2014, 49, 1720-1733.	0.7	29
8	Stardust Interstellar Preliminary Examination X: Impact speeds and directions of interstellar grains on the Stardust dust collector. Meteoritics and Planetary Science, 2014, 49, 1680-1697.	0.7	24
9	Characterization of preserved primitive fine-grained material from the Jupiter family comet 81P/Wild 2 â€" A new link between comets and CP-IDPs. Earth and Planetary Science Letters, 2014, 388, 367-373.	1.8	18
10	Stardust Interstellar Preliminary Examination <scp>II</scp>: Curating the interstellar dust collector, picokeystones, and sources of impact tracks. Meteoritics and Planetary Science, 2014, 49, 1522-1547.	0.7	18
11	Stardust Interstellar Preliminary Examination <scp>IV</scp>: Scanning transmission Xâ€ray microscopy analyses of impact features in the Stardust Interstellar Dust Collector. Meteoritics and Planetary Science, 2014, 49, 1562-1593.	0.7	18
12	Iron valence state of fine-grained material from the Jupiter family comet 81P/Wild 2 â€" A coordinated TEM/STEM EDS/STXM study. Geochimica Et Cosmochimica Acta, 2013, 122, 1-16.	1.6	17
13	Stardust Interstellar Preliminary Examination <scp>XI</scp>: Identification and elemental analysis of impact craters on Al foils from the Stardust Interstellar Dust Collector. Meteoritics and Planetary Science, 2014, 49, 1698-1719.	0.7	16
14	Stardust Interstellar Preliminary Examination I: Identification of tracks in aerogel. Meteoritics and Planetary Science, 2014, 49, 1509-1521.	0.7	16
15	Measurement of the Oxidation State of Fe in the ISM Using X-Ray Absorption Spectroscopy. Astrophysical Journal, 2019, 872, 66.	1.6	15
16	Stardust Interstellar Preliminary Examination <scp>VII</scp>: Synchrotron Xâ€ray fluorescence analysis of six Stardust interstellar candidates measured with the Advanced Photon Source 2â€<scp>ID</scp>â€Ð microprobe. Meteoritics and Planetary Science, 2014, 49, 1626-1644.	0.7	13
17	Stardust Interstellar Preliminary Examination VIII: Identification of crystalline material in two interstellar candidates. Meteoritics and Planetary Science, 2014, 49, 1645-1665.	0.7	12
18	Stardust Interstellar Preliminary Examination <scp>VI</scp>: Quantitative elemental analysis by synchrotron Xâ€ray fluorescence nanoimaging of eight impact features in aerogel. Meteoritics and Planetary Science, 2014, 49, 1612-1625.	0.7	12

#	Article	IF	Citations
19	Stardust Interstellar Preliminary Examination V: <scp>XRF</scp> analyses of interstellar dust candidates at <scp>ESRF ID</scp>13. Meteoritics and Planetary Science, 2014, 49, 1594-1611.	0.7	12
20	Stardust Interstellar Preliminary Examination <scp>III</scp>: Infrared spectroscopic analysis of interstellar dust candidates. Meteoritics and Planetary Science, 2014, 49, 1548-1561.	0.7	12
21	Fabrication of high-quality glass microfluidic devices for bioanalytical and space flight applications. MethodsX, 2020, 7, 101043.	0.7	12
22	TOF-SIMS analysis of Allende projectiles shot into silica aerogel. Meteoritics and Planetary Science, 2006, 41, 211-216.	0.7	11
23	Feasibility of Enceladus plume biosignature analysis: Successful capture of organic ice particles in hypervelocity impacts. Meteoritics and Planetary Science, 2020, 55, .	0.7	10
24	Coordinated Microanalyses of Seven Particles of Probable Interstellar Origin from the Stardust Mission.. Microscopy and Microanalysis, 2014, 20, 1692-1693.	0.2	9
25	Quantitative evaluation of the feasibility of sampling the ice plumes at Enceladus for biomarkers of extraterrestrial life. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	9
26	The use of static mass spectrometry to determine the combined stable isotopic composition of small samples of atmospheric methane. , 1999, 13, 1329-1333.		7
27	Optimization of Fluorescence Labeling of Trace Analytes: Application to Amino Acid Biosignature Detection with Pacific Blue. Analytical Chemistry, 2022, 94, 1240-1247.	3.2	7
28	Insights into solar nebula formation of pyrrhotite from nanoscale disequilibrium phases produced by H₂S sulfidation of Fe metal. American Mineralogist, 2017, 102, 1881-1893.	0.9	6
29	On the Feasibility of Informative Biosignature Measurements Using an Enceladus Plume Organic Analyzer. Planetary Science Journal, 2021, 2, 163.	1.5	6
30	Method for detecting and quantitating capture of organic molecules in hypervelocity impacts. MethodsX, 2021, 8, 101239.	0.7	5
31	Atomic layer deposition of 2D and 3D standards for synchrotron-based quantitative composition and structure analysis methods. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, 02D403.	0.9	1
32	Automatic detection of impact craters on Al foils from the Stardust interstellar dust collector using convolutional neural networks. Meteoritics and Planetary Science, 2021, 56, 1890-1904.	0.7	1
33	XAS Between the Stars. Microscopy and Microanalysis, 2019, 25, 258-259.	0.2	0