David L Shuster

List of Publications by Year
in descending order

48 papers	3,616 citations	201674 27 h-index	214800 47 g-index
50 all docs	50 docs citations	50 times ranked	2928 citing authors

#	Article	IF	Citations
1	Thermochronologic constraints on the origin of the Great Unconformity. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	15
2	Bridging earthquakes and mountain building in the Santa Cruz Mountains, CA. Science Advances, 2022, 8, eabi6031.	10.3	5
3	Tectonic controls on the timing of fjord incision at the Antarctic Peninsula. Earth and Planetary Science Letters, 2022, 585, 117528.	4.4	2
4	Two Stages of Accelerated Exhumation in the Middle Reach of the Yarlung River, Southern Tibet Since the Midâ€Miocene. Tectonics, 2021, 40, e2020TC006618.	2.8	21
5	Perseverance rover reveals an ancient delta-lake system and flood deposits at Jezero crater, Mars. Science, 2021, 374, 711-717.	12.6	86
6	(Uâ€Th)/He and ⁴He/³He Thermochronology of Secondary Oxides in Faults and Fractures: A Regional Perspective From Southeastern Arizona. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009905.	2.5	1
7	Burial and exhumation of the Hoh Xil Basin, northern Tibetan Plateau: Constraints from detrital (Uâ€Th)/He ages. Basin Research, 2020, 32, 894-915.	2.7	12
8	The end of the lunar dynamo. Science Advances, 2020, 6, eaax0883.	10.3	46
9	Simulations and Experiments Reveal Effect of Nanopores on Helium Diffusion in Quartz. ACS Earth and Space Chemistry, 2020, 4, 1906-1912.	2.7	6
10	Evaluating the Shinumo-Sespe drainage connection: Arguments against the â€œoldâ€•(70â€“17 Ma) Grand Canyon models for Colorado Plateau drainage evolution. , 2020, 16, 1425-1456.		9
11	Detrital Thermochronometry Reveals That the Topography Along the Antarctic Peninsula is Not a Pleistocene Landscape. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2019JF005447.	2.8	8
12	Timing of Cenozoic Extension in the Southern Stillwater Range and Dixie Valley, Nevada. Tectonics, 2020, 39, e2019TC005757.	2.8	7
13	Transient glacial incision in the Patagonian Andes from ~6 Ma to present. Science Advances, 2020, 6, eaay1641.	10.3	19
14	The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, S3.	1.6	73
15	Cosmogenic and nucleogenic 21Ne in quartz in a 28-meter sandstone core from the McMurdo Dry Valleys, Antarctica. Quaternary Geochronology, 2019, 52, 63-76.	1.4	15
16	Temperatures recorded by cosmogenic noble gases since the last glacial maximum in the Maritime Alps. Quaternary Research, 2019, 91, 829-847.	1.7	9
17	Miocene development of alpine glacial relief in the Patagonian Andes, as revealed by low-temperature thermochronometry. Earth and Planetary Science Letters, 2017, 460, 152-163.	4.4	28
18	Further evidence for early lunar magnetism from troctolite 76535. Journal of Geophysical Research E: Planets, 2017, 122, 76-93.	3.6	32

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19	A helium-based model for the effects of radiation damage annealing on helium diffusion kinetics in apatite. Earth and Planetary Science Letters, 2017, 477, 195-204.	4.4	43
20	A two-billion-year history for the lunar dynamo. Science Advances, 2017, 3, e1700207.	10.3	71
21	Million year old ice found under meter thick debris layer in Antarctica. Geophysical Research Letters, 2016, 43, 6995-7001.	4.0	20
22	Multiâ€phase lateâ€Neogene exhumation history of the Aar massif, Swiss central Alps. Terra Nova, 2016, 28, 383-393.	2.1	12
23	Grain size bias in cosmogenic nuclide studies of stream sediment in steep terrain. Journal of Geophysical Research F: Earth Surface, 2016, 121, 978-999.	2.8	40
24	Magnetism of a very young lunar glass. Journal of Geophysical Research E: Planets, 2015, 120, 1720-1735.	3.6	36
25	Zircon 4He/3He thermochronometry. Geochimica Et Cosmochimica Acta, 2015, 166, 1-14.	3.9	14
26	Paleotemperatures at the lunar surfaces from open system behavior of cosmogenic 38Ar and radiogenic 40Ar. Geochimica Et Cosmochimica Acta, 2015, 155, 154-171.	3.9	24
27	Knickpoint evolution on the Yarlung river: Evidence for late Cenozoic uplift of the southeastern Tibetan plateau margin. Earth and Planetary Science Letters, 2015, 430, 448-457.	4.4	48
28	Erosion in southern Tibet shut down at â¼10 Ma due to enhanced rock uplift within the Himalaya. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12030-12035.	7.1	85
29	Climate and topography control the size and flux of sediment produced on steep mountain slopes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15574-15579.	7.1	89
30	Formation of the Grand Canyon 5 to 6 million years ago through integration of older palaeocanyons. Nature Geoscience, 2014, 7, 239-244.	12.9	90
31	Cosmogenic noble gas paleothermometry. Earth and Planetary Science Letters, 2014, 400, 195-205.	4.4	25
32	Decline of the lunar core dynamo. Earth and Planetary Science Letters, 2014, 404, 89-97.	4.4	62
33	Incorporating 3â€Ð parent nuclide zonation for apatite ⁴He/³He thermochronometry: An example from the <scp>A</scp>ppalachian <scp>M</scp>ountains. Geochemistry, Geophysics, Geosystems, 2014, 15, 4217-4229.	2.5	14
34	The bombardment history of the Moon as recorded by ⁴⁰Arâ€³⁹Ar chronology. Meteoritics and Planetary Science, 2013, 48, 241-269.	1.6	97
35	Persistence and origin of the lunar core dynamo. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8453-8458.	7.1	64
36	A Long-Lived Lunar Core Dynamo. Science, 2012, 335, 453-456.	12.6	94

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37	Late Neogene exhumation and relief development of the Aar and Aiguilles Rouges massifs (Swiss Alps) from lowâ€temperature thermochronology modeling and ⁴He/³He thermochronometry. Journal of Geophysical Research, 2012, 117, .	3.3	54
38	Thermochronometry Reveals Headward Propagation of Erosion in an Alpine Landscape. Science, 2011, 332, 84-88.	12.6	90
39	Magnetic evidence for a partially differentiated carbonaceous chondrite parent body. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6386-6389.	7.1	97
40	Significant increase in relief of the European Alps during mid-Pleistocene glaciations. Nature Geoscience, 2011, 4, 688-692.	12.9	167
41	Numerical investigations of apatite ⁴He/³He thermochronometry. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	22
42	Evidence for shock heating and constraints on Martian surface temperatures revealed by 40Ar/39Ar thermochronometry of Martian meteorites. Geochimica Et Cosmochimica Acta, 2010, 74, 6900-6920.	3.9	84
43	Early Lunar Magnetism. Science, 2009, 323, 356-359.	12.6	160
44	Apatite (Uâ€“Th)/He thermochronometry using a radiation damage accumulation and annealing model. Geochimica Et Cosmochimica Acta, 2009, 73, 2347-2365.	3.9	732
45	Argon diffusion in plagioclase and implications for thermochronometry: A case study from the Bushveld Complex, South Africa. Geochimica Et Cosmochimica Acta, 2009, 73, 6600-6612.	3.9	88
46	The influence of natural radiation damage on helium diffusion kinetics in apatite. Earth and Planetary Science Letters, 2006, 249, 148-161.	4.4	558
47	Rapid Glacial Erosion at 1.8 Ma Revealed by 4He/3He Thermochronometry. Science, 2005, 310, 1668-1670.	12.6	146
48	Isotopic evolution of Mauna Loa and the chemical structure of the Hawaiian plume. Geochemistry, Geophysics, Geosystems, 2001, 2, n/a-n/a.	2.5	95