Stephen J Mojzsis

List of Publications by Year
in descending order

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104	7,611	57758	53230
papers	citations	44 h-index	85 g-index

115	115	115	4731
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Spontaneous Formation of Prebiotic Compartment Colonies on Hadean Earth and Preâ€Noachian Mars**. ChemSystemsChem, 2022, 4, .	2.6	3
2	Eoarchean subduction-like magmatism recorded in 3750ÂMa maficâ€“ultramafic rocks of the Ukaliq supracrustal belt (QuÃ©bec). Contributions To Mineralogy and Petrology, 2022, 177, 1.	3.1	9
3	Evidence of a primordial isotopic gradient in the inner region of the solar protoplanetary disc. Astronomy and Astrophysics, 2022, 660, A36.	5.1	2
4	A Model Earth-sized Planet in the Habitable Zone of Î± Centauri A/B. Astrophysical Journal, 2022, 927, 134.	4.5	4
5	Effects of pebble accretion on the growth and composition of planetesimals in the inner Solar system. Monthly Notices of the Royal Astronomical Society, 2022, 511, 158-175.	4.4	6
6	Spontaneous Formation of Prebiotic Compartment Colonies on Hadean Earth and Preâ€Noachian Mars. ChemSystemsChem, 2022, 4, .	2.6	0
7	Catalytic Synthesis of Polyribonucleic Acid on Prebiotic Rock Glasses. Astrobiology, 2022, 22, 629-636.	3.0	28
8	Tracing the Early Emergence of Microbial Sulfur Metabolisms. Geomicrobiology Journal, 2021, 38, 66-86.	2.0	9
9	Earth, Formation, and Early Evolution. , 2021, , 1-10.		0
10	Reply: The Isua (Greenland) â€œrelict stromatolitesâ€•cannot be confidently interpreted as original sedimentary structures. Earth and Planetary Science Letters, 2021, 562, 116851.	4.4	0
11	A new estimate for the age of highly-siderophile element retention in the lunar mantle from late accretion. Icarus, 2021, 361, 114389.	2.5	5
12	Habitable potentials. Nature Astronomy, 2021, 5, 1083-1085.	10.1	5
13	Impact bombardment chronology of the terrestrial planets from 4.5â€¯Ga to 3.5â€¯Ga. Icarus, 2020, 338, 113514.	2.5	38
14	When Did Life Likely Emerge on Earth in an RNAâ€First Process?. ChemSystemsChem, 2020, 2, e1900035.	2.6	71
15	Geochemical and textural investigations of the Eoarchean Ukaliq supracrustals, Northern QuÃ©bec (Canada). Lithos, 2020, 372-373, 105673.	1.4	4
16	Supply of phosphate to early Earth by photogeochemistry after meteoritic weathering. Nature Geoscience, 2020, 13, 344-348.	12.9	45
17	Reappraisal of purported ca. 3.7 Ga stromatolites from the Isua Supracrustal Belt (West Greenland) from detailed chemical and structural analysis. Earth and Planetary Science Letters, 2020, 545, 116409.	4.4	21
18	The partitioning of the inner and outer Solar System by a structured protoplanetary disk. Nature Astronomy, 2020, 4, 492-499.	10.1	73

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19	Biogenesis of the Neoproterozoic kremydilite manganese ores from Urucum (Brazil) â€“ A new manganese ore type. Precambrian Research, 2020, 340, 105624.	2.7	19
20	Widespread poly-metamorphosed Archean granitoid gneisses and supracrustal enclaves of the southern Inukjuak Domain, QuÃ©bec (Canada). Lithos, 2020, 364-365, 105520.	1.4	8
21	Europium as a lodestar: diagnosis of radiogenic heat production in terrestrial exoplanets. Astronomy and Astrophysics, 2020, 644, A19.	5.1	5
22	Onset of Giant Planet Migration before 4480 Million Years Ago. Astrophysical Journal, 2019, 881, 44.	4.5	82
23	Mars in the aftermath of a colossal impact. Icarus, 2019, 333, 87-95.	2.5	8
24	The Assean Lake Complex. , 2019, , 703-722.		0
25	The Martian subsurface as a potential window into the origin of life. Nature Geoscience, 2018, 11, 21-26.	12.9	91
26	Thermal effects of late accretion to the crust and mantle of Mercury. Earth and Planetary Science Letters, 2018, 482, 536-544.	4.4	3
27	Late accretion to the Moon recorded in zircon (Uâ€“Th)/He thermochronometry. Earth and Planetary Science Letters, 2018, 482, 222-235.	4.4	16
28	The curious case of Marsâ€™ formation. Astronomy and Astrophysics, 2018, 617, A17.	5.1	17
29	Jupiter's Influence on the Building Blocks of Mars and Earth. Geophysical Research Letters, 2018, 45, 5908-5917.	4.0	27
30	Thermodynamics, Disequilibrium, Evolution: Far-From-Equilibrium Geological and Chemical Considerations for Origin-Of-Life Research. Origins of Life and Evolution of Biospheres, 2017, 47, 39-56.	1.9	54
31	Evaluating an impact origin for Mercury's high-magnesium region. Journal of Geophysical Research E: Planets, 2017, 122, 614-632.	3.6	19
32	The Great Mars Climate Paradox Redux: REPLY. Geology, 2017, 45, e410-e410.	4.4	1
33	The cool and distant formation of Mars. Earth and Planetary Science Letters, 2017, 468, 85-93.	4.4	37
34	A colossal impact enriched Mars' mantle with noble metals. Geophysical Research Letters, 2017, 44, 5978-5985.	4.0	26
35	The terrestrial late veneer from core disruption of a lunar-sized impactor. Earth and Planetary Science Letters, 2017, 480, 25-32.	4.4	95
36	Sluggish Hadean geodynamics: Evidence from coupled 146,147 Smâ€“ 142,143 Nd systematics in Eoarchean supracrustal rocks of the Inukjuak domain (QuÃ©bec). Earth and Planetary Science Letters, 2017, 457, 23-37.	4.4	43

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37	ANALYSIS OF TERRESTRIAL PLANET FORMATION BY THE GRAND TACK MODEL: SYSTEM ARCHITECTURE AND TACK LOCATION. Astrophysical Journal, 2016, 821, 75.	4.5	73
38	Thermal effects of impact bombardments on Noachian Mars. Earth and Planetary Science Letters, 2016, 442, 108-120.	4.4	28
39	Late veneer and late accretion to the terrestrial planets. Earth and Planetary Science Letters, 2016, 455, 85-93.	4.4	57
40	Chemical and textural overprinting of ancient stromatolites: Timing, processes, and implications for their use as paleoenvironmental proxies. Precambrian Research, 2016, 278, 145-160.	2.7	31
41	Highly siderophile element abundances in Eoarchean komatiite and basalt protoliths. Contributions To Mineralogy and Petrology, 2016, 171, 1.	3.1	9
42	Correlated chemostratigraphy of Mn-carbonate microbialites (ÃšrkÃºt, Hungary). Gondwana Research, 2016, 29, 278-289.	6.0	22
43	Tungsten isotope composition of the Acasta Gneiss Complex. Earth and Planetary Science Letters, 2015, 419, 168-177.	4.4	80
44	Micrometer-scale Uâ€“Pb age domains in eucrite zircons, impact re-setting, and the thermal history of the HED parent body. Icarus, 2015, 245, 367-378.	2.5	32
45	A protracted timeline for lunar bombardment from mineral chemistry, Ti thermometry and Uâ€“Pb geochronology of Apollo 14 melt breccia zircons. Contributions To Mineralogy and Petrology, 2015, 169, 1.	3.1	61
46	Earth, Formation and Early Evolution. , 2015, , 689-698.		0
47	Cobalt and marine redox evolution. Earth and Planetary Science Letters, 2014, 390, 253-263.	4.4	95
48	Luâ€“Hf isotope systematics of the Hadeanâ€“Eoarchean Acasta Gneiss Complex (Northwest Territories,) Tj ETQq0 0 0 rgBT /Overlock 1	3.9	41
49	Component geochronology in the polyphase ca. 3920 Ma Acasta Gneiss. Geochimica Et Cosmochimica Acta, 2014, 133, 68-96.	3.9	75
50	A radiogenic heating evolution model for cosmochemically Earth-like exoplanets. Icarus, 2014, 243, 274-286.	2.5	63
51	Combined^{147,146}Smâ€^{143,142}Nd constraints on the longevity and residence time of early terrestrial crust. Geochemistry, Geophysics, Geosystems, 2014, 15, 2329-2345.	2.5	58
52	Earth, Formation and Early Evolution. , 2014, , 1-11.		0
53	Geochemistry of pyrite from diamictites of the Boolgeeda Iron Formation, Western Australia with implications for the GOE and Paleoproterozoic ice ages. Chemical Geology, 2013, 362, 131-142.	3.3	19
54	The impact environment of the Hadean Earth. Chemie Der Erde, 2013, 73, 227-248.	2.0	60

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55	Reduced, reused and recycled: Detrital zircons define a maximum age for the Eoarchean (ca. 3750â€“3780) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 283-293.	4.4	60
56	Chemical sedimentary protoliths in the >3.75Ga Nuvvuagittuq Supracrustal Belt (QuÃ©bec, Canada). Gondwana Research, 2013, 23, 574-594.	6.0	26
57	Inherited 142Nd anomalies in Eoarchean protoliths. Earth and Planetary Science Letters, 2013, 361, 50-57.	4.4	91
58	A legacy of Hadean silicate differentiation inferred from Hf isotopes in Eoarchean rocks of the Nuvvuagittuq supracrustal belt (QuÃ©bec, Canada). Earth and Planetary Science Letters, 2013, 362, 171-181.	4.4	43
59	A search for thermal excursions from ancient extraterrestrial impacts using Hadean zircon Ti-U-Th-Pb depth profiles. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13486-13492.	7.1	40
60	The composition of Earth's oldest iron formations: The Nuvvuagittuq Supracrustal Belt (QuÃ©bec,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	4.4	99
61	Hafnium isotope evidence from Archean granitic rocks for deep-mantle origin of continental crust. Earth and Planetary Science Letters, 2012, 337-338, 211-223.	4.4	169
62	Geology, age and field relations of Hadean zircon-bearing supracrustal rocks from Quad Creek, eastern Beartooth Mountains (Montana and Wyoming, USA). Chemical Geology, 2012, 312-313, 47-57.	3.3	20
63	Aerobic bacterial pyrite oxidation and acid rock drainage during the Great Oxidation Event. Nature, 2011, 478, 369-373.	27.8	299
64	Abodes for life in carbonaceous asteroids?. Icarus, 2011, 213, 273-279.	2.5	29
65	Leftover lithosphere. Nature Geoscience, 2010, 3, 148-149.	12.9	5
66	Ancient graphite in the Eoarchean quartzâ€“pyroxene rocks from Akilia in southern West Greenland I: Petrographic and spectroscopic characterization. Geochimica Et Cosmochimica Acta, 2010, 74, 5862-5883.	3.9	55
67	Microbial habitability of the Hadean Earth during the late heavy bombardment. Nature, 2009, 459, 419-422.	27.8	247
68	Metamorphic zircon, trace elements and Neoarchean metamorphism in the ca. 3.75ÂGa Nuvvuagittuq supracrustal belt, QuÃ©bec (Canada). Chemical Geology, 2009, 261, 99-114.	3.3	49
69	Application of precise 142Nd/144Nd analysis of small samples to inclusions in diamonds (Finsch, South) Tj ETQq1 1 0.784314 rgBT /Ov	3.3	25
70	Chapter 7.5 Sulphur on the Early Earth. Neoproterozoic-Cambrian Tectonics, Global Change and Evolution: A Focus on South Western Gondwana, 2007, 15, 923-970.	0.2	17
71	Pre-3750ÂMa supracrustal rocks from the Nuvvuagittuq supracrustal belt, northern QuÃ©bec. Earth and Planetary Science Letters, 2007, 255, 9-21.	4.4	102
72	Identification of chemical sedimentary protoliths using iron isotopes in the >3750ÂMa Nuvvuagittuq supracrustal belt, Canada. Earth and Planetary Science Letters, 2007, 254, 358-376.	4.4	112

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73	Multiple sulfur isotopes from Paleoproterozoic Huronian interglacial sediments and the rise of atmospheric oxygen. Earth and Planetary Science Letters, 2007, 255, 188-212.	4.4	127
74	Puâ€“Xe, Uâ€“Xe, Uâ€“Pb chronology and isotope systematics of ancient zircons from Western Australia. Earth and Planetary Science Letters, 2007, 261, 491-499.	4.4	46
75	Thermal events documented in Hadean zircons by ion microprobe depth profiles. Geochimica Et Cosmochimica Acta, 2007, 71, 4044-4065.	3.9	64
76	Constraints on Hadean zircon protoliths from oxygen isotopes, Ti-thermometry, and rare earth elements. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	2.5	160
77	Chemical and isotopic evidence for widespread Eoarchean metasedimentary enclaves in southern West Greenland. Geochimica Et Cosmochimica Acta, 2006, 70, 4229-4257.	3.9	51
78	Mass-independent fractionation of sulfur isotopes in sulfides from the pre-3770ÂMa Isua Supracrustal Belt, West Greenland. Geobiology, 2006, 4, 227-238.	2.4	30
79	Response to Comment on "Heterogeneous Hadean Hafnium: Evidence of Continental Crust at 4.4 to 4.5 Ga". Science, 2006, 312, 1139b-1139b.	12.6	13
80	Geology, Age and Origin of Supracrustal Rocks at Akilia, West Greenland. Numerische Mathematik, 2006, 306, 303-366.	1.4	81
81	Composition and Structure of Microbial Communities from Stromatolites of Hamelin Pool in Shark Bay, Western Australia. Applied and Environmental Microbiology, 2005, 71, 4822-4832.	3.1	203
82	Multiple sulfur isotopes of sulfides from sediments in the aftermath of Paleoproterozoic glaciations. Geochimica Et Cosmochimica Acta, 2005, 69, 5033-5060.	3.9	76
83	Nitrogen isotopic composition of ammoniated phyllosilicates: case studies from Precambrian metamorphosed sedimentary rocks. Chemical Geology, 2005, 216, 37-58.	3.3	86
84	Heterogeneous Hadean Hafnium: Evidence of Continental Crust at 4.4 to 4.5 Ga. Science, 2005, 310, 1947-1950.	12.6	476
85	Extinct 244Pu in Ancient Zircons. Science, 2004, 306, 89-91.	12.6	57
86	The first billion years: new insights from geochemistry. Precambrian Research, 2004, 135, 245-250.	2.7	2
87	Probing early atmospheres. Nature, 2003, 425, 249-250.	27.8	3
88	Mass-independent isotope effects in Archean (2.5 to 3.8 Ga) sedimentary sulfides determined by ion microprobe analysis. Geochimica Et Cosmochimica Acta, 2003, 67, 1635-1658.	3.9	190
89	Ion Microprobe Uâ€Pb Age Determinations on Zircon from the Late Archean Granulite Facies Transition Zone of Southern India. Journal of Geology, 2003, 111, 407-425.	1.4	62
90	Origin and Significance of Archean Quartzose Rocks at Akilia, Greenland. Science, 2002, 298, 917a-917.	12.6	41

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91	Establishment of a 3.83-Ga magmatic age for the Akilia tonalite (southern West Greenland). Earth and Planetary Science Letters, 2002, 202, 563-576.	4.4	143
92	Extraterrestrial iridium, sediment accumulation and the habitability of the early Earth's surface. Journal of Geophysical Research, 2001, 106, 3219-3236.	3.3	60
93	Oxygen-isotope evidence from ancient zircons for liquid water at the Earth's surface 4,300â€‰Myr ago. Nature, 2001, 409, 178-181.	27.8	747
94	Accretion to Earth and Moon â^¼3.85 Ga. , 2001, , 423-446.		3
95	Sulfur isotopic compositions of individual sulfides in Martian meteorites ALH84001 and Nakhla: implications for crustâ€“regolith exchange on Mars. Earth and Planetary Science Letters, 2000, 184, 23-35.	4.4	74
96	Heavy Bombardment of the Earth at ~3.85 Ga:. , 2000, , 475-492.		49
97	Origin of life from apatite dating?. Nature, 1999, 400, 127-128.	27.8	27
98	Phosphates and carbon on Mars: Exobiological implications and sample return considerations. Journal of Geophysical Research, 1998, 103, 28495-28511.	3.3	29
99	<title>Early Mars and early Earth: paleoenvironments for the emergence of life</title>. , 1997, , .		3
100	Recognition of â‰¥3850 Ma water-lain sediments in West Greenland and their significance for the early Archaean Earth. Geochimica Et Cosmochimica Acta, 1997, 61, 2475-2484.	3.9	186
101	Entropy and Charge in Molecular Evolutionâ€”the Case of Phosphate. Journal of Theoretical Biology, 1997, 187, 503-522.	1.7	78
102	Extraterrestrial life: Life on Mars â€“Â then and now. Current Biology, 1996, 6, 1213-1216.	3.9	20
103	Evidence for life on Earth before 3,800 million years ago. Nature, 1996, 384, 55-59.	27.8	1,188
104	Detailed chemical compositions of planet-hosting stars: II. Exploration of the interiors of terrestrial-type exoplanets. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	4