Mark D Schmitz

List of Publications by Year
in descending order

80	5,128	101543	88630
papers	citations	36 h-index	70 g-index

80	80	80	4439
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Calibrating the Cryogenian. Science, 2010, 327, 1241-1243.	12.6	488
2	Reassessing the uranium decay constants for geochronology using ID-TIMS Uâ€“Pb data. Geochimica Et Cosmochimica Acta, 2006, 70, 426-445.	3.9	406
3	Derivation of isotope ratios, errors, and error correlations for Uâ€Pb geochronology using ²⁰⁵Pbâ€²³⁵Uâ€(²³³U)â€spiked isotope dilution thermal ionization mass spectrometric data. Geochemistry, Geophysics, Geosystems, 2007, 8, .	2.5	320
4	U-Pb zircon and titanite systematics of the Fish Canyon Tuff: an assessment of high-precision U-Pb geochronology and its application to young volcanic rocks. Geochimica Et Cosmochimica Acta, 2001, 65, 2571-2587.	3.9	297
5	Ages and origins of rocks of the Killingworth dome, south-central Connecticut: Implications for the tectonic evolution of southern New England. Numerische Mathematik, 2007, 307, 63-118.	1.4	185
6	Palaeontological evidence for an Oligocene divergence between Old World monkeys and apes. Nature, 2013, 497, 611-614.	27.8	180
7	Subduction and terrane collision stabilize the western Kaapvaal craton tectosphere 2.9 billion years ago. Earth and Planetary Science Letters, 2004, 222, 363-376.	4.4	172
8	MKED1: A new titanite standard for in situ analysis of Smâ€“Nd isotopes and Uâ€“Pb geochronology. Chemical Geology, 2016, 425, 110-126.	3.3	153
9	Forearc ages reveal extensive short-lived and rapid seafloor spreading following subduction initiation. Earth and Planetary Science Letters, 2019, 506, 520-529.	4.4	148
10	Evaluation of Duluth Complex anorthositic series (AS3) zircon as a U-Pb geochronological standard: new high-precision isotope dilution thermal ionization mass spectrometry results. Geochimica Et Cosmochimica Acta, 2003, 67, 3665-3672.	3.9	130
11	Magma emplacement, differentiation and cooling in the middle crust: Integrated zircon geochronologicalâ€“geochemical constraints from the Bergell Intrusion, Central Alps. Chemical Geology, 2015, 417, 322-340.	3.3	125
12	Neoarchean paleoweathering of tonalite and metabasalt: Implications for reconstructions of 2.69Ga early terrestrial ecosystems and paleoatmospheric chemistry. Precambrian Research, 2011, 189, 1-17.	2.7	121
13	Mesozoic thermal evolution of the southern African mantle lithosphere. Lithos, 2003, 71, 273-287.	1.4	118
14	Constraints on the thermal evolution of continental lithosphere from U-Pb accessory mineral thermochronometry of lower crustal xenoliths, southern Africa. Contributions To Mineralogy and Petrology, 2003, 144, 592-618.	3.1	98
15	Chronostratigraphy and Paleoclimatology of the LodÃ¨ve Basin, France: Evidence for a pan-tropical aridification event across the Carboniferousâ€“Permian boundary. Palaeogeography, Palaeoclimatology, Palaeoecology, 2015, 430, 118-131.	2.3	98
16	Smâ€“Nd isotope systematics by laser ablation-multicollector-inductively coupled plasma mass spectrometry: Methods and potential natural and synthetic reference materials. Chemical Geology, 2011, 284, 1-20.	3.3	96
17	Age intercalibration of 40Ar/39Ar sanidine and chemically distinct U/Pb zircon populations from the Alder Creek Rhyolite Quaternary geochronology standard. Chemical Geology, 2013, 345, 87-98.	3.3	96
18	Ultrahigh-temperature metamorphism in the lower crust during Neoarchean Ventersdorp rifting and magmatism, Kaapvaal Craton, southern Africa. Bulletin of the Geological Society of America, 2003, 115, 533-548.	3.3	91

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19	Decoupling of the Lu-Hf and Sm-Nd isotope systems during the evolution of granulitic lower crust beneath southern Africa. Geology, 2004, 32, 405.	4.4	83
20	A review of the Middleâ€“Late Pennsylvanian west European regional substages and floral biozones, and their correlation to the Geological Time Scale based on new Uâ€“Pb ages. Earth-Science Reviews, 2016, 154, 301-335.	9.1	81
21	High-precision Uâ€“Pb zircon age constraints on the Carboniferousâ€“Permian boundary in the southern Urals stratotype. Earth and Planetary Science Letters, 2007, 256, 244-257.	4.4	72
22	Understanding cratonic flood basalts. Earth and Planetary Science Letters, 2006, 245, 190-201.	4.4	69
23	Rapid magma evolution constrained by zircon petrochronology and 40Ar/39Ar sanidine ages for the Huckleberry Ridge Tuff, Yellowstone, USA. Geology, 2014, 42, 643-646.	4.4	68
24	Cryogenian of Yukon. Precambrian Research, 2018, 319, 114-143.	2.7	68
25	EOCENE ZIRCON REFERENCE MATERIAL FOR MICROANALYSIS OF U-Th-Pb ISOTOPES AND TRACE ELEMENTS. Canadian Mineralogist, 2014, 52, 409-421.	1.0	65
26	Exploring the law of detrital zircon: LA-ICP-MS and CA-TIMS geochronology of Jurassic forearc strata, Cook Inlet, Alaska, USA. Geology, 2019, 47, 1044-1048.	4.4	63
27	South Australian U-Pb zircon (CA-ID-TIMS) age supports globally synchronous Sturtian deglaciation. Precambrian Research, 2018, 315, 257-263.	2.7	58
28	Filling the gap: new precise Early Cretaceous radioisotopic ages from the Andes. Geological Magazine, 2015, 152, 557-564.	1.5	56
29	The Petrology of the Rotoiti Eruption Sequence, Taupo Volcanic Zone: an Example of Fractionation and Mixing in a Rhyolitic System. Journal of Petrology, 2004, 45, 2045-2066.	2.8	55
30	The significance of Uâ€“Pb zircon dates in lower crustal xenoliths from the southwestern margin of the Kaapvaal craton, southern Africa. Chemical Geology, 2001, 172, 59-76.	3.3	53
31	Kikiktat volcanics of Arctic Alaskaâ€”Melting of harzburgitic mantle associated with the Franklin large igneous province. Lithosphere, 2015, 7, 275-295.	1.4	50
32	Cambrian Sauk transgression in the Grand Canyon region redefined by detrital zircons. Nature Geoscience, 2018, 11, 438-443.	12.9	50
33	High-precision U-Pb zircon ages for explosive volcanism calibrating the NW European continental Autunian stratotype. Gondwana Research, 2017, 51, 118-136.	6.0	45
34	A high precision Uâ€“Pb radioisotopic age for the Agrio Formation, NeuquÃ©n Basin, Argentina: Implications for the chronology of the Hauterivian Stage. Cretaceous Research, 2017, 75, 193-204.	1.4	44
35	Pre- to synglacial rift-related volcanism in the Neoproterozoic (Cryogenian) Pocatello Formation, SE Idaho: New SHRIMP and CA-ID-TIMS constraints. Lithosphere, 2013, 5, 128-150.	1.4	41
36	Westward Growth of Laurentia by Preâ€“Late Jurassic Terrane Accretion, Eastern Oregon and Western Idaho, United States. Journal of Geology, 2015, 123, 233-267.	1.4	40

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37	Interhemispheric radio-astrochronological calibration of the time scales from the Andean and the Tethyan areas in the Valanginianâ€“Hauterivian (Early Cretaceous). Gondwana Research, 2019, 70, 104-132.	6.0	39
38	An improved approach to age-modeling in deep time: Implications for the Santa Cruz Formation, Argentina. Bulletin of the Geological Society of America, 2020, 132, 233-244.	3.3	36
39	Astronomical forcing of Carboniferous paralic sedimentary cycles in the Upper Silesian Basin, Czech Republic (Serpukhovian, latest Mississippian): New radiometric ages afford an astronomical age model for European biozonations and substages. Earth-Science Reviews, 2018, 177, 715-741.	9.1	33
40	New insights on the Orosirian carbon cycle, early Cyanobacteria, and the assembly of Laurentia from the Paleoproterozoic Belcher Group. Earth and Planetary Science Letters, 2019, 520, 141-152.	4.4	31
41	High-precision Uâ€“Pb zircon age constraints on the duration of rapid biogeochemical events during the Ludlow Epoch (Silurian Period). Journal of the Geological Society, 2015, 172, 157-160.	2.1	30
42	Coupled Re-Os and U-Pb geochronology of the Tonian Chuar Group, Grand Canyon. Bulletin of the Geological Society of America, 2018, 130, 1085-1098.	3.3	30
43	A middleâ€“late Ediacaran volcanoâ€sedimentary record from the eastern Arabianâ€Nubian shield. Terra Nova, 2014, 26, 120-129.	2.1	29
44	An ultrasonic method for isolating nonclay components from clayâ€rich material. Geochemistry, Geophysics, Geosystems, 2014, 15, 492-498.	2.5	29
45	Geochronological constraints on Neoproterozoic rifting and onset of the Marinoan glaciation from the Kingston Peak Formation in Death Valley, California (USA). Geology, 2020, 48, 1083-1087.	4.4	29
46	One diamictite and two rifts: Stratigraphy and geochronology of the Gataga Mountain of northern British Columbia. Numerische Mathematik, 2018, 318, 167-207.	1.4	28
47	Terrestrial and marginal-marine record of the mid-Cretaceous Oceanic Anoxic Event 2 (OAE 2): High-resolution framework, carbon isotopes, CO2 and sea-level change. Palaeogeography, Palaeoclimatology, Palaeoecology, 2019, 524, 118-136.	2.3	27
48	Uâ€“Pb and Hf isotopic analysis of zircon in lower crustal xenoliths from the Navajo volcanic field: 1.4ÂGa mafic magmatism and metamorphism beneath the Colorado Plateau. Contributions To Mineralogy and Petrology, 2006, 151, 313-330.	3.1	25
49	Settling the issue of â€œdecouplingâ€•between atmospheric carbon dioxide and global temperature: [CO2]atm reconstructions across the warming Paleogene-Neogene divide. Geology, 2017, 45, 999-1002.	4.4	25
50	New toxodontid (Notoungulata) from the Early Miocene of Mendoza, Argentina. Palaontologische Zeitschrift, 2015, 89, 611-634.	1.6	24
51	Rapid emplacement of massive Duluth Complex intrusions within the North American Midcontinent Rift. Geology, 2021, 49, 185-189.	4.4	21
52	Apatites for destruction: Reference apatites from Morocco and Brazil for U-Pb petrochronology and Nd and Sr isotope geochemistry. Chemical Geology, 2022, 590, 120689.	3.3	21
53	A detrital zircon test of large-scale terrane displacement along the Arctic margin of North America. Geology, 2021, 49, 545-550.	4.4	20
54	Chronostratigraphic Revision of the Cloverly Formation (Lower Cretaceous, Western Interior, USA). Bulletin of the Peabody Museum of Natural History, 2019, 60, 3.	1.1	17

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55	The Main Ostrava Whetstone: composition, sedimentary processes, palaeogeography and geochronology of a major Mississippian volcaniclastic unit of the Upper Silesian Basin (Poland and) Tj ETQq1 1 0.784314 rgBT /Overlock	2.3	15
56	Middle Triassic lake deepening in the Ordos Basin of North China linked with global sea-level rise. Global and Planetary Change, 2021, 207, 103670.	3.5	15
57	Volcanic Initiation of the Eocene Heart Mountain Slide, Wyoming, USA. Journal of Geology, 2017, 125, 439-457.	1.4	14
58	Strain variations across the Proterozoic Penokean Orogen, USA and Canada. Precambrian Research, 2018, 318, 25-69.	2.7	14
59	Precise early Cambrian Uâ€“Pb zircon dates bracket the oldest trilobites and archaeocyaths in Moroccan West Gondwana. Geological Magazine, 2021, 158, 219-238.	1.5	14
60	Integrating zircon trace-element geochemistry and high-precision U-Pb zircon geochronology to resolve the timing and petrogenesis of the late Ediacaranâ€“Cambrian Wichita igneous province, Southern Oklahoma Aulacogen, USA. Geology, 2021, 49, 268-272.	4.4	14
61	Climate- and eustasy-driven cyclicity in Pennsylvanian fusulinid assemblages, Donets Basin (Ukraine). Palaeogeography, Palaeoclimatology, Palaeoecology, 2014, 396, 41-61.	2.3	13
62	Isotopic evidence for a lithospheric origin of alkaline rocks and carbonatites: an example from southern Africa. Canadian Journal of Earth Sciences, 2016, 53, 1216-1226.	1.3	13
63	A link between rift-related volcanism and end-Ediacaran extinction? Integrated chemostratigraphy, biostratigraphy, and U-Pb geochronology from Sonora, Mexico. Geology, 2021, 49, 115-119.	4.4	13
64	(Re)proposal of three Cambrian Subsystems and their Geochronology. Episodes, 2021, 44, 273-283.	1.2	13
65	Coal-bearing fluvial cycles of the late Paleozoic tropics; astronomical control on sediment supply constrained by high-precision radioisotopic ages, Upper Silesian Basin. Earth-Science Reviews, 2022, 228, 103998.	9.1	13
66	Comparing desired workforce skills and reported teaching practices to model studentsâ€™ experiences in undergraduate geoscience programs. Journal of Geoscience Education, 2021, 69, 27-42.	1.4	11
67	TS-Mnz â€“ A new monazite age reference material for U-Th-Pb microanalysis. Chemical Geology, 2021, 572, 120195.	3.3	11
68	New high-precision U-Pb zircon age of the Irati Formation (ParanÃ¡ Basin) and implications for the timing of the Kungurian anoxic events recorded in southern Gondwana. Gondwana Research, 2022, 107, 134-145.	6.0	11
69	The duration of a Yellowstone super-eruption cycle and implications for the age of the Olduvai subchron. Earth and Planetary Science Letters, 2017, 479, 377-386.	4.4	9
70	Volcanism at 1.45â€¯Ma within the Yellowstone Volcanic Field, United States. Journal of Volcanology and Geothermal Research, 2018, 357, 224-238.	2.1	9
71	A new late Hemingfordian vertebrate fauna from Hawk Rim, Oregon, with implications for biostratigraphy and geochronology. Journal of Vertebrate Paleontology, 2016, 36, e1201095.	1.0	7
72	Depositional settings and changing composition of the Jambi palaeoflora within the Permian Mengkarang Formation (Sumatra, Indonesia). Geological Journal, 2018, 53, 2969-2990.	1.3	7

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73	A new, high-precision CA-ID-TIMS date for the â€˜Kalkbergâ€™ K-bentonite (Judds Falls Bentonite). Lethaia, 2018, 51, 344-356.	1.4	7
74	A robust age model for the Cryogenian Pocatello Formation of southeastern Idaho (northwestern) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 zircons. , 2022, 18, 825-849.		6
75	The radioisotopically constrained VisÃ©an onset of turbidites in the Moravian-Silesian part of the Rhenohercynian foreland basin (Central European Variscides). International Journal of Earth Sciences, 2018, 107, 711-727.	1.8	5
76	Timescales of impact melt sheet crystallization and the precise age of the Morokweng impact structure, South Africa. Earth and Planetary Science Letters, 2021, 567, 117013.	4.4	5
77	Reply to the comment on â€œChronostratigraphy and paleoclimatology of the LodÃ¨ve Basin, France: Evidence for a pan-tropical aridification event across the Carboniferousâ€“Permian boundaryâ€• by Michel et al., (2015). Palaeogeography, Palaeoclimatology, Palaeoecology 430, 118â€“131. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 441, 1000-1004.	2.3	4
78	A Laurentian cratonic reference from the distal Proterozoic basement of Western Newfoundland using tandem in situ and isotope dilution U-pb zircon and titanite geochronology. Numerische Mathematik, 2021, 321, 1045-1079.	1.4	4
79	Synchronous emplacement of the anorthosite xenolithâ€bearing Beaver River diabase and one of the largest lava flows on Earth. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009909.	2.5	3
80	U-Pb geochronology and cyclostratigraphy of the middle Ediacaran upper Jibalah Group, eastern Arabian Shield. Precambrian Research, 2022, 375, 106674.	2.7	1