

Axel Hofmann

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6607081/publications.pdf>

Version: 2024-02-01

99
papers

4,662
citations

109321

35
h-index

102487

66
g-index

99
all docs

99
docs citations

99
times ranked

3348
citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence for oxygenic photosynthesis half a billion years before the Great Oxidation Event. <i>Nature Geoscience</i> , 2014, 7, 283-286.	12.9	444
2	Rare Earth Element and yttrium compositions of Archean and Paleoproterozoic Fe formations revisited: New perspectives on the significance and mechanisms of deposition. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 6387-6405.	3.9	373
3	Geodynamo, Solar Wind, and Magnetopause 3.4 to 3.45 Billion Years Ago. <i>Science</i> , 2010, 327, 1238-1240.	12.6	256
4	The geochemistry of sedimentary rocks from the Fig Tree Group, Barberton greenstone belt: Implications for tectonic, hydrothermal and surface processes during mid-Archaean times. <i>Precambrian Research</i> , 2005, 143, 23-49.	2.7	187
5	Sulfur record of rising and falling marine oxygen and sulfate levels during the Lomagundi event. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 18300-18305.	7.1	174
6	Titanium isotopic evidence for felsic crust and plate tectonics 3.5 billion years ago. <i>Science</i> , 2017, 357, 1271-1274.	12.6	166
7	Silica alteration zones in the Barberton greenstone belt: A window into subseafloor processes 3.5-3.3 Ga ago. <i>Chemical Geology</i> , 2008, 257, 221-239.	3.3	157
8	Towards a complete magmatic barcode for the Zimbabwe craton: Baddeleyite U-Pb dating of regional dolerite dyke swarms and sill complexes. <i>Precambrian Research</i> , 2010, 183, 388-398.	2.7	148
9	Iron isotope composition of some Archean and Proterozoic iron formations. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 80, 158-169.	3.9	147
10	Multiple sulphur and iron isotope composition of detrital pyrite in Archaean sedimentary rocks: A new tool for provenance analysis. <i>Earth and Planetary Science Letters</i> , 2009, 286, 436-445.	4.4	113
11	Carbonaceous Cherts in the Barberton Greenstone Belt and Their Significance for the Study of Early Life in the Archean Record. <i>Astrobiology</i> , 2007, 7, 355-388.	3.0	99
12	Coupled Fe and S isotope variations in pyrite nodules from Archean shale. <i>Earth and Planetary Science Letters</i> , 2014, 392, 67-79.	4.4	86
13	Isotopic evidence for oxygenated Mesoarchaeon shallow oceans. <i>Nature Geoscience</i> , 2018, 11, 133-138.	12.9	86
14	Generation of early Archaean grey gneisses through melting of older crust in the eastern Kaapvaal craton, southern Africa. <i>Precambrian Research</i> , 2014, 255, 823-846.	2.7	84
15	Microbial remains in some earliest Earth rocks: Comparison with a potential modern analogue. <i>Precambrian Research</i> , 2008, 164, 187-200.	2.7	82
16	Implications of in situ calcification for photosynthesis in a ~3.3Ga-old microbial biofilm from the Barberton greenstone belt, South Africa. <i>Earth and Planetary Science Letters</i> , 2011, 310, 468-479.	4.4	75
17	A trace element and Pb isotopic investigation into the provenance and deposition of stromatolitic carbonates, ironstones and associated shales of the ~3.0 Ga Pongola Supergroup, Kaapvaal Craton. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 158, 57-78.	3.9	70
18	Cyclicity of Triassic to Lower Jurassic continental red beds of the Argana Valley, Morocco: implications for palaeoclimate and basin evolution. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2000, 161, 229-266.	2.3	65

#	ARTICLE	IF	CITATIONS
19	The geochemistry of Archaean shales derived from a Mafic volcanic sequence, Belingwe greenstone belt, Zimbabwe: provenance, source area unroofing and submarine versus subaerial weathering. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 421-440.	3.9	64
20	Dykes of the 1.11Ga Umkondo LIP, Southern Africa: Clues to a complex plumbing system. <i>Precambrian Research</i> , 2014, 249, 129-143.	2.7	60
21	Source composition, fractional crystallization and magma mixing processes in the 3.48â€“3.43Ga Tsawela tonalite suite (Ancient Gneiss Complex, Swaziland) â€“ Implications for Palaeoarchaean geodynamics. <i>Precambrian Research</i> , 2016, 276, 43-66.	2.7	58
22	Two-step deoxygenation at the end of the Paleoproterozoic Lomagundi Event. <i>Earth and Planetary Science Letters</i> , 2018, 486, 70-83.	4.4	58
23	Comparing orthomagmatic and hydrothermal mineralization models for komatiite-hosted nickel deposits in Zimbabwe using multiple-sulfur, iron, and nickel isotope data. <i>Mineralium Deposita</i> , 2014, 49, 75-100.	4.1	56
24	A lithium-isotope perspective on the evolution of carbon and silicon cycles. <i>Nature</i> , 2021, 595, 394-398.	27.8	56
25	Pb- and Nd-isotope systematics of stromatolitic limestones from the 2.7 Ga Ngezi Group of the Belingwe Greenstone Belt: constraints on timing of deposition and provenance. <i>Precambrian Research</i> , 2002, 114, 277-294.	2.7	55
26	Aerobic iron and manganese cycling in a redox-stratified Mesoarchean epicontinental sea. <i>Earth and Planetary Science Letters</i> , 2018, 500, 28-40.	4.4	54
27	A Mesoarchean shift in uranium isotope systematics. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 238, 438-452.	3.9	52
28	Diagenetic xenotime age constraints on the Sanjiaotang Formation, Luoyu Group, southern margin of the North China Craton: Implications for regional stratigraphic correlation and early evolution of eukaryotes. <i>Precambrian Research</i> , 2014, 251, 21-32.	2.7	51
29	A review of Palaeoarchaean felsic volcanism in the eastern Kaapvaal craton: Linking plutonic and volcanic records. <i>Geoscience Frontiers</i> , 2018, 9, 667-688.	8.4	47
30	Early continental crust generated by reworking of basalts variably silicified by seawater. <i>Nature Geoscience</i> , 2019, 12, 769-773.	12.9	45
31	A review of the stratigraphy and geological setting of the Palaeoproterozoic Magondi Supergroup, Zimbabwe â€“ Type locality for the Lomagundi carbon isotope excursion. <i>Precambrian Research</i> , 2010, 182, 254-273.	2.7	44
32	Limited oxygen production in the Mesoarchean ocean. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6647-6652.	7.1	42
33	Evidence for a 3.45â€billionâ€yearâ€old magnetic remanence: Hints of an ancient geodynamo from conglomerates of South Africa. <i>Geochemistry, Geophysics, Geosystems</i> , 2009, 10, .	2.5	40
34	Precise U-Pb baddeleyite age dating of the Usushwana Complex, southern Africa â€“ Implications for the Mesoarchaeon magmatic and sedimentological evolution of the Pongola Supergroup, Kaapvaal Craton. <i>Precambrian Research</i> , 2015, 267, 174-185.	2.7	39
35	An atmospheric source of S in Mesoarchaeon structurally-controlled gold mineralisation of the Barberton Greenstone Belt. <i>Precambrian Research</i> , 2016, 285, 10-20.	2.7	38
36	Juvenile crust formation in the Zimbabwe Craton deduced from the O-Hf isotopic record of 3.8â€“3.1 Ga detrital zircons. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 215, 432-446.	3.9	37

#	ARTICLE	IF	CITATIONS
37	Chapter 5.5 Silicified Basalts, Bedded Cherts and Other Sea Floor Alteration Phenomena of the 3.4 Ga Nondweni Greenstone Belt, South Africa. <i>Neoproterozoic-Cambrian Tectonics, Global Change and Evolution: A Focus on South Western Gondwana</i> , 2007, 15, 571-605.	0.2	36
38	Trace element zoning of sulfides and quartz at Sheba and Fairview gold mines: Clues to Mesoarchean mineralisation in the Barberton Greenstone Belt, South Africa. <i>Ore Geology Reviews</i> , 2014, 56, 94-114.	2.7	36
39	Unusual manganese enrichment in the Mesoarchean Mozaan Group, Pongola Supergroup, South Africa. <i>Precambrian Research</i> , 2016, 281, 414-433.	2.7	35
40	Analytical requirements for quantitative X-ray fluorescence nano-imaging of metal traces in solid samples. <i>TrAC - Trends in Analytical Chemistry</i> , 2017, 91, 104-111.	11.4	35
41	Cellular remains in a ~3.42-billion-year-old seafloor hydrothermal environment. <i>Science Advances</i> , 2021, 7, .	10.3	34
42	Exceptional preservation of expandable clay minerals in the ca. 2.1Ga black shales of the Francevillian basin, Gabon and its implication for atmospheric oxygen accumulation. <i>Chemical Geology</i> , 2013, 362, 181-192.	3.3	31
43	Thrust-related accretion of an Archaean greenstone belt in the Midlands of Zimbabwe. <i>Journal of Structural Geology</i> , 2002, 24, 1707-1727.	2.3	29
44	Zircon SHRIMP dating confirms a Palaeoarchean supracrustal terrain in the southeastern Kaapvaal Craton, southern Africa. <i>Gondwana Research</i> , 2012, 21, 818-828.	6.0	29
45	Differentiating marine vs hydrothermal processes in Devonian carbonatemoounds using rare earth elements (Kess Kess mounds, Anti-Atlas, Morocco). <i>Chemical Geology</i> , 2015, 409, 69-86.	3.3	29
46	A paleosol record of the evolution of Cr redox cycling and evidence for an increase in atmospheric oxygen during the Neoproterozoic. <i>Geobiology</i> , 2019, 17, 579-593.	2.4	27
47	Chapter 7 A review of the current status of the Older Metamorphic Group and Older Metamorphic Tonalite Gneiss: insights into the Palaeoarchean history of the Singhbhum craton, India. <i>Geological Society Memoir</i> , 2015, 43, 103-107.	1.7	26
48	The Nhlngano gneiss dome in south-west Swaziland – A record of crustal destabilization of the eastern Kaapvaal craton in the Neoarchean. <i>Precambrian Research</i> , 2015, 258, 109-132.	2.7	25
49	Desilication in Archean weathering processes traced by silicon isotopes and Ge/Si ratios. <i>Chemical Geology</i> , 2016, 420, 139-147.	3.3	25
50	Margin fluctuation sequences and grounding zone wedges: The record of the Late Palaeozoic Ice Age in the eastern Karoo Basin (Dwyka Group, South Africa). <i>Depositional Record</i> , 2019, 5, 247-271.	1.7	24
51	Chromium isotope systematics and the diagenesis of marine carbonates. <i>Earth and Planetary Science Letters</i> , 2021, 562, 116824.	4.4	24
52	3.51 Ga old felsic volcanic rocks and carbonaceous cherts from the Gorumahisani Greenstone Belt – Insights into the Palaeoarchean record of the Singhbhum Craton, India. <i>Precambrian Research</i> , 2021, 357, 106109.	2.7	22
53	The Belingwe Greenstone Belt: Ensialic or Oceanic?. <i>Neoproterozoic-Cambrian Tectonics, Global Change and Evolution: A Focus on South Western Gondwana</i> , 2004, , 487-538.	0.2	21
54	Crystallisation of magmatic topaz and implications for Nb-Ta-W mineralisation in F-rich silicic melts – The Ary-Bulak ongonite massif. <i>Lithos</i> , 2014, 202-203, 317-330.	1.4	21

#	ARTICLE	IF	CITATIONS
55	Petrochemical characterization of Neoproterozoic Colomine granitoids, SE Cameroon: Implications for gold mineralization. <i>Lithos</i> , 2019, 344-345, 175-192.	1.4	21
56	Diagenetic Fe-carbonates in Paleoproterozoic felsic sedimentary rocks (Hooggenoeg Formation,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 budget of seawater. <i>Precambrian Research</i> , 2009, 172, 255-278.	2.7	20
57	Archean spherule layers in the Barberton greenstone belt, South Africa: A discussion of problems related to the impact interpretation. , 2006, , .		18
58	The Archean geological history of the Singhbhum Craton, India â€“ a proposal for a consistent framework of craton evolution. <i>Earth-Science Reviews</i> , 2022, 228, 103994.	9.1	18
59	Horizontal tectonic deformation geometries in a late Archean sedimentary sequence, Belingwe greenstone belt, Zimbabwe. <i>Tectonics</i> , 2001, 20, 909-932.	2.8	17
60	Discovery of extraterrestrial component carrier phases in Archean spherule layers: Implications for estimation of Archean bolide sizes. <i>Geology</i> , 2015, 43, 299-302.	4.4	17
61	3.2 Ga detrital uraninite in the Witwatersrand Basin, South Africa: Evidence of a reducing Archean atmosphere. <i>Geology</i> , 2018, 46, 295-298.	4.4	16
62	Petrogenesis of the Neoproterozoic diorite-granite association in the Wangwushan area, southern North China Craton: Implications for continental crust evolution. <i>Precambrian Research</i> , 2019, 326, 84-104.	2.7	16
63	Fluid inclusion analysis of silicified Palaeoproterozoic oceanic crust â€“ A record of Archean seawater?. <i>Precambrian Research</i> , 2015, 266, 150-164.	2.7	15
64	The Pongola Supergroup: Mesoarchean Deposition Following Kaapvaal Craton Stabilization. <i>Regional Geology Reviews</i> , 2019, , 225-254.	1.2	15
65	Archean Hydrothermal Systems in the Barberton Greenstone Belt and Their Significance as a Habitat for Early Life. , 2011, , 51-78.		15
66	Nondestructive spectroscopic and petrochemical investigations of Paleoproterozoic spherule layers from the ICDP drill core BARB5, Barberton Mountain Land, South Africa. <i>Meteoritics and Planetary Science</i> , 2016, 51, 2441-2458.	1.6	14
67	Characterization of kerogenous films and taphonomic modes of the Sirius Passet Lagerstutte, Greenland. <i>Geology</i> , 2018, 46, 359-362.	4.4	14
68	A revised classification scheme of pyrite in the Witwatersrand Basin and application to placer gold deposits. <i>Earth-Science Reviews</i> , 2020, 201, 103064.	9.1	14
69	The onset of deep recycling of supracrustal materials at the Paleo-Mesoarchean boundary. <i>National Science Review</i> , 2022, 9, nwab136.	9.5	14
70	The origin of early continental crust: New clues from coupling Ge/Si ratios with silicon isotopes. <i>Earth and Planetary Science Letters</i> , 2022, 582, 117415.	4.4	14
71	Uranium isotope evidence for Mesoarchean biological oxygen production in shallow marine and continental settings. <i>Earth and Planetary Science Letters</i> , 2020, 551, 116583.	4.4	13
72	Coupled stable chromium and iron isotopic fractionation tracing magmatic mineral crystallization in Archean komatiite-tholeiite suites. <i>Chemical Geology</i> , 2021, 576, 120121.	3.3	12

#	ARTICLE	IF	CITATIONS
73	Age of the Dominion-Nsuze Igneous Province, the first intracratonic Igneous Province of the Kaapvaal Craton. <i>Precambrian Research</i> , 2021, 363, 106335.	2.7	12
74	Gold mobility during Palaeoarchaeoan submarine alteration. <i>Earth and Planetary Science Letters</i> , 2017, 462, 47-54.	4.4	11
75	The Mesoarchaeoan Dominion Group and the onset of intracontinental volcanism on the Kaapvaal craton – Geological, geochemical and temporal constraints. <i>Gondwana Research</i> , 2020, 84, 131-150.	6.0	11
76	Anoxic continental surface weathering recorded by the 2.95 Ga Denny Dalton Paleosol (Pongola) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.9	11
77	Geology, zircon U–Pb dating and μ Hf data for the Julie greenstone belt and associated rocks in NW Ghana: Implications for Birimian-to-Tarkwaian correlation and crustal evolution. <i>Journal of African Earth Sciences</i> , 2022, 186, 104444.	2.0	11
78	Archean Granitoid–Greenstone Geology of the Southeastern Part of the Kaapvaal Craton. <i>Regional Geology Reviews</i> , 2019, , 33-54.	1.2	10
79	Palaeoarchaeoan felsic magmatism: A melt inclusion study of 3.45 Ga old rhyolites from the Barberton Greenstone Belt, South Africa. <i>Chemical Geology</i> , 2015, 414, 69-83.	3.3	9
80	Hydrothermal clay mineral formation in the uraniferous Paleoproterozoic FA Formation, Francevillian basin, Gabon. <i>Precambrian Research</i> , 2014, 246, 134-149.	2.7	8
81	Petrographic and Micro-XRF analysis of multiple archean impact-derived spherule layers in drill core CT3 from the northern Barberton Greenstone Belt (South Africa). <i>Journal of African Earth Sciences</i> , 2018, 138, 264-288.	2.0	8
82	The Late Palaeozoic Ice Age unconformity in southern Namibia viewed as a patchwork mosaic. <i>Depositional Record</i> , 2022, 8, 419-435.	1.7	8
83	Mesoarchaeoan Gold Mineralisation in the Barberton Greenstone Belt: A Review. <i>Regional Geology Reviews</i> , 2019, , 171-184.	1.2	7
84	High-grade metamorphism of ironstones in the Mesoarchaeoan of southwest Swaziland. <i>Mineralogy and Petrology</i> , 2014, 108, 589-605.	1.1	6
85	Hafnium-Neodymium isotope, trace element and U-Pb zircon age constraints on the petrogenesis of the 3.44–3.46 Ga Dwalile greenstone remnant, Ancient gneiss Complex, Swaziland. <i>Precambrian Research</i> , 2020, 351, 105970.	2.7	6
86	Constraining provenance for the uraniferous Paleoproterozoic Francevillian Group sediments (Gabon) with detrital zircon geochronology and geochemistry. <i>Precambrian Research</i> , 2020, 343, 105724.	2.7	6
87	Mesoarchaeoan acidic volcanic lakes: A critical ecological niche in early land colonisation. <i>Earth and Planetary Science Letters</i> , 2021, 556, 116725.	4.4	6
88	Continental extensional setting for the Archean Belingwe Greenstone Belt, Zimbabwe: Comment and Reply. <i>Geology</i> , 1999, 27, 667.	4.4	5
89	Continental setting inferred for emplacement of the 2.9–2.7 Ga Belingwe Greenstone Belt, Zimbabwe: Comment and Reply. <i>Geology</i> , 2003, 31, e30-e31.	4.4	4
90	(Ca-Y)-phosphate inclusions in apatite crystals from Archean rocks from the Barberton Greenstone Belt and Pilbara Craton: First report of natural occurrence. <i>American Mineralogist</i> , 2018, 103, 307-313.	1.9	4

#	ARTICLE	IF	CITATIONS
91	The Paleoproterozoic Record of the Zimbabwe Craton. , 2019, , 855-864.		4
92	Possible discontinuous evolution of atmospheric xenon suggested by Archean barites. Chemical Geology, 2021, 581, 120405.	3.3	4
93	Reply to the comment by PrÃ©at and Weber on. Earth and Planetary Science Letters, 2019, 511, 259-261.	4.4	3
94	Limited expression of the Paleoproterozoic Oklo natural nuclear reactor phenomenon in the aftermath of a widespread deoxygenation event ~2.11â€“2.06 billion years ago. Chemical Geology, 2021, 578, 120315.	3.3	3
95	2470 million-year-old banded iron formation reveals a climatic oscillation consistent with the Gleissberg solar cycle. Communications Earth & Environment, 2022, 3, .	6.8	3
96	Crustal modelling from Pan-African granites of the Colomine Gold District, SE Cameroon: Insights from zircon U-Pb dating and Lu-Hf isotope systematics. Journal of African Earth Sciences, 2022, 187, 104441.	2.0	2
97	Barberton Greenstone Belt, Sedimentology. , 2014, , 1-3.		0
98	Barberton Greenstone Belt, Sedimentology. , 2015, , 244-246.		0
99	Barberton Greenstone Belt, Sedimentology. , 2021, , 1-3.		0