AlÄº Polat

List of Publications by Year
in descending order

83	4,995	76326	88630
papers	citations	40 h-index	70 g-index

84	84	84	2168
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Geochemistry of Neoarchean (ca. 2.55â€“2.50 Ga) volcanic and ophiolitic rocks in the Wutaishan greenstone belt, central orogenic belt, North China craton: Implications for geodynamic setting and continental growth. Bulletin of the Geological Society of America, 2005, 117, 1387.	3.3	250
2	Growth of graniteâ€“greenstone terranes at convergent margins, and stabilization of Archean cratons. Tectonophysics, 1999, 305, 43-73.	2.2	218
3	Rapid forearc spreading between 130 and 120Ma: Evidence from geochronology and geochemistry of the Xigaze ophiolite, southern Tibet. Lithos, 2013, 172-173, 1-16.	1.4	176
4	Geochemical diversity in oceanic komatiites and basalts from the late Archean Wawa greenstone belts, Superior Province, Canada: trace element and Nd isotope evidence for a heterogeneous mantle. Precambrian Research, 1999, 94, 139-173.	2.7	173
5	An overview of the geochemistry of Eoarchean to Mesoarchean ultramafic to mafic volcanic rocks, SW Greenland: Implications for mantle depletion and petrogenetic processes at subduction zones in the early Earth. Gondwana Research, 2011, 20, 255-283.	6.0	165
6	Archean greenstone belt magmatism and the continental growthâ€“mantle evolution connection: constraints from Thâ€“Uâ€“Nbâ€“LREE systematics of the 2.7 Ga Wawa subprovince, Superior Province, Canada. Earth and Planetary Science Letters, 2000, 175, 41-54.	4.4	145
7	The origin of decoupled Hfâ€“Nd isotope compositions in Eoarchean rocks from southern West Greenland. Geochimica Et Cosmochimica Acta, 2011, 75, 6610-6628.	3.9	142
8	Contrasting geochemical patterns in the 3.7â€“3.8 Ga pillow basalt cores and rims, Isua greenstone belt, Southwest Greenland: implications for postmagmatic alteration processes. Geochimica Et Cosmochimica Acta, 2003, 67, 441-457.	3.9	137
9	Onset of plate tectonics by the Eoarchean. Precambrian Research, 2021, 352, 105980.	2.7	137
10	Source heterogeneity for the major components of â¼3.7ÂGa Banded Iron Formations (Isua Greenstone) Tj ETQq0 0 0 rgBT /Overlock 1 Planetary Science Letters, 2007, 253, 266-281.	4.4	135
11	Suprasubduction zone ophiolites and Archean tectonics. Geology, 2008, 36, 431.	4.4	134
12	Archean greenstone-tonalite duality: Thermochemical mantle convection models or plate tectonics in the early Earth global dynamics?. Tectonophysics, 2006, 415, 141-165.	2.2	126
13	Growth of Archean continental crust in oceanic island arcs. Geology, 2012, 40, 383-384.	4.4	119
14	Trace element systematics of the Neoarchean FiskenÃ¦sset anorthosite complex and associated meta-volcanic rocks, SW Greenland: Evidence for a magmatic arc origin. Precambrian Research, 2009, 175, 87-115.	2.7	110
15	Highly depleted Hadean mantle reservoirs in the sources of early Archean arc-like rocks, Isua supracrustal belt, southern West Greenland. Geochimica Et Cosmochimica Acta, 2010, 74, 7236-7260.	3.9	110
16	Geological Evidence for the Operation of Plate Tectonics throughout the Archean: Records from Archean Paleo-Plate Boundaries. Journal of Earth Science (Wuhan, China), 2018, 29, 1291-1303.	3.2	105
17	Geochemistry of anorthositic differentiated sills in the Archean (~2970Ma) FiskenÃ¦sset Complex, SW Greenland: Implications for parental magma compositions, geodynamic setting, and secular heat flow in arcs. Lithos, 2011, 123, 50-72.	1.4	101
18	Nd-isotope systematics of â¼2.7 Ga adakites, magnesian andesites, and arc basalts, Superior Province: evidence for shallow crustal recycling at Archean subduction zones. Earth and Planetary Science Letters, 2002, 202, 345-360.	4.4	100

#	Article	IF	Citations
19	Field and geochemical characteristics of the Mesoarchean (â¹¼3075Ma) Ivisaartoq greenstone belt, southern West Greenland: Evidence for seafloor hydrothermal alteration in supra-subduction oceanic crust. Gondwana Research, 2007, 11, 69-91.	6.0	99
20	Chromium isotope fractionation during oxidative weatheringâ€"Implications from the study of a Paleoproterozoic (ca. 1.9 Ga) paleosol, Schreiber Beach, Ontario, Canada. Precambrian Research, 2013, 224, 434-453.	2.7	94
21	A late Archean tectonic mÃ©lange in the Central Orogenic Belt, North China Craton. Tectonophysics, 2013, 608, 929-946.	2.2	91
22	Hfâ€"Nd isotope evidence for contemporaneous subduction processes in the source of late Archean arc lavas from the Superior Province, Canada. Chemical Geology, 2004, 213, 403-429.	3.3	87
23	Geology of a Neoarchean suture: Evidence from the Zunhua ophiolitic mÃ©lange of the Eastern Hebei Province, North China Craton. Bulletin of the Geological Society of America, 2019, 131, 1943-1964.	3.3	83
24	The geochemistry of Neoarchean (ca. 2700Ma) tholeiitic basalts, transitional to alkaline basalts, and gabbros, Wawa Subprovince, Canada: Implications for petrogenetic and geodynamic processes. Precambrian Research, 2009, 168, 83-105.	2.7	82
25	Geodynamic processes, continental growth, and mantle evolution recorded in late Archean greenstone belts of the southern Superior Province, Canada. Precambrian Research, 2001, 112, 5-25.	2.7	80
26	A review of structural patterns and melting processes in the Archean craton of West Greenland: Evidence for crustal growth at convergent plate margins as opposed to non-uniformitarian models. Tectonophysics, 2015, 662, 67-94.	2.2	80
27	Oxidative elemental cycling under the low O2 Eoarchean atmosphere. Scientific Reports, 2016, 6, 21058.	3.3	74
28	Formation of an Archean tectonic mÃ©lange in the Schreiber-Hemlo greenstone belt, Superior Province, Canada: Implications for Archean subduction-accretion process. Tectonics, 1999, 18, 733-755.	2.8	69
29	MÃ©langes through time: Life cycle of the world's largest Archean mÃ©lange compared with Mesozoic and Paleozoic subduction-accretion-collision mÃ©langes. Earth-Science Reviews, 2020, 209, 103303.	9.1	68
30	Paired metamorphism in the Neoarchean: A record of accretionary-to-collisional orogenesis in the North China Craton. Earth and Planetary Science Letters, 2020, 543, 116355.	4.4	68
31	New age (ca. 2970Ma), mantle source composition and geodynamic constraints on the Archean FiskenÃ¦sset anorthosite complex, SW Greenland. Chemical Geology, 2010, 277, 1-20.	3.3	65
32	A 2.5 Ga fore-arc subduction-accretion complex in the Dengfeng Granite-Greenstone Belt, Southern North China Craton. Precambrian Research, 2016, 275, 241-264.	2.7	65
33	Geochemistry of Neoarchean mafic volcanic rocks and late mafic dikes in the Zanhuang Complex, Central Orogenic Belt, North China Craton: Implications for geodynamic setting. Lithos, 2013, 175-176, 193-212.	1.4	64
34	Neoproterozoic IAT intrusion into Mesoproterozoic MOR Miaowan Ophiolite, Yangtze Craton: Evidence for evolving tectonic settings. Precambrian Research, 2017, 289, 75-94.	2.7	62
35	Geochemistry of ultramafic rocks and hornblendite veins in the FiskenÃ¦sset layered anorthosite complex, SW Greenland: Evidence for hydrous upper mantle in the Archean. Precambrian Research, 2012, 214-215, 124-153.	2.7	59
36	The origin of early Archean banded iron formations and of continental crust, Isua, southern West Greenland. Precambrian Research, 2005, 138, 151-175.	2.7	58

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37	Origin of Archean tonaliteâ€“trondhjemiteâ€“granodiorite (TTG) suites and granites in the FiskenÃ¦sset region, southern West Greenland: Implications for continental growth. Gondwana Research, 2013, 23, 452-470.	6.0	56
38	The Hadean upper mantle conundrum: evidence for source depletion and enrichment from Sm-Nd, Re-Os, and Pb isotopic compositions in 3.71 Gy boninite-like metabasalts from the Isua Supracrustal Belt, Greenland 1 1Associate editor: A. D. Brandon. Geochimica Et Cosmochimica Acta, 2004, 68, 1645-1660.	3.9	52
39	Structural relationships along a Neoarchean arc-continent collision zone, North China craton. Bulletin of the Geological Society of America, 2017, 129, 59-75.	3.3	45
40	Geochemical systematics of 2.7ÂGa Kinojevis Group (Abitibi), and Manitouwadge and Winston Lake (Wawa) Fe-rich basaltâ€“rhyolite associations: Backarc rift oceanic crust?. Lithos, 2008, 101, 1-23.	1.4	44
41	Geochemical variations in Archean volcanic rocks, southwestern Greenland: Traces of diverse tectonic settings in the early Earth. Geology, 2013, 41, 379-380.	4.4	38
42	Lithological, structural, and geochemical characteristics of the Mesoarchean TÃ¢rtoq greenstone belt, southern West Greenland, and the Chugach â€“ Prince William accretionary complex, southern Alaska: evidence for uniformitarian plate-tectonic processes. Canadian Journal of Earth Sciences, 2016, 53, 1336-1371.	1.3	38
43	Archean dome-and-basin style structures form during growth and death of intraoceanic and continental margin arcs in accretionary orogens. Earth-Science Reviews, 2021, 220, 103725.	9.1	38
44	Petrogenesis and geochemistry of circa 2.5 Ga granitoids in the Zanhuang Massif: Implications for magmatic source and Neoarchean metamorphism of the North China Craton. Lithos, 2017, 268-271, 149-162.	1.4	34
45	Origin and tectonic implications of an Early Paleozoic (460â€“440â€¯Ma) subduction-accretion shear zone in the northwestern Yunkai Domain, South China. Lithos, 2018, 322, 104-128.	1.4	33
46	The origin of geochemical trends and Eoarchean (ca. 3700 Ma) zircons in Mesoarchean (ca. 3075 Ma) ocelli-hosting pillow basalts, Ivisaartoq greenstone belt, SW Greenland: Evidence for crustal contamination versus crustal recycling. Chemical Geology, 2009, 268, 248-271.	3.3	32
47	Magmatic record of Neoarchean arc-polarity reversal from the Dengfeng segment of the Central Orogenic Belt, North China Craton. Precambrian Research, 2019, 326, 105-123.	2.7	32
48	Dacitic ocelli in mafic lavas, 3.8â€“3.7ÂGa Isua greenstone belt, West Greenland: Geochemical evidence for partial melting of oceanic crust and magma mixing. Chemical Geology, 2009, 258, 105-124.	3.3	31
49	Alpine-style nappes thrust over ancient North China continental margin demonstrate large Archean horizontal plate motions. Nature Communications, 2021, 12, 6172.	12.8	31
50	Fifty years of the Eoarchean and the case for evolving uniformitarianism. Precambrian Research, 2021, 367, 106442.	2.7	31
51	Extreme element mobility during transformation of Neoarchean (ca. 2.7 Ga) pillow basalts to a Paleoproterozoic (ca. 1.9 Ga) paleosol, Schreiber Beach, Ontario, Canada. Chemical Geology, 2012, 326-327, 145-173.	3.3	29
52	Petrogenetic and geodynamic origin of the Neoarchean DorÃ© Lake Complex, Abitibi subprovince, Superior Province, Canada. International Journal of Earth Sciences, 2018, 107, 811-843.	1.8	28
53	Geochemistry of mafic rocks and cherts in the Darbut and Karamay ophiolitic mÃ©langes in West Junggar, northwestern China: Evidence for a Late Silurian to Devonian back-arc basin system. Tectonophysics, 2018, 745, 395-411.	2.2	28
54	Amphibole, plagioclase and clinopyroxene geochemistry of the Archean FiskenÃ¦sset Complex at Majorqap qÃ¢va, southwestern Greenland: Implications for Archean petrogenetic and geodynamic processes. Precambrian Research, 2014, 247, 64-91.	2.7	26

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55	Structural relationships and kinematics of the Neoarchean Dengfeng forearc and accretionary complexes, southern North China craton. Bulletin of the Geological Society of America, 2019, 131, 966-996.	3.3	26
56	A juvenile oceanic island arc origin for the Archean (ca. 2.97 Ga) FiskenÃ¦sset anorthosite complex, southwestern Greenland: Evidence from oxygen isotopes. Earth and Planetary Science Letters, 2014, 396, 252-266.	4.4	23
57	An overview of anorthosite-bearing layered intrusions in the Archaean craton of southern West Greenland and the Superior Province of Canada: implications for Archaean tectonics and the origin of megacrystic plagioclase. Geodinamica Acta, 2018, 30, 84-99.	2.2	23
58	From subduction initiation to arcâ€“polarity reversal: Life cycle of an Archean subduction zone from the Zunhua ophiolitic mÃ©lange, North China Craton. Precambrian Research, 2020, 350, 105868.	2.7	23
59	Geochemistry of the Mesoarchean FiskenÃ¦sset Complex at Majorqap qÃ¢va, SW Greenland: Evidence for two different magma compositions. Chemical Geology, 2012, 314-317, 66-82.	3.3	22
60	S-type granites in the western Superior Province: a marker of Archean collision zones. Canadian Journal of Earth Sciences, 2019, 56, 1409-1436.	1.3	21
61	Temporal variations in the incompatible trace element systematics of Archean volcanic rocks: Implications for tectonic processes in the early Earth. Precambrian Research, 2022, 368, 106487.	2.7	21
62	Geochemistry, Nd, Pb and Sr isotope systematics, and Uâ€“Pb zircon ages of the Neoarchean Bad Vermilion Lake greenstone belt and spatially associated granitic rocks, western Superior Province, Canada. Precambrian Research, 2016, 282, 21-51.	2.7	20
63	Lithospheric mantle xenoliths sampled by melts from upwelling asthenosphere: The Quaternary Tasse alkaline basalts of southeastern British Columbia, Canada. Gondwana Research, 2016, 33, 209-230.	6.0	19
64	Formation of the Neoarchean Bad Vermilion Lake Anorthosite Complex and spatially associated granitic rocks at a convergent plate margin, Superior Province, Western Ontario, Canada. Gondwana Research, 2016, 33, 134-159.	6.0	19
65	The nature and origin of cratons constrained by their surface geology. Bulletin of the Geological Society of America, 2022, 134, 1485-1505.	3.3	19
66	Ultra-high pressure inclusion in Archean ophiolitic podiform chromitite in mÃ©lange block suggests deep subduction on early Earth. Precambrian Research, 2021, 362, 106318.	2.7	18
67	Vestiges of early Earthâ€™s deep subduction and CHONSP cycle recorded in Archean ophiolitic podiform chromitites. Earth-Science Reviews, 2022, 227, 103968.	9.1	18
68	Sea-floor metamorphism recorded in epidosites from the ca. 1.0 Ga Miaowan ophiolite, Huangling anticline, China. Journal of Earth Science (Wuhan, China), 2012, 23, 696-704.	3.2	15
69	Combined bulk-rock Hf- and Nd-isotope compositions of Mesoarchaean metavolcanic rocks from the Ivisaartoq Supracrustal Belt, SW Greenland: Deviations from the mantle array caused by crustal recycling. Chemie Der Erde, 2016, 76, 543-554.	2.0	15
70	A Neoarchean arc-backarc pair in the Linshan Massif, southern North China Craton. Precambrian Research, 2020, 341, 105649.	2.7	15
71	Comparisons Between Tethyan Anorthositeâ€Bearing Ophiolites and Archean Anorthositeâ€Bearing Layered Intrusions: Implications for Archean Geodynamic Processes. Tectonics, 2020, 39, e2020TC006096.	2.8	14
72	Petrology and geochemistry of the Tasse mantle xenoliths of the Canadian Cordillera: A record of Archean to Quaternary mantle growth, metasomatism, removal, and melting. Tectonophysics, 2018, 737, 1-26.	2.2	13

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73	A back-arc origin for the Neoarchean megacrystic anorthosite-bearing Bird River Sill and the associated greenstone belt, Bird River subprovince, Western Superior Province, Manitoba, Canada. International Journal of Earth Sciences, 2019, 108, 2177-2207.	1.8	10
74	Petrogenesis and geodynamic setting of the Neoarchaean Haines Gabbroic Complex and Shebandowan greenstone belt, southwestern Superior Province, Ontario, Canada. Lithos, 2019, 324-325, 1-19.	1.4	10
75	Archaean crustal growth processes in southern West Greenland and the southern Superior Province: geodynamic and magmatic constraints. Geological Society Special Publication, 2009, 318, 155-191.	1.3	9
76	An overview of the lithological and geochemical characteristics of the Mesoarchean (ca. 3075 Ma) Ivisaartoq greenstone belt, southern West Greenland. , 2008, , 51-76.		8
77	Evidence for Neoarchean hydrous arc magmatism, the anorthosite-bearing Mayville Intrusion, western Superior Province, Canada. Lithos, 2020, 362-363, 105482.	1.4	8
78	Neoarchean seafloor hydrothermal metamorphism of basalts in the Zanhuang ophiolitic mÃ©lange, North China Craton. Precambrian Research, 2020, 347, 105832.	2.7	8
79	Geochemistry of the metavolcanic rocks in the vicinity of the MacLellan Auâ€“Ag deposit and an evaluation of the tectonic setting of the Lynn Lake greenstone belt, Canada: Evidence for a Paleoproterozoic-aged rifted continental margin. Lithos, 2015, 233, 46-68.	1.4	7
80	Anatomy of a Neoarchean continental arc-backarc system in the Cross Lake-Pipestone Lake region, northwestern Superior Province, Canada. Precambrian Research, 2022, 370, 106556.	2.7	5
81	Geological processes in the Early Earth. Gondwana Research, 2013, 23, 391-393.	6.0	4
82	Ca. 780 Ma OIB-like mafic dykes in the Western Jiangnan orogenic Belt, South China: evidence for large-scale upwelling of asthenosphere beneath a post-orogenic setting. International Geology Review, 2020, 62, 2280-2299.	2.1	2
83	A Review of the Geodynamic Significance of Hornblende-Bearing Ultramafic Rocks in the Mesoarchean FiskenÃ¦sset Complex, SW Greenland. Modern Approaches in Solid Earth Sciences, 2014, , 127-147.	0.3	2