

# Alexander A Nemchin

## List of Publications by Year in descending order

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53  
papers

4,180  
citations

136940

32  
h-index

168376

53  
g-index

54  
all docs

54  
docs citations

54  
times ranked

3420  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental constraints on the long-lived radiogenic isotope evolution of the Moon. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 326, 119-148.	3.9	2
2	Ages of lunar impact breccias: Limits for timing of the Imbrium impact. <i>Chemie Der Erde</i> , 2021, 81, 125683.	2.0	12
3	Age and composition of young basalts on the Moon, measured from samples returned by Chang'e-5. <i>Science</i> , 2021, 374, 887-890.	12.6	148
4	Recrystallization and chemical changes in apatite in response to hypervelocity impact. <i>Geology</i> , 2020, 48, 19-23.	4.4	17
5	The internal structure and geodynamics of Mars inferred from a 4.2-Gyr zircon record. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 30973-30979.	7.1	33
6	The sulfur budget and sulfur isotopic composition of Martian regolith breccia NWA 7533. <i>Meteoritics and Planetary Science</i> , 2020, 55, 2097-2116.	1.6	8
7	Age of the Sääksjärvi impact structure, Finland: reconciling the timing of small impacts in crystalline basement with regional basin development. <i>Journal of the Geological Society</i> , 2020, 177, 1231-1243.	2.1	11
8	The timing of basaltic volcanism at the Apollo landing sites. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 266, 29-53.	3.9	40
9	Mechanisms and consequences of intra-crystalline enrichment of ancient radiogenic Pb in detrital Hadean zircons from the Jack Hills, Western Australia. <i>Earth and Planetary Science Letters</i> , 2019, 517, 38-49.	4.4	14
10	A new U-Pb age for shock-recrystallised zircon from the Lappajärvi impact crater, Finland, and implications for the accurate dating of impact events. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 245, 479-494.	3.9	48
11	U-Pb age distribution recorded in zircons from Archean quartzites in the Mt. Alfred area, Yilgarn Craton, Western Australia. <i>Precambrian Research</i> , 2018, 310, 278-290.	2.7	6
12	Constraining the timing and sources of volcanism at the Apollo 12 landing site using new Pb isotopic compositions and crystallisation ages. <i>Chemical Geology</i> , 2018, 482, 101-112.	3.3	15
13	A 4463 Ma apparent zircon age from the Jack Hills (Western Australia) resulting from ancient Pb mobilization. <i>Geology</i> , 2018, 46, 303-306.	4.4	25
14	A tonalitic analogue to ancient detrital zircon. <i>Chemical Geology</i> , 2018, 499, 43-57.	3.3	4
15	Ancient volcanism on the Moon: Insights from Pb isotopes in the MIL 13317 and Kalahari 009 lunar meteorites. <i>Earth and Planetary Science Letters</i> , 2018, 502, 84-95.	4.4	34
16	Evidence for extremely rapid magma ocean crystallization and crust formation on Mars. <i>Nature</i> , 2018, 558, 586-589.	27.8	111
17	Microstructural constraints on the mechanisms of the transformation to reidite in naturally shocked zircon. <i>Contributions To Mineralogy and Petrology</i> , 2017, 172, 1.	3.1	64
18	Impact history of the Apollo 17 landing site revealed by U-Pb SIMS ages. <i>Meteoritics and Planetary Science</i> , 2017, 52, 584-611.	1.6	21

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19	Dry annealing of metamict zircon: A differential scanning calorimetry study. <i>American Mineralogist</i> , 2017, , .	1.9	0
20	Water content in the Martian mantle: A Nakhla perspective. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 212, 84-98.	3.9	12
21	A pressure-temperature phase diagram for zircon at extreme conditions. <i>Earth-Science Reviews</i> , 2017, 165, 185-202.	9.1	128
22	Direct Pb Isotopic Analysis of a Nuclear Fallout Debris Particle from the Trinity Nuclear Test. <i>Analytical Chemistry</i> , 2017, 89, 1887-1891.	6.5	2
23	CO2 fluid inclusions in Jack Hills zircons. <i>Contributions To Mineralogy and Petrology</i> , 2017, 172, 1.	3.1	6
24	Pb isotopes in the impact melt breccia 66095: Association with the Imbrium basin and the isotopic composition of lithologies at the Apollo 16 landing site. <i>Chemical Geology</i> , 2017, 466, 608-616.	3.3	7
25	Origin and transportation history of lunar breccia 14311. <i>Meteoritics and Planetary Science</i> , 2017, 52, 842-858.	1.6	13
26	Regolith breccia Northwest Africa 7533: Mineralogy and petrology with implications for early Mars. <i>Meteoritics and Planetary Science</i> , 2017, 52, 89-124.	1.6	43
27	Lunar basalt chronology, mantle differentiation and implications for determining the age of the Moon. <i>Earth and Planetary Science Letters</i> , 2016, 451, 149-158.	4.4	60
28	Nickeliferous pyrite tracks pervasive hydrothermal alteration in Martian regolith breccia: A study in <sc>NWA</sc> 7533. <i>Meteoritics and Planetary Science</i> , 2015, 50, 2099-2120.	1.6	32
29	The mechanism of borosilicate glass corrosion revisited. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 158, 112-129.	3.9	137
30	Sr, Nd, Pb and Os Isotope Systematics of CAMP Tholeiites from Eastern North America (ENA): Evidence of a Subduction-enriched Mantle Source. <i>Journal of Petrology</i> , 2014, 55, 133-180.	2.8	69
31	A 4.2 billion year old impact basin on the Moon: Uâ€“Pb dating of zirconolite and apatite in lunar melt rock 67955. <i>Earth and Planetary Science Letters</i> , 2014, 388, 387-398.	4.4	84
32	Mobilization of radiogenic Pb in zircon revealed by ion imaging: Implications for early Earth geochronology. <i>Geology</i> , 2013, 41, 291-294.	4.4	152
33	Resolution of impactâ€“related microstructures in lunar zircon: A shockâ€“deformation mechanism map. <i>Meteoritics and Planetary Science</i> , 2012, 47, 120-141.	1.6	87
34	Proterozoic events recorded in quartzite cobbles at Jack Hills, Western Australia: New constraints on sedimentation and source of >4Ga zircons. <i>Earth and Planetary Science Letters</i> , 2010, 292, 158-169.	4.4	20
35	Two cycles of voluminous pyroclastic volcanism and sedimentation related to episodic granite emplacement during the late Archean: Eastern Yilgarn Craton, Western Australia. <i>Precambrian Research</i> , 2010, 183, 251-274.	2.7	63
36	High precision, high accuracy measurement of oxygen isotopes in a large lunar zircon by SIMS. <i>Chemical Geology</i> , 2009, 261, 32-42.	3.3	82

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37	Archean high-Mg monzodiorite–syenite, epidote skarn, and biotite–sericite gold lodes in the Granny Smith–Wallaby district, Australia: U–Pb and Re–Os chronometry of two intrusion-related hydrothermal systems. <i>Mineralium Deposita</i> , 2008, 43, 337-362.	4.1	36
38	Chronology of the Pueblo Viejo epithermal gold–silver deposit, Dominican Republic: formation in an Early Cretaceous intra-oceanic island arc and burial under ophiolite. <i>Mineralium Deposita</i> , 2008, 43, 873-889.	4.1	12
39	A light carbon reservoir recorded in zircon-hosted diamond from the Jack Hills. <i>Nature</i> , 2008, 454, 92-95.	27.8	58
40	Early Palaeozoic orogenesis along the Indian margin of Gondwana: Tectonic response to Gondwana assembly. <i>Earth and Planetary Science Letters</i> , 2007, 255, 70-84.	4.4	417
41	Sedimentary basin and detrital zircon record along East Laurentia and Baltica during assembly and breakup of Rodinia. <i>Journal of the Geological Society</i> , 2007, 164, 257-275.	2.1	292
42	Hadean diamonds in zircon from Jack Hills, Western Australia. <i>Nature</i> , 2007, 448, 917-920.	27.8	102
43	Isotopic and geochemical evidence of proterozoic episodic crustal reworking within the irumide belt of south-central Africa, the southern metacratonic boundary of an Archaean Bangweulu Craton. <i>Precambrian Research</i> , 2006, 148, 225-256.	2.7	99
44	Discordance of the U–Pb system in detrital zircons: Implication for provenance studies of sedimentary rocks. <i>Sedimentary Geology</i> , 2005, 182, 143-162.	2.1	130
45	Granitoid evolution in the Late Archean Wutai Complex, North China Craton. <i>Journal of Asian Earth Sciences</i> , 2005, 24, 597-613.	2.3	286
46	Laurentian provenance and an intracratonic tectonic setting for the Moine Supergroup, Scotland, constrained by detrital zircons from the Loch Eil and Glen Urquhart successions. <i>Journal of the Geological Society</i> , 2004, 161, 861-874.	2.1	114
47	Determining Precambrian crustal evolution in China: a case-study from Wutaishan, Shanxi Province, demonstrating the application of precise SHRIMP U–Pb geochronology. <i>Geological Society Special Publication</i> , 2004, 226, 5-25.	1.3	73
48	Linking source and sedimentary basin: Detrital zircon record of sediment flux along a modern river system and implications for provenance studies. <i>Earth and Planetary Science Letters</i> , 2003, 210, 259-268.	4.4	202
49	Source of the Dalradian Supergroup constrained by U–Pb dating of detrital zircon and implications for the East Laurentian margin. <i>Journal of the Geological Society</i> , 2003, 160, 231-246.	2.1	152
50	Mesozoic crust-mantle interaction beneath the North China craton: A consequence of the dispersal of Gondwanaland and accretion of Asia. <i>Geology</i> , 2003, 31, 817.	4.4	251
51	Permian fragmentation, accretion and subsequent translation of a low-latitude Tethyan seamount to the high-latitude east Gondwana margin: evidence from detrital zircon age data. <i>Geological Magazine</i> , 2002, 139, 131-144.	1.5	43
52	Paleogeographic development of the east Laurentian margin: Constraints from U–Pb dating of detrital zircons in the Newfoundland Appalachians. <i>Bulletin of the Geological Society of America</i> , 2001, 113, 1234-1246.	3.3	172
53	U/Pb dating of detrital zircons: Implications for the provenance record of Gondwana margin terranes. <i>Bulletin of the Geological Society of America</i> , 1999, 111, 1107-1119.	3.3	119