

Avner Ayalon

List of Publications by Year in descending order

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papers

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71102

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5941
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#	ARTICLE	IF	CITATIONS
1	Sea-level oxygen isotopic relationships from planktonic foraminifera and speleothems in the Eastern Mediterranean region and their implication for paleorainfall during interglacial intervals. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 3181-3199.	3.9	825
2	The Eastern Mediterranean paleoclimate as a reflection of regional events: Soreq cave, Israel. <i>Earth and Planetary Science Letters</i> , 1999, 166, 85-95.	4.4	627
3	Late Quaternary Paleoclimate in the Eastern Mediterranean Region from Stable Isotope Analysis of Speleothems at Soreq Cave, Israel. <i>Quaternary Research</i> , 1997, 47, 155-168.	1.7	603
4	Rapid coupling between ice volume and polar temperature over the past 150,000 years. <i>Nature</i> , 2012, 491, 744-747.	27.8	477
5	The earliest modern humans outside Africa. <i>Science</i> , 2018, 359, 456-459.	12.6	373
6	Timing and hydrological conditions of Sapropel events in the Eastern Mediterranean, as evident from speleothems, Soreq cave, Israel. <i>Chemical Geology</i> , 2000, 169, 145-156.	3.3	333
7	Evidence for habitual use of fire at the end of the Lower Paleolithic: Site-formation processes at Qesem Cave, Israel. <i>Journal of Human Evolution</i> , 2007, 53, 197-212.	2.6	289
8	Glacial/interglacial temperature variations in Soreq cave speleothems as recorded by $\delta^{18}O$ clumped isotope thermometry. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 5351-5360.	3.9	264
9	Carbon and oxygen isotope study of the active water-carbonate system in a karstic Mediterranean cave: Implications for paleoclimate research in semiarid regions. <i>Geochimica Et Cosmochimica Acta</i> , 1996, 60, 337-347.	3.9	261
10	Paleoclimate and location of the border between Mediterranean climate region and the Saharo-Arabian Desert as revealed by speleothems from the northern Negev Desert, Israel. <i>Earth and Planetary Science Letters</i> , 2006, 249, 384-399.	4.4	228
11	A high resolution and continuous isotopic speleothem record of paleoclimate and paleoenvironment from 90 to 53 ka from Pinnacle Point on the south coast of South Africa. <i>Quaternary Science Reviews</i> , 2010, 29, 2131-2145.	3.0	213
12	Geochemical and boron, strontium, and oxygen isotopic constraints on the origin of the salinity in groundwater from the Mediterranean Coast of Israel. <i>Water Resources Research</i> , 1999, 35, 1877-1894.	4.2	210
13	Levantine cranium from Manot Cave (Israel) foreshadows the first European modern humans. <i>Nature</i> , 2015, 520, 216-219.	27.8	191
14	Climatic variability during the last 90ka of the southern and northern Levantine Basin as evident from marine records and speleothems. <i>Quaternary Science Reviews</i> , 2009, 28, 2882-2896.	3.0	188
15	Paleoclimate reconstruction based on the timing of speleothem growth and oxygen and carbon isotope composition in a cave located in the rain shadow in Israel. <i>Quaternary Research</i> , 2003, 59, 182-193.	1.7	183
16	Constraints on hydrological and paleotemperature variations in the Eastern Mediterranean region in the last 140ka given by the $\delta^{18}O$ values of speleothem fluid inclusions. <i>Quaternary Science Reviews</i> , 2004, 23, 919-934.	3.0	183
17	Desert speleothems reveal climatic window for African exodus of early modern humans. <i>Geology</i> , 2007, 35, 831.	4.4	181
18	Rainfall-recharge relationships within a karstic terrain in the Eastern Mediterranean semi-arid region, Israel: $\delta^{18}O$ and $\delta^{17}O$ characteristics. <i>Journal of Hydrology</i> , 1998, 207, 18-31.	5.4	179

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19	Middle-Late Quaternary paleoclimate of northern margins of the Saharan-Arabian Desert: reconstruction from speleothems of Negev Desert, Israel. <i>Quaternary Science Reviews</i> , 2010, 29, 2647-2662.	3.0	168
20	Climate deterioration in the Eastern Mediterranean as revealed by ion microprobe analysis of a speleothem that grew from 2.2 to 0.9ka in Soreq Cave, Israel. <i>Quaternary Research</i> , 2009, 71, 27-35.	1.7	149
21	U-Th isotope systematics from the Soreq cave, Israel and climatic correlations. <i>Earth and Planetary Science Letters</i> , 1998, 156, 141-155.	4.4	144
22	Petrography, strontium, barium and uranium concentrations, and strontium and uranium isotope ratios in speleothems as palaeoclimatic proxies: Soreq Cave, Israel. <i>Holocene</i> , 1999, 9, 715-722.	1.7	132
23	D/H ratios of fluid inclusions of Soreq cave (Israel) speleothems as a guide to the Eastern Mediterranean Meteoric Line relationships in the last 120 ky. <i>Chemical Geology</i> , 2000, 166, 183-191.	3.3	126
24	The chronology of the late Lower Paleolithic in the Levant based on U-Th ages of speleothems from Qesem Cave, Israel. <i>Quaternary Geochronology</i> , 2010, 5, 644-656.	1.4	111
25	Climatic conditions during marine oxygen isotope stage 6 in the eastern Mediterranean region from the isotopic composition of speleothems of Soreq Cave, Israel. <i>Geology</i> , 2002, 30, 303.	4.4	109
26	Response of the Nile and its catchment to millennial-scale climatic change since the LGM from Sr isotopes and major elements of East Mediterranean sediments. <i>Quaternary Science Reviews</i> , 2011, 30, 431-442.	3.0	104
27	Seasonal resolution of Eastern Mediterranean climate change since 34ka from a Soreq Cave speleothem. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 89, 240-255.	3.9	91
28	Dating large infrequent earthquakes by damaged cave deposits. <i>Geology</i> , 2005, 33, 261.	4.4	81
29	Seasonal climate signals (1990-2008) in a modern Soreq Cave stalagmite as revealed by high-resolution geochemical analysis. <i>Chemical Geology</i> , 2014, 363, 322-333.	3.3	75
30	Hydrogen-isotope geochemistry of diagenetic clay minerals from Cretaceous sandstones, Alberta, Canada: evidence for exchange. <i>Applied Geochemistry</i> , 1990, 5, 657-668.	3.0	73
31	Pliocene-Pleistocene climate of the northern margin of Saharan-Arabian Desert recorded in speleothems from the Negev Desert, Israel. <i>Earth and Planetary Science Letters</i> , 2013, 368, 88-100.	4.4	71
32	Sea-land paleoclimate correlation in the Eastern Mediterranean region during the late Holocene. <i>Israel Journal of Earth Sciences</i> , 2002, 51, 181-190.	0.3	70
33	Environmental Controls of Speleothem Mineralogy in a Karstic Dolomitic Terrain (Soreq Cave, Israel). <i>Journal of Geology</i> , 1991, 99, 189-207.	1.4	68
34	Radiocarbon chronology of Manot Cave, Israel and Upper Paleolithic dispersals. <i>Science Advances</i> , 2017, 3, e1701450.	10.3	63
35	Multi-elemental mapping of a speleothem using laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010, 65, 707-714.	2.9	59
36	Coeval dry events in the central and eastern Mediterranean basin at 5.2 and 5.6ka recorded in Corchia (Italy) and Soreq caves (Israel) speleothems. <i>Global and Planetary Change</i> , 2014, 122, 130-139.	3.5	59

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37	Stable carbon and oxygen isotopic compositions of wood ash: an experimental study with archaeological implications. <i>Journal of Archaeological Science</i> , 2013, 40, 570-578.	2.4	56
38	Speleothems as palaeoclimate indicators, a case study from Soreq Cave located in the Eastern Mediterranean Region, Israel. , 2004, , 363-391.		53
39	The role of rare rainstorms in the formation of calcic soil horizons on alluvial surfaces in extreme deserts. <i>Quaternary Research</i> , 2010, 74, 177-187.	1.7	51
40	Accounting for kinetic isotope effects in Soreq Cave (Israel) speleothems. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 143, 303-318.	3.9	49
41	The vadose flow above Soreq Cave, Israel: a tritium study of the cave waters. <i>Journal of Hydrology</i> , 2003, 273, 155-163.	5.4	48
42	Last Glacial warm events on Mount Hermon: the southern extension of the Alpine karst range of the east Mediterranean. <i>Quaternary Science Reviews</i> , 2013, 59, 43-56.	3.0	43
43	A high spatial resolution $\delta^{18}O$ profile of a speleothem using an ion-microprobe. <i>Chemical Geology</i> , 2003, 197, 21-28.	3.3	41
44	Transition from arid to hyper-arid environment in the southern Levant deserts as recorded by early Pleistocene cummulic Aridisols. <i>Quaternary Science Reviews</i> , 2011, 30, 312-323.	3.0	40
45	Lithium isotopes in speleothems: Temperature-controlled variation in silicate weathering during glacial cycles. <i>Earth and Planetary Science Letters</i> , 2017, 469, 64-74.	4.4	39
46	The modern and Last Glacial Maximum hydrological cycles of the Eastern Mediterranean and the Levant from a water isotope perspective. <i>Earth and Planetary Science Letters</i> , 2017, 457, 302-312.	4.4	38
47	Late Pleistocene records of speleothem stable isotopic compositions from Pinnacle Point on the South African south coast. <i>Quaternary Research</i> , 2019, 91, 265-288.	1.7	35
48	Oxygen-isotope studies of clastic diagenesis in the Lower Cretaceous Viking Formation, Alberta: implications for the role of meteoric water. <i>Geological Society Special Publication</i> , 1987, 36, 277-296.	1.3	33
49	Dike intrusion into unconsolidated sandstone and the development of quartzite contact zones. <i>Journal of Structural Geology</i> , 1995, 17, 997-1010.	2.3	33
50	Resolving seasonal rainfall changes in the Middle East during the last interglacial period. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 24985-24990.	7.1	33
51	Comparison of climate and environment on the edge of the Palaeo-Agulhas Plain to the Little Karoo (South Africa) in Marine Isotope Stages 5a-c as indicated by speleothems. <i>Quaternary Science Reviews</i> , 2020, 235, 105803.	3.0	30
52	Stable isotope evidence for multiple fluid regimes during carbonate cementation of the Upper Tertiary Hazeva Formation, Dead Sea Graben, southern Israel. <i>Journal of Geochemical Exploration</i> , 2003, 80, 151-170.	3.2	27
53	Hydro-climate research of the late quaternary of the Eastern Mediterranean-Levant region based on speleothems research – A review. <i>Quaternary Science Reviews</i> , 2019, 221, 105872.	3.0	27
54	Dust clouds, climate change and coins: consiliences of palaeoclimate and economy in the Late Antique southern Levant. <i>Levant</i> , 2017, 49, 205-223.	0.9	26

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55	Iron mineralization and dolomitization in the Paran Fault zone, Israel: implications for low-temperature basinal fluid processes near the Dead Sea Transform. <i>Geofluids</i> , 2006, 6, 137-153.	0.7	25
56	Fault-related oceanic serpentinization in the Troodos ophiolite, Cyprus: Implications for a fossil oceanic core complex. <i>Earth and Planetary Science Letters</i> , 2009, 282, 34-46.	4.4	20
57	Chemical and isotopic composition of diagenetic carbonate cements and its relation to hydrocarbon accumulation in the Heletz-Kokhav oil field (Israel). <i>Journal of Geochemical Exploration</i> , 2011, 108, 88-98.	3.2	20
58	Using palaeo-environmental proxies to reconstruct natural and anthropogenic controls on sedimentation rates, Tell es-Safi/Gath, eastern Mediterranean. <i>Anthropocene</i> , 2014, 8, 70-82.	3.3	18
59	Minerological and O-isotope studies of diagenesis and porewater evolution in continental sandstones, Cretaceous Belly River Group, Alberta, Canada. <i>Applied Geochemistry</i> , 1991, 6, 291-303.	3.0	17
60	Climatic and environmental conditions in the Western Galilee, during Late Middle and Upper Paleolithic periods, based on speleothems from Manot Cave, Israel. <i>Journal of Human Evolution</i> , 2021, 160, 102605.	2.6	17
61	Stable isotope evidence for the origin of diagenetic carbonate minerals from the Lower Jurassic Inmar Formation, southern Israel. <i>Sedimentology</i> , 1995, 42, 147-160.	3.1	13
62	Holocene climatic conditions in the eastern Adriatic recorded in stalagmites from Stražina pešć Cave (Croatia). <i>Quaternary International</i> , 2019, 508, 98-106.	1.5	12
63	K _{Ar} and Rb _{Sr} whole-rock ages reset during pan african event in the Sinai peninsula (Ataqa Area). <i>Precambrian Research</i> , 1987, 37, 191-197.	2.7	11
64	Changes in the flux of Saharan dust to the East Mediterranean Sea since the last glacial maximum as observed through Sr-isotope geochemistry. <i>Mineralogical Magazine</i> , 2008, 72, 307-311.	1.4	11
65	High-resolution $\delta^{18}O$ and $\delta^{13}C$ records during the past 65ka from Fengyu Cave in Guilin: Variation of monsoonal climates in south China. <i>Quaternary International</i> , 2017, 441, 117-128.	1.5	11
66	Stable isotopic compositions of waters in the karst environments of China: Climatic implications. <i>Applied Geochemistry</i> , 2007, 22, 1748-1763.	3.0	10
67	Authenticity examination of the inscription on the ossuary attributed to James, brother of Jesus. <i>Journal of Archaeological Science</i> , 2004, 31, 1185-1189.	2.4	9
68	Response to Comment on "The earliest modern humans outside Africa". <i>Science</i> , 2018, 362, .	12.6	8
69	Authenticity Examination of the Jehoash Inscription. Tel Aviv, 2004, 31, 3-16.	1.0	6
70	The age of the Lower Paleolithic site of Kefar Menachem West, Israel—Another facet of Acheulian variability. <i>Journal of Archaeological Science: Reports</i> , 2016, 10, 350-362.	0.5	6
71	Pliocene—Pleistocene palaeoclimate reconstruction from Ashalim Cave speleothems, Negev Desert, Israel. <i>Geological Society Special Publication</i> , 2018, 466, 201-216.	1.3	5