Boaz Lazar

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3498978/publications.pdf

Version: 2024-02-01

116 papers	4,603 citations	109321 35 h-index	114465 63 g-index
118 all docs	118 docs citations	118 times ranked	4205 citing authors

#	Article	IF	Citations
1	High-Resolution Holocene Environmental Changes in the Thar Desert, Northwestern India. Science, 1999, 284, 125-128.	12.6	373
2	Vertical mixing and coral death in the Red Sea following the eruption of Mount Pinatubo. Nature, 1995, 377, 507-510.	27.8	278
3	Coral reefs may start dissolving when atmospheric CO₂ doubles. Geophysical Research Letters, 2009, 36, .	4.0	250
4	Evolution of the atmosphere and oceans. Nature, 1986, 320, 27-33.	27.8	166
5	The Evaporation Path of Seawater and the Coprecipitation of Br- and K+ with Halite. Journal of Sedimentary Research, 1987, Vol. 57, 928-38.	1.6	161
6	Effect of aragonite saturation, temperature, and nutrients on the community calcification rate of a coral reef. Journal of Geophysical Research, 2007, 112, .	3.3	159
7	Geochemical evolution and timescale of seawater intrusion into the coastal aquifer of Israel. Geochimica Et Cosmochimica Acta, 2005, 69, 579-592.	3.9	129
8	Diagenesis in live corals from the Gulf of Aqaba. I. The effect on paleo-oceanography tracers. Geochimica Et Cosmochimica Acta, 2000, 64, 3123-3132.	3.9	127
9	The composition of Permian seawater. Geochimica Et Cosmochimica Acta, 1991, 55, 417-432.	3.9	109
10	Strontium stable isotopes fractionate in the soil environments?. Earth and Planetary Science Letters, 2008, 272, 406-411.	4.4	108
11	Taking the metabolic pulse of the worldâ€™s coral reefs. PLoS ONE, 2018, 13, e0190872.	2.5	96
12	Dynamics of the carbon dioxide system in the Dead Sea. Geochimica Et Cosmochimica Acta, 2001, 65, 355-368.	3.9	89
13	Chemical versus mechanical bioerosion of coral reefs by boring sponges - lessons from Pione cf. vastifica. Journal of Experimental Biology, 2007, 210, 91-96.	1.7	83
14	Community metabolism of a coral reef exposed to naturally varying dissolved inorganic nutrient loads. Biogeochemistry, 2007, 84, 67-82.	3.5	69
15	Carbon turnover rates in the One Tree Island reef: A 40â€year perspective. Journal of Geophysical Research, 2012, 117, .	3.3	68
16	The analysis of fluid inclusions in halite. Geochimica Et Cosmochimica Acta, 1988, 52, 485-490.	3.9	64
17	Six Month In Situ High-Resolution Carbonate Chemistry and Temperature Study on a Coral Reef Flat Reveals Asynchronous pH and Temperature Anomalies. PLoS ONE, 2015, 10, e0127648.	2.5	64
18	Strontium isotope evidence on the history of oilfield brines, Mediterranean Coastal Plain, Israel. Geochimica Et Cosmochimica Acta, 1983, 47, 687-695.	3.9	62

#	Article	IF	Citations
19	Diagenetic effects on the distribution of uranium in live and Holocene corals from the Gulf of Aqaba. Geochimica Et Cosmochimica Acta, 2004, 68, 4583-4593.	3.9	62
20	Fish activity: a major mechanism for sediment resuspension and organic matter remineralization in coastal marine sediments. Marine Ecology - Progress Series, 2008, 372, 195-209.	1.9	62
21	Carbon geochemistry of marine-derived brines: I. 13C depletions due to intense photosynthesis. Geochimica Et Cosmochimica Acta, 1992, 56, 335-345.	3.9	58
22	Freshwater on the route of hominids out of Africa revealed by U-Th in Red Sea corals. Geology, 2011, 39, 1067-1070.	4.4	52
23	Phytoplankton drives nitrite dynamics in the Gulf of Aqaba, Red Sea. Marine Ecology - Progress Series, 2002, 239, 233-239.	1.9	51
24	Manganese Mobilization and Enrichment during Soil Aquifer Treatment (SAT) of Effluents, the Dan Region Sewage Reclamation Project (Shafdan), Israel. Environmental Science & Technology, 2007, 41, 766-772.	10.0	50
25	Nitrite dynamics in the open oceanâ€"clues from seasonal and diurnal variations. Marine Ecology - Progress Series, 2012, 453, 11-26.	1.9	50
26	Echinoid Bioerosion as a Major Structuring Force of Red Sea Coral Reefs. Biological Bulletin, 1996, 190, 367-372.	1.8	49
27	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean. Earth and Planetary Science Letters, 2017, 464, 211-226.	4.4	49
28	Bioerosion of coral reefsâ€A chemical approach. Limnology and Oceanography, 1991, 36, 377-383.	3.1	48
29	Chemical characterization of atmospheric dust from a weekly time series in the north Red Sea between 2006 and 2010. Geochimica Et Cosmochimica Acta, 2017, 211, 373-393.	3.9	47
30	The carbonate system in hypersaline solutions: Alkalinity and CaCO₃ solubility of evaporated seawater. Limnology and Oceanography, 1983, 28, 978-986.	3.1	45
31	Community calcification in Lizard Island, Great Barrier Reef: A 33 year perspective. Geochimica Et Cosmochimica Acta, 2014, 144, 72-81.	3.9	44
32	Expression of the nitrogen stress response gene ntcA reveals nitrogen-sufficient Synechococcus populations in the oligotrophic northern Red Sea. Limnology and Oceanography, 2005, 50, 1932-1944.	3.1	41
33	Marine87Sr/86Sr ratios from the Jurassic to Pleistocene: evidence from groundwaters in Israel. Earth and Planetary Science Letters, 1980, 47, 75-80.	4.4	39
34	Large earthquakes kill coral reefs at the north-west Gulf of Aqaba. Terra Nova, 2004, 16, 133-138.	2.1	37
35	Nitrate contamination sources in aquifers underlying cultivated fields in an arid region â€“ The Arava Valley, Israel. Applied Geochemistry, 2015, 63, 322-332.	3.0	37
36	Environmental implications of salt facies in the Dead Sea. Bulletin of the Geological Society of America, 2016, 128, 824-841.	3.3	37

#	Article	IF	Citations
37	Title is missing!. Wetlands Ecology and Management, 1998, 6, 103-120.	1.5	36
38	Biogeochemical processes in infiltration basins and their impact on the recharging effluent, the soil aquifer treatment (SAT) system of the Shafdan plant, Israel. Applied Geochemistry, 2014, 48, 58-69.	3.0	36
39	Expansion and homogeneity of the vertical distribution of zooplankton in a very deep mixed layer. Marine Ecology - Progress Series, 2002, 238, 91-100.	1.9	35
40	Controls on the pH of hyper-saline lakes â€“ A lesson from the Dead Sea. Earth and Planetary Science Letters, 2016, 434, 289-297.	4.4	33
41	Nitrogen and phosphorus limitation of oceanic microbial growth during spring in the Gulf of Aqaba. Aquatic Microbial Ecology, 2009, 56, 227-239.	1.8	33
42	Radiocarbon in Seawater Intruding into the Israeli Mediterranean Coastal Aquifer. Radiocarbon, 2001, 43, 773-781.	1.8	32
43	88Sr/86Sr fractionation in inorganic aragonite and in corals. Geochimica Et Cosmochimica Acta, 2016, 178, 268-280.	3.9	32
44	Temporal Changes in Radiocarbon Reservoir Age in the Dead Sea-Lake Lisan System. Radiocarbon, 2004, 46, 649-655.	1.8	30
45	Long-term freshening of the Dead Sea brine revealed by porewater Cl‾ and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mi>Î´</mml:mi><mml:mmultiscripts><mml:mrow><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>18</mml:mn></mml:mrow></mml:mmultiscripts></mml:math> in ICDP Dead Sea deep-drill. Earth and Planetary Science Letters, 2014, 400, 94-101.	4.4	30
46	Enrichment of 88 Sr in continental waters due to calcium carbonate precipitation. Earth and Planetary Science Letters, 2017, 459, 381-393.	4.4	30
47	Ammonium contribution from boring bivalves to their coral host--a mutualistic symbiosis?. Marine Ecology - Progress Series, 1998, 169, 295-301.	1.9	30
48	Cation exchange and CaCO3 dissolution during artificial recharge of effluent to a calcareous sandstone aquifer. Journal of Hydrology, 2011, 400, 165-175.	5.4	29
49	10Be dating of Neogene halite. Geochimica Et Cosmochimica Acta, 2013, 122, 418-429.	3.9	29
50	Radiocarbon Chronology of the DSDDP Core at the Deepest Floor of the Dead Sea. Radiocarbon, 2017, 59, 383-394.	1.8	29
51	Extreme 13C depletions in seawater-derived brines and their implications for the past geochemical carbon cycle. Geology, 1990, 18, 1191.	4.4	26
52	10Be in Lake Lisan sediments â€” A proxy for production or climate?. Earth and Planetary Science Letters, 2008, 269, 448-457.	4.4	26
53	Basin-scale estimates of pelagic and coral reef calcification in the Red Sea and Western Indian Ocean. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16303-16308.	7.1	26
54	Evidence for inorganic precipitation of CaCO3 on suspended solids in the open water of the Red Sea. Marine Chemistry, 2016, 186, 145-155.	2.3	26

#	Article	IF	Citations
55	Constraints on aragonite precipitation in the Dead Sea from geochemical measurements of flood plumes. Quaternary Science Reviews, 2019, 221, 105876.	3.0	26
56	The effect of bioturbation in pelagic sediments: Lessons from radioactive tracers and planktonic foraminifera in the Gulf of Aqaba, Red Sea. Geochimica Et Cosmochimica Acta, 2016, 194, 139-152.	3.9	25
57	Characterization and Dating of Saline Groundwater in the Dead Sea Area. Radiocarbon, 2010, 52, 1123-1140.	1.8	24
58	Testing the utility of geochemical proxies for paleoproductivity in oxic sedimentary marine settings of the Gulf of Aqaba, Red Sea. Chemical Geology, 2017, 473, 40-49.	3.3	23
59	Uâ€“Th dating of calcite corals from the Gulf of Aqaba. Geochimica Et Cosmochimica Acta, 2017, 198, 285-298.	3.9	22
60	The chemical evolution of brine and Mg-K-salts along the course of extreme evaporation of seawater â€“ An experimental study. Geochimica Et Cosmochimica Acta, 2018, 241, 164-179.	3.9	22
61	The circulation of the Dead Sea brine in the regional aquifer. Earth and Planetary Science Letters, 2018, 493, 242-261.	4.4	21
62	Late Holocene shorelines at the Gulf of Aqaba: migrating shorelines under conditions of tectonic and sea level stability. Stephan Mueller Special Publication Series, 0, 2, 105-111.	0.0	21
63	Evolution of fringing reefs: space and time constraints from the Gulf of Aqaba. Coral Reefs, 2005, 24, 165-172.	2.2	20
64	88Sr/86Sr fractionation and calcite accumulation rate in the Sea of Galilee. Geochimica Et Cosmochimica Acta, 2017, 215, 17-32.	3.9	20
65	Ra and Th adsorption coefficients in lakesâ€”Lake Kinneret (Sea of Galilee) â€œnatural experimentâ€• Geochimica Et Cosmochimica Acta, 2008, 72, 3446-3459.	3.9	19
66	Mobilization and retardation of reduced manganese in sandy aquifers: Column experiments, modeling and implications. Geochimica Et Cosmochimica Acta, 2012, 96, 259-271.	3.9	19
67	Pore fluids in Dead Sea sediment core reveal linear response of lake chemistry to global climate changes. Geology, 2017, 45, 315-318.	4.4	19
68	High precision determination of 228Ra and 228Ra/226Ra isotope ratio in natural waters by MC-ICPMS. International Journal of Mass Spectrometry, 2010, 294, 112-115.	1.5	18
69	Subtractive differential pulse anodic stripping voltammetry at a stationary mercury-coated glassy carbon electrode. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1980, 108, 143-151.	0.1	17
70	Mutual interferences in the determination of Zn(II) and Cu(II) in seawater by anodic stripping voltammetry. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1981, 125, 295-306.	0.1	17
71	Application of personal microcomputers in the analytical laboratoryâ€”I Potentiometric analysis. Talanta, 1982, 29, 267-274.	5.5	17
72	Groundfish overfishing, diatom decline, and the marine silica cycle: Lessons from Saanich Inlet, Canada, and the Baltic Sea cod crash. Global Biogeochemical Cycles, 2009, 23, .	4.9	17

#	Article	IF	Citations
73	Controls on the Radiocarbon Reservoir Ages in the Modern Dead Sea Drainage System and in the Last Glacial Lake Lisan. Radiocarbon, 2007, 49, 969-982.	1.8	16
74	Precise determination of Î´88/86Sr in natural samples by double-spike MC-ICP-MS and its TIMS verification. Journal of Analytical Atomic Spectrometry, 2013, 28, 940.	3.0	16
75	Carbon Isotope Exchange During Calcite Interaction With Brine: Implications for ¹⁴C Dating of Hypersaline Groundwater. Radiocarbon, 2013, 55, 81-101.	1.8	16
76	Comparing Rhizon samplers and centrifugation for poreâ€water separation in studies of the marine carbonate system in sediments. Limnology and Oceanography: Methods, 2018, 16, 828-839.	2.0	16
77	Late Holocene events that shaped the shoreline at the northern Gulf of Aqaba recorded by a buried fossil reef. Israel Journal of Earth Sciences, 2009, 58, 355-368.	0.3	16
78	Copper complexing capacity of seawater: A critical appraisal of the direct ASV method. Marine Chemistry, 1981, 10, 221-231.	2.3	15
79	Short residence time and fast transport of fine detritus in the Judean Desert: Clues from⁷Be in settled dust. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	15
80	Resuspension by fish facilitates the transport and redistribution of coastal sediments. Limnology and Oceanography, 2012, 57, 945-958.	3.1	15
81	Strontium Isotope Fractionation in Soils and Pedogenic Processes. Procedia Earth and Planetary Science, 2013, 7, 790-793.	0.6	15
82	Deep Submarine Groundwater Dischargeâ€"Evidence From Achziv Submarine Canyon at the Exposure of the Judea Group Confined Aquifer, Eastern Mediterranean. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015435.	2.6	15
83	Radiocarbon Reservoir Ages as Freshwater-Brine Monitors in Lake Lisan, Dead Sea System. Radiocarbon, 2013, 55, 1050-1057.	1.8	14
84	The determination of pH in hypersaline lakes with a conventional combination glass electrode. Limnology and Oceanography: Methods, 2014, 12, 810-815.	2.0	13
85	Beryllium isotopes as tracers of Lake Lisan (last Glacial Dead Sea) hydrology and the Laschamp geomagnetic excursion. Earth and Planetary Science Letters, 2014, 400, 233-242.	4.4	13
86	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and Î´37Cl composition of pore fluids and halites. Earth and Planetary Science Letters, 2018, 487, 127-137.	4.4	13
87	Continuous CO 2 escape from the hypersaline Dead Sea caused by aragonite precipitation. Geochimica Et Cosmochimica Acta, 2017, 207, 43-56.	3.9	12
88	Sulfate reduction in Lake Agmon, Israel. Science of the Total Environment, 2001, 266, 203-209.	8.0	11
89	The effect of salinization and freshening events in coastal aquifers on nutrient characteristics as deduced from field data. Journal of Hydrology, 2015, 529, 1293-1301.	5.4	11
90	Last interglacial sea levels and regional tectonics from fossil coral reefs in the northeast Gulf of Aqaba. Quaternary Science Reviews, 2018, 191, 41-56.	3.0	11

#	Article	IF	Citations
91	Droughts, flooding events, and shifts in water sources and seasonality characterize last interglacial Levant climate. Quaternary Science Reviews, 2020, 248, 106546.	3.0	11
92	The effect of salinization and freshening events in coastal aquifers on nutrient characteristics as deduced from column experiments under aerobic and anaerobic conditions. Journal of Hydrology, 2015, 529, 1282-1292.	5.4	10
93	Mount Sedom salt diapir - Source for sulfate replenishment and gypsum supersaturation in the last glacial Dead Sea (Lake Lisan). Quaternary Science Reviews, 2019, 221, 105871.	3.0	10
94	Carbonates dissolution and precipitation in hemipelagic sediments overlaid by supersaturated bottom-waters â€“ Gulf of Aqaba, Red Sea. Geochimica Et Cosmochimica Acta, 2019, 246, 565-580.	3.9	10
95	‹sup›14‹/sup›C excess in deepâ€sea sediments porewater driven by diffusionßžSoutheast Mediterranean. Limnology and Oceanography, 2002, 47, 565-570.	3.1	9
96	Radiocarbon Dating of Porewater â€“ Correction for Diffusion and Diagenetic Processes. Radiocarbon, 2001, 43, 765-771.	1.8	8
97	Radiocarbon dating of primary aragonite by sequential extraction of CO2. Holocene, 2007, 17, 131-137.	1.7	8
98	Gypsum Deltas at the Holocene Dead Sea Linked to Grand Solar Minima. Geophysical Research Letters, 2021, 48, e2020GL091034.	4.0	8
99	Monitoring the Health of Coral Reef Ecosystems Using Community Metabolism. , 2004, , 367-376.		7
100	The Mg isotope signature of marine Mg-evaporites. Geochimica Et Cosmochimica Acta, 2021, 301, 30-47.	3.9	6
101	The silica cycle in a Northeast Pacific fjord; the role of biological resuspension. Progress in Oceanography, 2016, 147, 10-21.	3.2	5
102	Investigation of tubular handling of bicarbonate in man. A new approach utilizing stable carbon isotope fractionation.. Journal of Clinical Investigation, 1983, 72, 2125-2136.	8.2	5
103	Particle Triggered Reactions as an Important Mechanism of Alkalinity and Inorganic Carbon Removal in River Plumes. Geophysical Research Letters, 2021, 48, e2021GL093178.	4.0	4
104	Using radium isotopes to constrain the age of saline groundwater, implications to seawater intrusion in aquifers. Journal of Hydrology, 2021, 598, 126412.	5.4	4
105	Hydrological and thermodynamic controls on late Holocene gypsum formation by mixing saline groundwater and Dead Sea brine. Geochimica Et Cosmochimica Acta, 2022, 316, 363-383.	3.9	4
106	Radiocarbon in Porewater of Continental Shelf Sediments (Southeast Mediterranean). Radiocarbon, 2004, 46, 633-642.	1.8	3
107	Application of an autoranging amplifier in the simultaneous determination of trace heavy metals by anodic stripping voltammetry. Talanta, 1980, 27, 1061-1066.	5.5	2
108	Early Diagenetic Imprint on Temperature Proxies in Holocene Corals: A Case Study From French Polynesia. Frontiers in Earth Science, 2020, 8, .	1.8	2

#	Article	IF	Citations
109	Radiocarbon Reservoir Ages as Freshwater-Brine Monitors in Lake Lisan, Dead Sea System. Radiocarbon, 2013, 55, .	1.8	2
110	Chronologies of Late Quaternary Coral Reefs and Lake Sediments from the Red Sea and Dead Sea Rift Valley. , 0, , 75-82.		1
111	Constraining Evaporation Rates Based on Largeâ€Scale Sea Surface Transects of Salinity or Isotopic Compositions. Journal of Geophysical Research: Oceans, 2019, 124, 1322-1330.	2.6	1
112	RADIOCARBON RESERVOIR AGES IN THE HOLOCENE DEAD SEA. Radiocarbon, 2020, 62, 1453-1473.	1.8	1
113	Reply to Charrach (2019) comment on â€œMount Sedom salt diapir - Source for sulfate replenishment and gypsum supersaturation in the last glacial Dead Sea (Lake Lisan)â€• by Levy etÂal. (2019). Quaternary Science Reviews, 2020, 231, 106111.	3.0	1
114	Carbon Isotope Exchange During Calcite Interaction With Brine: Implications for 14C Dating of Hypersaline Groundwater. Radiocarbon, 2013, 55, 81-101.	1.8	0
115	Geochemical Aspects of Seawater Intrusion into the Mediterranean Coastal Aquifer. Springer Hydrogeology, 2021, , 67-79.	0.3	0
116	Holocene sea levels at the Gulf of Aqaba, northern Red Sea. Quaternary Science Reviews, 2022, 277, 107278.	3.0	0