Antoni Rosell-MelÃ©

List of Publications by Year
in descending order

109 papers	7,724 citations	47 h-index	84 g-index
		47006	54911
112 all docs	112 docs citations	112 times ranked	6384 citing authors

#	Article	IF	Citations
1	Calibration of the alkenone paleotemperature index U37Kâ€² based on core-tops from the eastern South Atlantic and the global ocean (60Â°N-60Â°S). Geochimica Et Cosmochimica Acta, 1998, 62, 1757-1772.	3.9	900
2	Constraints on the magnitude and patterns of ocean cooling at the Last Glacial Maximum. Nature Geoscience, 2009, 2, 127-132.	12.9	517
3	North Pacific seasonality and the glaciation of North America 2.7â€‰million years ago. Nature, 2005, 433, 821-825.	27.8	336
4	Upwelling Intensification As Part of the Pliocene-Pleistocene Climate Transition. Science, 2000, 290, 2288-2291.	12.6	306
5	Southern Ocean dustâ€“climate coupling over the past four million years. Nature, 2011, 476, 312-315.	27.8	298
6	Multiproxy approach for the reconstruction of the glacial ocean surface (MARGO). Quaternary Science Reviews, 2005, 24, 813-819.	3.0	233
7	Links between iron supply, marine productivity, sea surface temperature, and CO₂ over the last 1.1 Ma. Paleoceanography, 2009, 24, .	3.0	216
8	Climate Sensitivity Estimated from Temperature Reconstructions of the Last Glacial Maximum. Science, 2011, 334, 1385-1388.	12.6	212
9	Subpolar Link to the Emergence of the Modern Equatorial Pacific Cold Tongue. Science, 2010, 328, 1550-1553.	12.6	179
10	Last Glacial Maximum temperatures over the North Atlantic, Europe and western Siberia: a comparison between PMIP models, MARGO seaâ€“surface temperatures and pollen-based reconstructions. Quaternary Science Reviews, 2006, 25, 2082-2102.	3.0	170
11	Interhemispheric appraisal of the value of alkenone indices as temperature and salinity proxies in high-latitude locations. Paleoceanography, 1998, 13, 694-703.	3.0	166
12	Atlantic core-top calibration of the U37K index as a sea-surface palaeotemperature indicator. Geochimica Et Cosmochimica Acta, 1995, 59, 3099-3107.	3.9	156
13	Pleistocene sea-surface temperature evolution: Early cooling, delayed glacial intensification, and implications for the mid-Pleistocene climate transition. Earth-Science Reviews, 2013, 123, 173-193.	9.1	149
14	Molecular record of secular sea surface temperature changes on 100-year timescales for glacial terminations I, II and IV. Nature, 1992, 356, 423-426.	27.8	148
15	Variability in the Benguela Current upwelling system over the past 70,000 years. Progress in Oceanography, 1995, 35, 207-251.	3.2	142
16	Late Glacialâ€“Holocene climate variability at the south-eastern margin of the Aegean Sea. Marine Geology, 2009, 266, 182-197.	2.1	129
17	A comparison of PMIP2 model simulations and the MARGO proxy reconstruction for tropical sea surface temperatures at last glacial maximum. Climate Dynamics, 2009, 32, 799-815.	3.8	126
18	Risk excess of soft-tissue sarcoma and thyroid cancer in a community exposed to airborne organochlorinated compound mixtures with a high hexachlorobenzene content. International Journal of Cancer, 1994, 56, 200-203.	5.1	116

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19	Chlorin accumulation rate as a proxy for Quaternary marine primary productivity. Nature, 1996, 383, 63-65.	27.8	116
20	Comparing proxies for the reconstruction of LGM sea-surface conditions in the northern North Atlantic. Quaternary Science Reviews, 2006, 25, 2820-2834.	3.0	108
21	The emergence of modern sea ice cover in the Arctic Ocean. Nature Communications, 2014, 5, 5608.	12.8	99
22	Temperature and Salinity Effects on Alkenone Ratios Measured in Surface Sediments from the Indian Ocean. Quaternary Research, 1997, 47, 344-355.	1.7	92
23	Links between the onset of modern Walker circulation and the mid-Pleistocene climate transition. Geology, 2005, 33, 389.	4.4	90
24	Variability of unusual distributions of alkenones in the surface waters of the Nordic seas. Paleoceanography, 2005, 20, n/a-n/a.	3.0	76
25	High-resolution alkenone sea surface temperature variability on the North Icelandic Shelf: implications for Nordic Seas palaeoclimatic development during the Holocene. Holocene, 2007, 17, 9-24.	1.7	76
26	Seasonality of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:msup><mml:mtext>U</mml:mtext><mml:mrow><mml:msup><mml:mt temperature estimates as inferred from sediment trap data. Quaternary Science Reviews, 2013, 72, 128-136.	3.0	76
27	An interlaboratory study of TEX₈₆ and BIT analysis of sediments, extracts, and standard mixtures. Geochemistry, Geophysics, Geosystems, 2013, 14, 5263-5285.	2.5	76
28	Distributions of long-chain alkenones and alkyl alkenoates in marine surface sediments from the North East Atlantic. Organic Geochemistry, 1994, 22, 501-509.	1.8	72
29	Comparison of instrumental and GDGT-based estimates of sea surface and air temperatures from the Skagerrak. Organic Geochemistry, 2009, 40, 287-291.	1.8	72
30	Appraisal of TEX86 and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>TEX</mml:mtext></mml:mrow><mml:mrow><mml:mn>86</mml:mn> thermometries in subpolar and polar regions. Geochimica Et Cosmochimica Acta, 2014, 131, 213-226.	3.9	71
31	Core-top calibration of the alkenone index vs sea surface temperature in the Indian Ocean. Deep-Sea Research Part II: Topical Studies in Oceanography, 1997, 44, 1445-1460.	1.4	67
32	Application of microwave-assisted extraction to the analysis of biomarker climate proxies in marine sediments. Organic Geochemistry, 2003, 34, 1517-1523.	1.8	62
33	Expansion of subarctic water masses in the North Atlantic and Pacific oceans and implications for midâ€Pleistocene ice sheet growth. Paleoceanography, 2008, 23, .	3.0	62
34	Management opportunities for soil carbon sequestration following agricultural land abandonment. Environmental Science and Policy, 2020, 108, 104-111.	4.9	61
35	Constraints in the application of the Branched and Isoprenoid Tetraether index as a terrestrial input proxy. Journal of Geophysical Research, 2011, 116, .	3.3	59
36	Biomarker evidence for â€œHeinrichâ€•events. Geochimica Et Cosmochimica Acta, 1997, 61, 1671-1678.	3.9	57

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37	Sea surface temperature variability in the Pacific sector of the Southern Ocean over the past 700 kyr. Paleoceanography, 2012, 27, .	3.0	57
38	Determination of the UK37 index in geological samples. Analytical Chemistry, 1995, 67, 1283-1289.	6.5	56
39	Distributions of UK37and UK37â€²in the surface waters and sediments of the Nordic Seas: Implications for paleoceanography. Geochemistry, Geophysics, Geosystems, 2004, 5, n/a-n/a.	2.5	56
40	Water contamination from oil extraction activities in Northern Peruvian Amazonian rivers. Environmental Pollution, 2017, 225, 370-380.	7.5	55
41	Global distribution patterns of hydroxy glycerol dialkyl glycerol tetraethers. Organic Geochemistry, 2013, 57, 107-118.	1.8	54
42	Influence of water availability in the distributions of branched glycerol dialkyl glycerol tetraether in soils of the Iberian Peninsula. Biogeosciences, 2014, 11, 2571-2581.	3.3	53
43	An interlaboratory study of TEX‹sub›86‹/sub› and BIT analysis using highâ€performance liquid chromatographyâ€“mass spectrometry. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	52
44	Sea surface temperature anomalies in the oceans at the LGM estimated from the alkenone-U37Kâ€²index: comparison with GCMs. Geophysical Research Letters, 2004, 31, .	4.0	50
45	Oil pollution in soils and sediments from the Northern Peruvian Amazon. Science of the Total Environment, 2018, 610-611, 1010-1019.	8.0	50
46	Appraisal of a molecular approach to infer variations in surface ocean freshwater inputs into the North Atlantic during the last glacial. Global and Planetary Change, 2002, 34, 143-152.	3.5	48
47	Alkenone and coccolith records of the mid-Pleistocene in the south-east Atlantic: Implications for the U37Kâ€² index and South African climate. Quaternary Science Reviews, 2005, 24, 1559-1572.	3.0	48
48	Climatic bisection of the last interglacial warm period in the Polar North Atlantic. Quaternary Science Reviews, 2011, 30, 1813-1818.	3.0	46
49	Bacterial dominance in subseafloor sediments characterized by methane hydrates. FEMS Microbiology Ecology, 2012, 81, 88-98.	2.7	46
50	Hydroxylated isoprenoidal GDGTs in the Nordic Seas. Marine Chemistry, 2013, 152, 1-10.	2.3	45
51	Evidence for a Warm Last Glacial Maximum in the Nordic Seas or an example of shortcomings in UK37â€²and UK37to estimate low sea surface temperature?. Paleoceanography, 1999, 14, 770-776.	3.0	44
52	Co-variation of crenarchaeol and branched GDGTs in globally-distributed marine and freshwater sedimentary archives. Global and Planetary Change, 2012, 92-93, 275-285.	3.5	41
53	Liquid chromatography/tandem mass spectrometry of free base alkyl porphyrins for the characterization of the macrocyclic substituents in components of complex mixtures. , 1999, 13, 568-573.		39
54	Time-transgressive North Atlantic productivity changes upon Northern Hemisphere glaciation. Paleoceanography, 2013, 28, 740-751.	3.0	39

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55	Alkenone fluxes and anomalous U37Kâ€² values during 1989â€“1990 in the Northeast Atlantic (48Â°N 21Â°W). Marine Chemistry, 2000, 71, 251-264.	2.3	37
56	Links between media communication and local perceptions of climate change in an indigenous society. Climatic Change, 2015, 131, 307-320.	3.6	37
57	Soil organic carbon accumulation rates on Mediterranean abandoned agricultural lands. Science of the Total Environment, 2021, 759, 143535.	8.0	34
58	Comparison of two U37K-sea surface temperature records for the last climatic cycle at ODP Site 658 from the sub-tropical Northeast Atlantic. Palaeogeography, Palaeoclimatology, Palaeoecology, 1993, 103, 57-65.	2.3	33
59	Variability of the Arctic front during the last climatic cycle: application of a novel molecular proxy. Terra Nova, 1998, 10, 86-89.	2.1	32
60	The composition of volatile and particulate hydrocarbons in urban air. Fresenius' Journal of Analytical Chemistry, 1991, 339, 689-698.	1.5	31
61	Paleoclimatic significance of the stratigraphic occurrence of photosynthetic biomarker pigments in the Nordic seas. Geology, 1997, 25, 49.	4.4	31
62	Project takes a new look at past sea surface temperatures. Eos, 1998, 79, 393-393.	0.1	31
63	Multi-proxy constraints on sapropel formation during the late Pliocene of central Mediterranean (southwest Sicily). Earth and Planetary Science Letters, 2015, 420, 30-44.	4.4	31
64	Belowground biota responses to maize biochar addition to the soil of a Mediterranean vineyard. Science of the Total Environment, 2019, 660, 1522-1532.	8.0	31
65	Persistent warmth across the Benguela upwelling system during the Pliocene epoch. Earth and Planetary Science Letters, 2014, 386, 10-20.	4.4	30
66	Rapid screening of glycerol dialkyl glycerol tetraethers in continental Eurasia samples using HPLC/APCI-ion trap mass spectrometry. Organic Geochemistry, 2007, 38, 161-164.	1.8	29
67	Biomarker seasonality study in Lake Van, Turkey. Organic Geochemistry, 2011, 42, 1289-1298.	1.8	27
68	Analytical Considerations for the Use of the Paleothermometer Tetraether Index86 and the Branched vs Isoprenoid Tetraether Index Regarding the Choice of Cleanup and Instrumental Conditions. Analytical Chemistry, 2009, 81, 2701-2707.	6.5	26
69	High-performance liquid chromatography-mass spectrometry of porphyrins by using an atmospheric pressure interface. Journal of the American Society for Mass Spectrometry, 1996, 7, 965-971.	2.8	25
70	Sediment reworking on high-latitude continental margins and its implications for palaeoceanographic studies: insights from the Norwegian-Greenland Sea. Geological Society Special Publication, 2002, 203, 325-348.	1.3	25
71	Molecular dynamics simulation study of the effect of glycerol dialkyl glycerol tetraether hydroxylation on membrane thermostability. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 966-974.	2.6	25
72	Eolian transport of glycerol dialkyl glycerol tetraethers (GDGTs) off northwest Africa. Organic Geochemistry, 2013, 64, 112-118.	1.8	24

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73	Glacial Southern Ocean freshening at the onset of the Middle Pleistocene Climate Transition. Earth and Planetary Science Letters, 2012, 345-348, 194-202.	4.4	21
74	Crenarchaea and phytoplankton coupling in sedimentary archives: Common trigger or metabolic dependence?. Limnology and Oceanography, 2011, 56, 1907-1916.	3.1	20
75	Late Pliocene upwelling in the Southern Benguela region. Palaeogeography, Palaeoclimatology, Palaeoecology, 2015, 429, 62-71.	2.3	19
76	Vapor-particle partitioning of hydrocarbons in Western Mediterranean urban and marine atmospheres. Mikrochimica Acta, 1991, 104, 13-27.	5.0	18
77	Benefits of freeze-drying sediments for the analysis of total chlorins and alkenone concentrations in marine sediments. Organic Geochemistry, 2007, 38, 1002-1007.	1.8	18
78	Oceanographic and climatic evolution of the southeastern subtropical Atlantic over the last 3.5 Ma. Earth and Planetary Science Letters, 2018, 492, 12-21.	4.4	18
79	First evidences of Amazonian wildlife feeding on petroleum-contaminated soils: A new exposure route to petrogenic compounds?. Environmental Research, 2018, 160, 514-517.	7.5	18
80	Branched GDGT variability in sediments and soils from catchments with marked temperature seasonality. Organic Geochemistry, 2018, 122, 98-114.	1.8	18
81	Anthropogenic lead in Amazonian wildlife. Nature Sustainability, 2019, 2, 702-709.	23.7	18
82	Coupling of air and sea surface temperatures in the eastern Fram Strait during the last 2000 years. Holocene, 2013, 23, 692-698.	1.7	16
83	Organic biomarker records spanning the last 34,800 years from the southeastern Brazilian upper slope: links between sea surface temperature, displacement of the Brazil Current, and marine productivity. Geo-Marine Letters, 2016, 36, 361-369.	1.1	16
84	Polycyclic aromatic hydrocarbons, polychlorinated biphenyls and organochlorine pesticides in European hake (Merluccius merluccius) muscle from the Western Mediterranean Sea. Marine Pollution Bulletin, 2015, 95, 513-519.	5.0	15
85	Abundance and Co-Distribution of Widespread Marine Archaeal Lineages in Surface Sediments of Freshwater Water Bodies across the Iberian Peninsula. Microbial Ecology, 2017, 74, 776-787.	2.8	15
86	Appraisal of sedimentary alkenones for the quantitative reconstruction of phytoplankton biomass. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2014787118.	7.1	15
87	Phase distribution of hydrocarbons in the water column after a pelagic deep ocean oil spill. Marine Pollution Bulletin, 2010, 60, 1667-1673.	5.0	14
88	Postglacial paleoceanography of the western Barents Sea: Implications for alkenone-based sea surface temperatures and primary productivity. Quaternary Science Reviews, 2019, 224, 105973.	3.0	14
89	Seasonal effects of water temperature and dissolved oxygen on the isoGDGT proxy (TEX86) in a Mediterranean oligotrophic lake. Chemical Geology, 2020, 551, 119759.	3.3	14
90	Modelling nitrogen and phosphorus loads in a Mediterranean river catchment (La Tordera, NE Spain). Hydrology and Earth System Sciences, 2012, 16, 2417-2435.	4.9	13

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91	Modern Analogue Approach Applied to High-Resolution Varved Sedimentsâ€"A Synthesis for Lake MontcortÃ¨s (Central Pyrenees). Quaternary, 2020, 3, 1.	2.0	12
92	Rapid Characterization of Metallo Porphyrin Classes in Natural Extracts by Gel Permeation Chromatography/Atmospheric Pressure Chemical Ionization/Mass Spectrometry. Rapid Communications in Mass Spectrometry, 1996, 10, 209-213.	1.5	11
93	Preliminary study of fluxes of major lipid biomarker classes in the water column and sediments of Lake Baikal, Russia. Global and Planetary Change, 2005, 46, 45-56.	3.5	11
94	Alkenones, alkenoates, and organic matter in coastal environments of NW Scotland: Assessment of potential application for sea level reconstruction. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	11
95	Alkenones and coccoliths in iceâ€rafted debris during the Last Glacial Maximum in the North Atlantic: implications for the use of U^K₃₇â€² as a sea surface temperature proxy. Journal of Quaternary Science, 2011, 26, 657-664.	2.1	11
96	Transfer of seston lipids during a flagellate bloom from the surface to the benthic community in the Weddell Sea. Scientia Marina, 2013, 77, 397-407.	0.6	10
97	Chapter Eleven Biomarkers as Paleoceanographic Proxies. Developments in Marine Geology, 2007, , 441-490.	0.4	9
98	Participatory scenario development for integrated assessment of nutrient flows in a Catalan river catchment. Hydrology and Earth System Sciences, 2007, 11, 1843-1855.	4.9	9
99	Improving the Fertigation of Soilless Urban Vertical Agriculture Through the Combination of Struvite and Rhizobia Inoculation in Phaseolus vulgaris. Frontiers in Plant Science, 2021, 12, 649304.	3.6	8
100	Response to Comment on â€œClimate Sensitivity Estimated from Temperature Reconstructions of the Last Glacial Maximumâ€. Science, 2012, 337, 1294-1294.	12.6	5
101	Evidence of bee products processing: A functional definition of a specialized type of macro-lithic tool. Journal of Archaeological Science: Reports, 2017, 14, 638-650.	0.5	5
102	Modelling of the Effect of Chromatographic Resolution on the Determination of the UK37' Index. Journal of Chromatographic Science, 1999, 37, 245-250.	1.4	3
103	Archaeabacterial lipids in drill core samples from the Bosumtwi impact structure, Ghana. Meteoritics and Planetary Science, 2008, 43, 1777-1782.	1.6	3
104	Fast preparation of the seawater accommodated fraction of heavy fuel oil by sonication. Chemosphere, 2008, 73, 1811-1816.	8.2	2
105	Dataset on the evidence of bee products processing: A functional definition of a specialized type of macro-lithic tool. Data in Brief, 2017, 14, 738-758.	1.0	2
106	Biomarker Fingerprint of Debris Flow Deposits as a Paleoproxy for IRD Sources in the Last Glacial North Atlantic. Paleoceanography and Paleoclimatology, 2020, 35, e2020PA003850.	2.9	1
107	Examination of the Use of Biomarker Proxies for the Reconstruction of Paleoceanographic Conditions in the Northern North Atlantic. , 2001, , 353-363.		1
108	Languages: Catalan speakers learn a wider range. Nature, 2008, 455, 26-26.	27.8	0

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109	Reply to: Improper estimation of lead contamination. Nature Sustainability, 2021, 4, 19-20.	23.7	0