Matthew J Kohn

List of Publications by Year
in descending order

99 papers	9,847 citations	38742 50 h-index	36028 97 g-index
102 all docs	102 docs citations	102 times ranked	6908 citing authors

#	Article	IF	Citations
1	Carbon isotope compositions of terrestrial C3 plants as indicators of (paleo)ecology and (paleo)climate. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19691-19695.	7.1	1,041
2	Predicting animal Î´18O: Accounting for diet and physiological adaptation. Geochimica Et Cosmochimica Acta, 1996, 60, 4811-4829.	3.9	565
3	Pâ€Š - T paths from anatectic pelites. Contributions To Mineralogy and Petrology, 1999, 134, 17-32.	3.1	501
4	Altered states: effects of diagenesis on fossil tooth chemistry. Geochimica Et Cosmochimica Acta, 1999, 63, 2737-2747.	3.9	394
5	Herbivore tooth oxygen isotope compositions: Effects of diet and physiology. Geochimica Et Cosmochimica Acta, 1996, 60, 3889-3896.	3.9	363
6	Stable Isotope Compositions of Biological Apatite. Reviews in Mineralogy and Geochemistry, 2002, 48, 455-488.	4.8	291
7	Retrograde net transfer reaction insurance for pressure-temperature estimates. Geology, 2000, 28, 1127.	4.4	287
8	The global range of subduction zone thermal structures from exhumed blueschists and eclogites: Rocks are hotter than models. Earth and Planetary Science Letters, 2015, 428, 243-254.	4.4	258
9	P-T-t data from central Nepal support critical taper and repudiate large-scale channel flow of the Greater Himalayan Sequence. Bulletin of the Geological Society of America, 2008, 120, 259-273.	3.3	247
10	Formation of monazite via prograde metamorphic reactions among common silicates: implications for age determinations. Geochimica Et Cosmochimica Acta, 2004, 68, 101-113.	3.9	244
11	Five generations of monazite in Langtang gneisses: implications for chronology of the Himalayan metamorphic core. Journal of Metamorphic Geology, 2005, 23, 399-406.	3.4	231
12	The fall and rise of metamorphic zircon. American Mineralogist, 2015, 100, 897-908.	1.9	226
13	A model for garnet and plagioclase growth in pelitic schists: implications for thermobarometry and P-T path determinations. Journal of Metamorphic Geology, 1990, 8, 683-696.	3.4	215
14	Large temperature drop across the Eoceneâ€“Oligocene transition in central North America. Nature, 2007, 445, 639-642.	27.8	213
15	Variability in oxygen isotope compositions of herbivore teeth: reflections of seasonality or developmental physiology?. Chemical Geology, 1998, 152, 97-112.	3.3	182
16	The Miocene: The Future of the Past. Paleoceanography and Paleoclimatology, 2021, 36, e2020PA004037.	2.9	166
17	Decoupling the spread of grasslands from the evolution of grazer-type herbivores in South America. Nature Communications, 2013, 4, 1478.	12.8	165
18	Miocene faulting at plate tectonic velocity in the Himalaya of central Nepal. Earth and Planetary Science Letters, 2004, 228, 299-310.	4.4	158

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19	Linked canopy, climate, and faunal change in the Cenozoic of Patagonia. Science, 2015, 347, 258-261.	12.6	158
20	Titanite Petrochronology. Reviews in Mineralogy and Geochemistry, 2017, 83, 419-441.	4.8	147
21	Trace element zoning in garnet as a monitor of crustal melting. Geology, 1996, 24, 1099.	4.4	143
22	The relative diffusion of Pb, Nd, Sr and O in garnet. Earth and Planetary Science Letters, 1995, 133, 199-211.	4.4	128
23	On the temperature correlation of Î´18O in modern precipitation. Earth and Planetary Science Letters, 2005, 231, 87-96.	4.4	126
24	Models of garnet differential geochronology. Geochimica Et Cosmochimica Acta, 2009, 73, 170-182.	3.9	126
25	Preserved Zr-temperatures and Uâ€“Pb ages in high-grade metamorphic titanite: Evidence for a static hot channel in the Himalayan orogen. Earth and Planetary Science Letters, 2011, 311, 136-143.	4.4	126
26	Metamorphic history of the central Himalaya, Annapurna region, Nepal, and implications for tectonic models. Bulletin of the Geological Society of America, 2011, 123, 1863-1879.	3.3	125
27	A new chronology for middle Eocene-early Miocene South American Land Mammal Ages. Bulletin of the Geological Society of America, 2013, 125, 539-555.	3.3	112
28	â€œThermoba-Raman-tryâ€: Calibration of spectroscopic barometers and thermometers for mineral inclusions. Earth and Planetary Science Letters, 2014, 388, 187-196.	4.4	111
29	Models of diffusion-limited uptake of trace elements in fossils and rates of fossilization. Geochimica Et Cosmochimica Acta, 2008, 72, 3758-3770.	3.9	102
30	40Ar/39Ar geochronology and P-T-t paths from the Cordillera Darwin metamorphic complex, Tierra del Fuego, Chile. Journal of Metamorphic Geology, 1995, 13, 251-270.	3.4	99
31	Traceâ€element distributions in silicates during prograde metamorphic reactions: implications for monazite formation. Journal of Metamorphic Geology, 2008, 26, 451-464.	3.4	97
32	Metamorphic chronologyâ€"a tool for all ages: Past achievements and future prospects. American Mineralogist, 2016, 101, 25-42.	1.9	94
33	Significant Agesâ€"An Introduction to Petrochronology. Reviews in Mineralogy and Geochemistry, 2017, 83, 1-12.	4.8	94
34	Oxygen isotope evidence for progressive uplift of the Cascade Range, Oregon. Earth and Planetary Science Letters, 2002, 204, 151-165.	4.4	90
35	The age and rate of displacement along the Main Central Thrust in the western Bhutan Himalaya. Earth and Planetary Science Letters, 2012, 319-320, 146-158.	4.4	90
36	Dining in the Pleistoceneâ€"Who's on the menu?. Geology, 2005, 33, 649-652.	4.4	87

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37	Comment: Tooth Enamel Mineralization in Ungulates: Implications for Recovering a Primary Isotopic Time-Series, by B. H. Passey and T. E. Cerling (2002). Geochimica Et Cosmochimica Acta, 2004, 68, 403-405.	3.9	82
38	Metamorphic P-T Paths from Cordillera Darwin, a Core Complex in Tierra del Fuego, Chile. Journal of Petrology, 1993, 34, 519-542.	2.8	77
39	Stable isotope chemistry of fossil bone as a new paleoclimate indicator. Geochimica Et Cosmochimica Acta, 2006, 70, 931-946.	3.9	77
40	The effect of tissue structure and soil chemistry on trace element uptake in fossils. Geochimica Et Cosmochimica Acta, 2010, 74, 3213-3231.	3.9	75
41	Pressure, Temperature, and Structural Evolution of West-Central New Hampshire: Hot Thrusts over Cold Basement. Journal of Petrology, 1992, 33, 521-556.	2.8	67
42	Trace element concentrations in teeth â€“ a modern Idaho baseline with implications for archeometry, forensics, and palaeontology. Journal of Archaeological Science, 2013, 40, 1689-1699.	2.4	66
43	U-Pb geochronology of the Santa Cruz Formation (early Miocene) at the RÃo Bote and RÃo Santa Cruz (southernmost Patagonia, Argentina): Implications for the correlation of fossil vertebrate localities. Journal of South American Earth Sciences, 2016, 70, 198-210.	1.4	66
44	A refined zirconium-in-rutile thermometer. American Mineralogist, 2020, 105, 963-971.	1.9	66
45	Trace element diffusivities in bone rule out simple diffusive uptake during fossilization but explain in vivo uptake and release. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 419-424.	7.1	61
46	Miocene tectonics and climate forcing of biodiversity, western United States. Geology, 2008, 36, 783.	4.4	55
47	Oxygen isotope constraints on metamorphic fluid flow, Townshend Dam, Vermont, U.S.A.. Geochimica Et Cosmochimica Acta, 1994, 58, 5551-5566.	3.9	54
48	Flattening the Bhutan Himalaya. Earth and Planetary Science Letters, 2012, 349-350, 67-74.	4.4	54
49	Quasi-static Eoceneâ€“Oligocene climate in Patagonia promotes slow faunal evolution and mid-Cenozoic global cooling. Palaeogeography, Palaeoclimatology, Palaeoecology, 2015, 435, 24-37.	2.3	54
50	Tooth enamel maturation reequilibrates oxygen isotope compositions and supports simple sampling methods. Geochimica Et Cosmochimica Acta, 2017, 198, 32-47.	3.9	54
51	Obtaining equilibrium oxygen isotope fractionations from rocks: theory and examples. Contributions To Mineralogy and Petrology, 1998, 132, 209-224.	3.1	51
52	Uâ€Thâ€Pb dating of monazite by singleâ€collector ICPâ€MS: Pitfalls and potential. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	50
53	Dining in the Pleistoceneâ€"Who's on the menu?. Geology, 2005, 33, 649.	4.4	50
54	Paleoaltimetry from Stable Isotope Compositions of Fossils. Reviews in Mineralogy and Geochemistry, 2007, 66, 119-154.	4.8	47

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55	Titanium in muscovite, biotite, and hornblende: Modeling, thermometry, and rutile activities of metapelites and amphibolites. American Mineralogist, 2012, 97, 543-555.	1.9	47
56	Climate stability across the Eocene-Oligocene transition, southern Argentina. Geology, 2004, 32, 621.	4.4	44
57	Oscillatory- and sector-zoned garnets record cyclic (?) rapid thrusting in central Nepal. Geochemistry, Geophysics, Geosystems, 2004, 5, n/a-n/a.	2.5	43
58	Protracted thrusting followed by late rapid cooling of the Greater Himalayan Sequence, Annapurna Himalaya, Central Nepal: Insights from titanite petrochronology. Journal of Metamorphic Geology, 2017, 35, 897-917.	3.4	40
59	Evidence for a far-traveled thrust sheet in the Greater Himalayan thrust system, and an alternative model to building the Himalaya. Tectonics, 2015, 34, 31-52.	2.8	39
60	Shear heating reconciles thermal models with the metamorphic rock record of subduction. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11706-11711.	7.1	36
61	An improved approach to age-modeling in deep time: Implications for the Santa Cruz Formation, Argentina. Bulletin of the Geological Society of America, 2020, 132, 233-244.	3.3	36
62	Ecology and physiology of White River mammals based on stable isotope ratios of teeth. Palaeogeography, Palaeoclimatology, Palaeoecology, 2008, 257, 22-37.	2.3	34
63	Paleoecology of late Pleistoceneâ€"Holocene faunas of eastern and central Wyoming, USA, with implications for LGM climate models. Palaeogeography, Palaeoclimatology, Palaeoecology, 2012, 326-328, 42-53.	2.3	34
64	Diffusion: Obstacles and Opportunities in Petrochronology. Reviews in Mineralogy and Geochemistry, 2017, 83, 103-152.	4.8	34
65	A mÃ©lange of subduction temperatures: Evidence from Zr-in-rutile thermometry for strengthening of the subduction interface. Earth and Planetary Science Letters, 2018, 482, 525-535.	4.4	34
66	Modeling of prograde mineral ?18O changes in metamorphic systems. Contributions To Mineralogy and Petrology, 1993, 113, 249-261.	3.1	33
67	Why most "dry" rocks should cool "wet". American Mineralogist, 1999, 84, 570-580.	1.9	33
68	Implications of near-rim compositional zoning in rutile for geothermometry, geospeedometry, and trace element equilibration. Contributions To Mineralogy and Petrology, 2016, 171, 1.	3.1	32
69	Resolving the timing of orogenesis in the Western Blue Ridge, southern Appalachians, via in situ ID-TIMS monazite geochronology. Geology, 2007, 35, 627.	4.4	31
70	Isotopic composition of precipitation in a topographically steep, seasonally snow-dominated watershed and implications of variations from the global meteoric water line. Hydrological Processes, 2016, 30, 4582-4592.	2.6	28
71	Isotopic evidence for lateral flow and diffusive transport, but not sublimation, in a sloped seasonal snowpack, Idaho, USA. Geophysical Research Letters, 2016, 43, 3298-3306.	4.0	27
72	Examining the tectono-stratigraphic architecture, structural geometry, and kinematic evolution of the Himalayan fold-thrust belt, Kumaun, northwest India. Lithosphere, 2019, 11, 414-435.	1.4	23

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73	Climate, dust, and fire across the Eocene-Oligocene transition, Patagonia. Geology, 2015, 43, 567-570.	4.4	22
74	Strontium isotope zoning in garnet: implications for metamorphic matrix equilibration, geochronology and phase equilibrium modelling. Journal of Metamorphic Geology, 2013, 31, 437-452.	3.4	19
75	Eoceneâ€“Oligocene latitudinal climate gradients in North America inferred from stable isotope ratios in perissodactyl tooth enamel. Palaeogeography, Palaeoclimatology, Palaeoecology, 2015, 417, 561-568.	2.3	19
76	Caught in the act: A case study on microscopic scale physicochemical effects of fossilization on stable isotopic composition of bone. Geochimica Et Cosmochimica Acta, 2020, 268, 277-295.	3.9	16
77	Assessing <i>Pâ€T</i> variability in mÃ©lange blocks from the Catalina Schist: Is there differential movement at the subduction interface?. Journal of Metamorphic Geology, 2021, 39, 271-295.	3.4	15
78	Patagonian Aridification at the Onset of the Midâ€Miocene Climatic Optimum. Paleoceanography and Paleoclimatology, 2020, 35, e2020PA003956.	2.9	14
79	Biostratigraphy and paleoclimatology of the Eocene-Oligocene boundary section at Toadstool Park, northwestern Nebraska, USA. , 2009, , .		13
80	A new acaremyid rodent (Caviomorpha, Octodontoidea) from Scarritt Pocket, Deseadan (late) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462	1.0	13
81	Distributed ductile thinning during thrust emplacement: A commonly overlooked exhumation mechanism. Geology, 2020, 48, 368-373.	4.4	13
82	Timescales of Partial Melting and Melt Crystallization in the Eastern Himalayan Orogen: Insights From Zircon Petrochronology. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009539.	2.5	13
83	Determining the population affinity of an unprovenienced human skull for repatriation. Journal of Archaeological Science: Reports, 2017, 12, 384-394.	0.5	12
84	Stable isotopes of fossil teeth corroborate key general circulation model predictions for the Last Glacial Maximum in North America. Geophysical Research Letters, 2010, 37, .	4.0	11
85	Backarc Lithospheric Thickness and Serpentine Stability Control Slabâ€Mantle Coupling Depths in Subduction Zones. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009304.	2.5	10
86	Insights on the controls on floodplain-dominated fluvial successions: a perspective from the Earlyâ€“Middle Miocene Santa Cruz Formation in RÃo ChalÃa (Patagonia, Argentina). Journal of the Geological Society, 2021, 178, .	2.1	9
87	Stable isotopes in large herbivore tooth enamel capture a mid-Miocene precipitation spike in the interior Pacific Northwest. Palaeogeography, Palaeoclimatology, Palaeoecology, 2018, 495, 1-12.	2.3	7
88	Stable isotope compositions of herbivore teeth indicate climatic stability leading into the mid-Miocene Climatic Optimum, in Idaho, U.S.A. Palaeogeography, Palaeoclimatology, Palaeoecology, 2020, 546, 109610.	2.3	7
89	A MÃ©lange of Subduction Ages: Constraints on the Timescale of Shear Zone Development and Underplating at the Subduction Interface, Catalina Schist (CA, USA). Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009790.	2.5	7
90	Late Cretaceous Metamorphism and Anatexis of the Gangdese Magmatic Arc, South Tibet: Implications for Thickening and Differentiation of Juvenile Crust. Journal of Petrology, 2022, 63, .	2.8	7

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91	Late Cretaceous hydrous melting and reworking of juvenile lower crust of the eastern Gangdese magmatic arc, southern Tibet. Gondwana Research, 2022, 104, 112-125.	6.0	6
92	Thermometry and Microstructural Analysis Imply Protracted Extensional Exhumation of the Tso Morari UHP Nappe, Northwestern Himalaya: Implications for Models of UHP Exhumation. Tectonics, 2020, 39, e2020TC006482.	2.8	5
93	Thermal regime of the lower crust in the eastern Khondalite Belt, North China Craton, constrained by Zr-in-rutile thermometry mapping. Precambrian Research, 2022, 377, 106720.	2.7	5
94	Reply to Freeman et al.: Carbon isotope discrimination by C3 plants. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, .	7.1	4
95	4. Diffusion: Obstacles and Opportunities in Petrochronology. , 2017, , 103-152.		2
96	The interpretability of stable hydrogen isotopes in modern herbivore tooth enamel. Geochimica Et Cosmochimica Acta, 2020, 270, 84-94.	3.9	2
97	No Correction of Terrestrial C3-Plant Carbon Isotope Compositions for PCO2. The Paleontological Society Special Publications, 2014, 13, 42-42.	0.0	1
98	Apatite: Following the movements of ancient humans and mastodons. American Mineralogist, 2018, 103, 324-325.	1.9	0
99	Acceptance of the Dana Medal of the Mineralogical Society of America for 2019. American Mineralogist, 2020, 105, 768-769.	1.9	0