Peter Reiners

List of Publications by Year
in descending order

113 papers	10,351 citations	34105 52 h-index	32842 100 g-index
116 all docs	116 docs citations	116 times ranked	6026 citing authors

#	Article	IF	Citations
1	Hydrothermal events in the Linzizong Group: Implications for Paleogene exhumation and paleoaltimetry of the southern Tibetan Plateau. Earth and Planetary Science Letters, 2022, 583, 117390.	4.4	6
2	Kryptonâ€81 Dating Constrains Timing of Deep Groundwater Flow Activation. Geophysical Research Letters, 2022, 49, .	4.0	6
3	Rapid erosion of the central Transantarctic Mountains at the Eocene-Oligocene transition: Evidence from skewed (U-Th)/He date distributions near Beardmore Glacier. Earth and Planetary Science Letters, 2021, 567, 117009.	4.4	15
4	Early Mesoproterozoic evolution of midcontinental Laurentia: Defining the geon 14 Baraboo orogeny. Geoscience Frontiers, 2021, 12, 101174.	8.4	18
5	(Uâ€Th)/He and ⁴He/³He Thermochronology of Secondary Oxides in Faults and Fractures: A Regional Perspective From Southeastern Arizona. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009905.	2.5	1
6	Thermochronologic perspectives on the deep-time evolution of the deep biosphere. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	11
7	The relationships between tectonics, climate and exhumation in the Central Andes (18â€“36Â°S): Evidence from low-temperature thermochronology. Earth-Science Reviews, 2020, 210, 103276.	9.1	31
8	The thermochronologic record of erosion and magmatism in the Canyonlands region of the Colorado Plateau. Numerische Mathematik, 2019, 319, 339-380.	1.4	21
9	Annealing kinetics of radiation damage in zircon. Geochimica Et Cosmochimica Acta, 2019, 249, 225-246.	3.9	67
10	Bayesian Markov-Chain Monte Carlo Inversion of Low-Temperature Thermochronology Around Two 8 â^' 10 m Wide Columbia River Flood Basalt Dikes. Frontiers in Earth Science, 2019, 7, .	1.8	15
11	Multiple episodes of fast exhumation since Cretaceous in southeast Tibet, revealed by low-temperature thermochronology. Earth and Planetary Science Letters, 2018, 490, 62-76.	4.4	118
12	Extraterrestrial dust, the marine lithologic record, and global biogeochemical cycles. Geology, 2018, 46, 863-866.	4.4	14
13	Thermochronology of sandstone-hosted secondary Fe- and Mn-oxides near Moab, Utah: Record of paleoâ€“fluid flow along a fault. Bulletin of the Geological Society of America, 2018, 130, 93-113.	3.3	15
14	Rapid Oligocene to Early Miocene Extension Along the Grant Range Detachment System, Nevada, USA: Insights From Multipart Cooling Histories of Footwall Rocks. Tectonics, 2018, 37, 4752-4779.	2.8	15
15	Toward Robust Interpretation of Lowâ€Temperature Thermochronometers in Magmatic Terranes. Geochemistry, Geophysics, Geosystems, 2018, 19, 3739-3763.	2.5	29
16	Error Propagation in the Derivation of Noble Gas Diffusion Parameters for Minerals From Step Heating Experiments. Geochemistry, Geophysics, Geosystems, 2018, 19, 3706-3720.	2.5	4
17	Unprecedented ³⁴Sâ€enrichment of pyrite formed following microbial sulfate reduction in fractured crystalline rocks. Geobiology, 2018, 16, 556-574.	2.4	34
18	Single-crystal hematite (Uâ€“Th)/He dates and fluid inclusions document widespread Cryogenian sand injection in crystalline basement. Earth and Planetary Science Letters, 2018, 500, 145-155.	4.4	26

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19	Thermochronometric and textural evidence for seismicity via asperity flash heating on exhumed hematite fault mirrors, Wasatch fault zone, UT, USA. Earth and Planetary Science Letters, 2017, 471, 85-93.	4.4	32
20	Reconciling regional continuity with local variability in structure, uplift and exhumation of the Timor orogen. Gondwana Research, 2017, 49, 364-386.	6.0	10
21	Zircon, titanite, and apatite (Uâ€Th)/He ages and ageâ€eU correlations from the Fennoscandian Shield, southern Sweden. Tectonics, 2017, 36, 1254-1274.	2.8	50
22	Isotope dilution analysis of Ca and Zr in apatite and zircon (U-Th)/He chronometry. Geochemistry, Geophysics, Geosystems, 2016, 17, 1623-1640.	2.5	28
23	Long-term tectonothermal history of Laramide basement from zirconâ€“He age-eU correlations. Earth and Planetary Science Letters, 2016, 453, 119-130.	4.4	55
24	Pulsed exhumation of interior eastern Tibet: Implications for relief generation mechanisms and the origin of high-elevation planation surfaces. Earth and Planetary Science Letters, 2016, 449, 176-185.	4.4	100
25	Effects of inherited cores and magmatic overgrowths on zircon (<scp>U</scp>â€<scp>T</scp>h)/<scp>H</scp>e ages and ageâ€e<scp>U</scp> trends from <scp>G</scp>reater <scp>H</scp>imalayan sequence rocks, <scp>M</scp>ount <scp>E</scp>verest region, <scp>T</scp>ibet. Geochemistry, Geophysics, Geosystems, 2015, 16, 2499-2507.	2.5	26
26	Linking hematite (U-Th)/He dating with the microtextural record of seismicity in the Wasatch fault damage zone, Utah, USA. Geology, 2015, 43, 771-774.	4.4	48
27	Synorogenic extension localized by upper-crustal thickening: An example from the Late Cretaceous Nevadaplano. Geology, 2015, 43, 351-354.	4.4	24
28	Hematite and Mn oxide (U-Th)/He dates from the Buckskin-Rawhide detachment system, western Arizona: Gaining insights into hematite (U-Th)/He systematics. Numerische Mathematik, 2014, 314, 1373-1435.	1.4	39
29	Detrital zircon U-Pb-He double dating: A method of quantifying long- and short-term exhumation rates in collisional orogens. Science China Earth Sciences, 2014, 57, 2702-2711.	5.2	4
30	Effects of Uâ€“Th-rich grain boundary phases on apatite helium ages. Chemical Geology, 2014, 390, 135-151.	3.3	92
31	Lowâ€temperature thermochronologic record of Eocene migmatite dome emplacement and late Cenozoic landscape development, Shuswap core complex, British Columbia. Tectonics, 2014, 33, 1616-1635.	2.8	11
32	Variable exhumation rates and variable displacement rates: Documenting recent slowing of Himalayan shortening in western Bhutan. Earth and Planetary Science Letters, 2014, 386, 161-174.	4.4	75
33	(U-Th)/He geochronology and chemical compositions of diagenetic cement, concretions, and fracture-filling oxide minerals in Mesozoic sandstones of the Colorado Plateau. Bulletin of the Geological Society of America, 2014, 126, 1363-1383.	3.3	40
34	Interpreting dateâ€“eU correlations in zircon (U-Th)/He datasets: A case study from the Longmen Shan, China. Earth and Planetary Science Letters, 2014, 403, 328-339.	4.4	72
35	Topographic relief driven by variations in surface rock density. Nature Geoscience, 2014, 7, 534-540.	12.9	66
36	Resolving spatial heterogeneities in exhumation and surface uplift in Timor-Leste: Constraints on deformation processes in young orogens. Tectonics, 2014, 33, 1089-1112.	2.8	21

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37	Helium diffusion in natural zircon: Radiation damage, anisotropy, and the interpretation of zircon (U-Th)/He thermochronology. Numerische Mathematik, 2013, 313, 145-198.	1.4	516
38	Geometric analysis of radiation damage connectivity in zircon, and its implications for helium diffusion. American Mineralogist, 2013, 98, 350-360.	1.9	69
39	The contribution of glacial erosion to shaping the hidden landscape of East Antarctica. Nature Geoscience, 2013, 6, 203-207.	12.9	70
40	(Uâ€“Th)/He ages of phosphates from St. SÃ©verin LL6 chondrite. Geochimica Et Cosmochimica Acta, 2013, 100, 282-296.	3.9	13
41	Thermochronologic evidence for plateau formation in central Tibet by 45 Ma. Geology, 2012, 40, 187-190.	4.4	212
42	Generation of Forsteritic Olivine (Fo99Â·8) by Subsolidus Oxidation in Basaltic Flows. Journal of Petrology, 2012, 53, 971-984.	2.8	32
43	Seismicity and the strange rubbing boulders of the Atacama Desert, northern Chile. Geology, 2012, 40, 851-854.	4.4	20
44	From crucible to graben in 2.3 Ma: A high-resolution geochronological study of porphyry life cycles, Boyongan-Bayugo copper-gold deposits, Philippines. Geology, 2012, 40, 471-474.	4.4	43
45	Low-temperature thermochronology of the northern Rocky Mountains, western U.S.A.. Numerische Mathematik, 2012, 312, 145-212.	1.4	47
46	Paleotopography in the western U.S. Cordillera. Numerische Mathematik, 2012, 312, 81-89.	1.4	1
47	Lithosphere today .... Nature, 2011, 472, 420-421.	27.8	1
48	Glaciation as a destructive and constructive control on mountain building. Nature, 2010, 467, 313-317.	27.8	219
49	Slab window migration and terrane accretion preserved by lowâ€temperature thermochronology of a magmatic arc, northern Antarctic Peninsula. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	25
50	Extremely low longâ€term erosion rates around the Gamburtsev Mountains in interior East Antarctica. Geophysical Research Letters, 2010, 37, .	4.0	46
51	Unroofing history of Alabama and Poverty Hills basement blocks, Owens Valley, California, from apatite (Uâ€“Th)/He thermochronology. International Geology Review, 2009, 51, 1034-1050.	2.1	5
52	Climate control on Quaternary coal fires and landscape evolution, Powder River basin, Wyoming and Montana. Geology, 2009, 37, 255-258.	4.4	16
53	Eocene Tibetan plateau remnants preserved in the northwest Himalaya. Nature Geoscience, 2009, 2, 364-368.	12.9	98
54	Eocene arc-continent collision and crustal consolidation in Kamchatka, Russian Far East. Numerische Mathematik, 2009, 309, 333-396.	1.4	57

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55	Nonmonotonic thermal histories and contrasting kinetics of multiple thermochronometers. Geochimica Et Cosmochimica Acta, 2009, 73, 3612-3629.	3.9	50
56	Thermochronology and landscape evolution. Physics Today, 2009, 62, 31-36.	0.3	68
57	Application of the (Uâ€Th)/He Thermochronometry to the Tectonoâ€Thermal Evolution of Sedimentary Basinâ€"A Case History of Well KQ1 in the Tarim Basin. Chinese Journal of Geophysics, 2009, 52, 803-813.	0.2	2
58	Multimillion year thermal history of a porphyry copper deposit: application of Uâ€"Pb, 40Ar/39Ar and (Uâ€"Th)/He chronometers, Bajo de la Alumbrera copperâ€"gold deposit, Argentina. Mineralium Deposita, 2008, 43, 295-314.	4.1	71
59	Thermochronological evidence for Mio-Pliocene late orogenic extension in the north-eastern Albanides (Albania). Terra Nova, 2008, 20, 180-187.	2.1	17
60	Temporalâ€"compositional trends over short and long time-scales in basalts of the Big Pine Volcanic Field, California. Earth and Planetary Science Letters, 2008, 269, 140-154.	4.4	59
61	Two-phase Neogene extension in the northwestern Basin and Range recorded in a single thermochronology sample. Geology, 2008, 36, 631.	4.4	27
62	New Insights into Crustal Contributions to Large-volume Rhyolite Generation in the Mid-Tertiary Sierra Madre Occidental Province, Mexico, Revealed by Uâ€"Pb Geochronology. Journal of Petrology, 2008, 49, 47-77.	2.8	101
63	Uplift of the western margin of the Andean plateau revealed from canyon incision history, southern Peru. Geology, 2007, 35, 523.	4.4	142
64	Thermochronologic Approaches to Paleotopography. Reviews in Mineralogy and Geochemistry, 2007, 66, 243-267.	4.8	46
65	Dating young basalt eruptions by (U-Th)/He on xenolithic zircons. Geology, 2007, 35, 17.	4.4	36
66	Conodont (Uâ€"Th)/He thermochronology: Initial results, potential, and problems. Earth and Planetary Science Letters, 2007, 258, 569-580.	4.4	18
67	High-temperature Mars-to-Earth transfer of meteorite ALH84001. Earth and Planetary Science Letters, 2007, 260, 72-85.	4.4	24
68	Jurassic-to-present thermal history of the central High Atlas (Morocco) assessed by low-temperature thermochronology. Terra Nova, 2007, 19, 58-64.	2.1	49
69	Late Mesozoic and Cenozoic thermotectonic evolution along a transect from the north China craton through the Qinling orogen into the Yangtze craton, central China. Tectonics, 2006, 25, n/a-n/a.	2.8	101
70	(Uâ€"Th)/He dating of volcanic phenocrysts with high-Uâ€"Th inclusions, Jemez Volcanic Field, New Mexico. Chemical Geology, 2006, 227, 223-235.	3.3	23
71	Cenozoic exhumation of the northern Sierra Nevada, California, from (U-Th)/He thermochronology. Bulletin of the Geological Society of America, 2006, 118, 1481-1488.	3.3	83
72	USING THERMOCHRONOLOGY TO UNDERSTAND OROGENIC EROSION. Annual Review of Earth and Planetary Sciences, 2006, 34, 419-466.	11.0	765

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73	Low temperature thermochronology of the southern East Greenland continental margin: Evidence from apatite (Uâ€“Th)/He and fission track analysis and implications for intermethod calibration. Lithos, 2006, 92, 117-136.	1.4	36
74	Cenozoic Tectonic Evolution of the Basin and Range Province in Northwestern Nevada. Numerische Mathematik, 2006, 306, 616-654.	1.4	79
75	Past, Present, and Future of Thermochronology. Reviews in Mineralogy and Geochemistry, 2005, 58, 1-18.	4.8	182
76	(U-Th)/(He-Pb) double dating of detrital zircons. Numerische Mathematik, 2005, 305, 259-311.	1.4	148
77	Zircon (U-Th)/He Thermochronometry. Reviews in Mineralogy and Geochemistry, 2005, 58, 151-179.	4.8	368
78	U-Th zonation-dependent alpha-ejection in (U-Th)/He chronometry. Geochimica Et Cosmochimica Acta, 2005, 69, 3349-3365.	3.9	329
79	Heâ€“Pb double dating of detrital zircons from the Ganges and Indus Rivers: Implication for quantifying sediment recycling and provenance studies. Earth and Planetary Science Letters, 2005, 237, 402-432.	4.4	135
80	Relief evolution in northern Corsica (western Mediterranean): Constraints on uplift and erosion on long-term and short-term timescales. Journal of Geophysical Research, 2005, 110, .	3.3	20
81	Incomplete retention of radiation damage in zircon from Sri Lanka. American Mineralogist, 2004, 89, 219-231.	1.9	193
82	Origin of the Blue Ridge escarpment along the passive margin of Eastern North America. Basin Research, 2004, 16, 41-63.	2.7	73
83	Rates of sediment recycling beneath the Acapulco trench: Constraints from (U-Th)/He thermochronology. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	31
84	Zircon (U-Th)/He thermochronometry: He diffusion and comparisons with 40Ar/39Ar dating. Geochimica Et Cosmochimica Acta, 2004, 68, 1857-1887.	3.9	599
85	Length scales of mantle heterogeneities and their relationship to ocean island basalt geochemistry. Geochimica Et Cosmochimica Acta, 2004, 68, 345-360.	3.9	125
86	Age and temperature of shock metamorphism of Martian meteorite Los Angeles from (U-Th)/He thermochronometry. Geology, 2004, 32, 677.	4.4	20
87	Long-term glacial erosion of active mountain belts: Example of the Chugachâ€“St. Elias Range, Alaska. Geology, 2004, 32, 501.	4.4	138
88	Late Cretaceous-Cenozoic exhumation history of Tiantangzhai region of Dabieshan Orogen: Constraints from (U-Th)/He and fission track analysis. Science Bulletin, 2003, 48, 1151-1156.	1.7	24
89	Coupled spatial variations in precipitation and long-term erosion rates across the Washington Cascades. Nature, 2003, 426, 645-647.	27.8	276
90	Post-orogenic evolution of the Dabie Shan, eastern China, from (U-Th)/He and fission-track thermochronology. Numerische Mathematik, 2003, 303, 489-518.	1.4	170

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91	Combined single-grain (U-Th)/He and U/Pb dating of detrital zircons from the Navajo Sandstone, Utah. Geology, 2003, 31, 761.	4.4	163
92	Influence of wildfires on apatite and zircon (U-Th)/He ages. Geology, 2003, 31, 1025.	4.4	58
93	Timing Constraints of Gold Mineralization along the Carlin Trend Utilizing Apatite Fission-Track, 40Ar/39Ar, and Apatite (U-Th)/He Methods. Economic Geology, 2003, 98, 1159-1171.	3.8	30
94	Late Miocene exhumation and uplift of the Washington Cascade Range. Geology, 2002, 30, 767.	4.4	94
95	Laramide exhumation of the Bighorn Mountains, Wyoming: An apatite (U-Th)/He thermochronology study. Geology, 2002, 30, 27.	4.4	78
96	(U-Th)/He chronometry experiences a renaissance. Eos, 2002, 83, 21.	0.1	25
97	He diffusion and (Uâ€“Th)/He thermochronometry of zircon: initial results from Fish Canyon Tuff and Gold Butte. Tectonophysics, 2002, 349, 297-308.	2.2	271
98	Late Cenozoic evolution of the eastern margin of the Tibetan Plateau: Inferences from40Ar/39Ar and (U-Th)/He thermochronology. Tectonics, 2002, 21, 1-1-1-20.	2.8	484
99	The pMELTS: A revision of MELTS for improved calculation of phase relations and major element partitioning related to partial melting of the mantle to 3 GPa. Geochemistry, Geophysics, Geosystems, 2002, 3, 1-35.	2.5	670
100	Temporal-compositional trends in intraplate basalt eruptions: Implications for mantle heterogeneity and melting processes. Geochemistry, Geophysics, Geosystems, 2002, 3, 1-30.	2.5	71
101	Influence of crystal size on apatite (Uâ€“Th)/He thermochronology: an example from the Bighorn Mountains, Wyoming. Earth and Planetary Science Letters, 2001, 188, 413-420.	4.4	278
102	Geochronological Constraints on the Post-Collisional (150-75 Ma) Thermal Extension in the Dabieshan Orogen, Central China. Gondwana Research, 2001, 4, 829-831.	6.0	2
103	Young basalts of the central Washington Cascades, flux melting of the mantle, and trace element signatures of primary arc magmas. Contributions To Mineralogy and Petrology, 2000, 138, 249-264.	3.1	64
104	Helium and argon thermochronometry of the Gold Butte block, south Virgin Mountains, Nevada. Earth and Planetary Science Letters, 2000, 178, 315-326.	4.4	85
105	Overlapping volcanoes: The origin of Hilo Ridge, Hawaii. Geology, 2000, 28, 547-550.	4.4	3
106	Structural and petrologic evolution of the Lihue basin and eastern Kauai, Hawaii. Bulletin of the Geological Society of America, 1999, 111, 674-685.	3.3	20
107	Helium diffusion and (Uâ€“Th)/He thermochronometry of titanite. Geochimica Et Cosmochimica Acta, 1999, 63, 3845-3859.	3.9	158
108	An Apparatus for High-Precision Helium Diffusion Measurements from Minerals. Analytical Chemistry, 1999, 71, 2059-2061.	6.5	55

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109	Reactive Melt Transport in the Mantle and Geochemical Signatures of Mantle-derived Magmas. Journal of Petrology, 1998, 39, 1039-1061.	2.8	54
110	Evidence for two shield volcanoes exposed on the island of Kauai, Hawaii. Geology, 1997, 25, 811.	4.4	20
111	Evidence for Multiple Mechanisms of Crustal Contamination of Magma from Compositionally Zoned Plutons and Associated Ultramafic Intrusions of the Alaska Range. Journal of Petrology, 1996, 37, 261-292.	2.8	40
112	Assimilation of felsic crust by basaltic magma: Thermal limits and extents of crustal contamination of mantle-derived magmas. Geology, 1995, 23, 563.	4.4	185
113	Shocked Quartz at the Triassic-Jurassic Boundary in Italy. Science, 1992, 255, 443-446.	12.6	86