Bradley R Hacker

List of Publications by Year
in descending order

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91	11,919	46918 47	48187 88
papers	citations	h-index	g-index

92	92	92	6324
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	U/Pb zircon ages constrain the architecture of the ultrahigh-pressure Qinlingâ€“Dabie Orogen, China. Earth and Planetary Science Letters, 1998, 161, 215-230.	1.8	877
2	Tectonics of the Qinling (Central China): tectonostratigraphy, geochronology, and deformation history. Tectonophysics, 2003, 366, 1-53.	0.9	768
3	Subduction factory 2. Are intermediate-depth earthquakes in subducting slabs linked to metamorphic dehydration reactions?. Journal of Geophysical Research, 2003, 108, .	3.3	761
4	Subduction factory 1. Theoretical mineralogy, densities, seismic wave speeds, and H2O contents. Journal of Geophysical Research, 2003, 108, .	3.3	714
5	Subduction factory: 4. Depth-dependent flux of H₂O from subducting slabs worldwide. Journal of Geophysical Research, 2011, 116, .	3.3	702
6	Exhumation of ultrahigh-pressure continental crust in east central China: Late Triassic-Early Jurassic tectonic unroofing. Journal of Geophysical Research, 2000, 105, 13339-13364.	3.3	608
7	Differentiation of the continental crust by relamination. Earth and Planetary Science Letters, 2011, 307, 501-516.	1.8	414
8	Fluid flow in subduction zones: The role of solid rheology and compaction pressure. Earth and Planetary Science Letters, 2014, 401, 261-274.	1.8	391
9	H₂O subduction beyond arcs. Geochemistry, Geophysics, Geosystems, 2008, 9, .	1.0	384
10	Laser-ablation split-stream ICP petrochronology. Chemical Geology, 2013, 345, 99-112.	1.4	373
11	Diapirs as the source of the sediment signature in arc lavas. Nature Geoscience, 2011, 4, 641-646.	5.4	330
12	Continental Lower Crust. Annual Review of Earth and Planetary Sciences, 2015, 43, 167-205.	4.6	260
13	High-temperature geochronology constraints on the tectonic history and architecture of the ultrahigh-pressure Dabie-Sulu Orogen. Tectonics, 2006, 25, n/a-n/a.	1.3	257
14	Evolution of the Kangmar Dome, southern Tibet: Structural, petrologic, and thermochronologic constraints. Tectonics, 2000, 19, 872-895.	1.3	256
15	Subduction Factory 3: An Excel worksheet and macro for calculating the densities, seismic wave speeds, and H2O contents of minerals and rocks at pressure and temperature. Geochemistry, Geophysics, Geosystems, 2004, 5, n/a-n/a.	1.0	246
16	High-temperature deformation during continental-margin subduction & exhumation: The ultrahigh-pressure Western Gneiss Region of Norway. Tectonophysics, 2010, 480, 149-171.	0.9	211
17	Subduction, collision and exhumation in the ultrahigh-pressure Qinling-Dabie orogen. Geological Society Special Publication, 2004, 226, 157-175.	0.8	172
18	Near-Ultrahigh Pressure Processing of Continental Crust: Miocene Crustal Xenoliths from the Pamir. Journal of Petrology, 2005, 46, 1661-1687.	1.1	162

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19	Thermal structure due to solid-state flow in the mantle wedge beneath arcs. Geophysical Monograph Series, 2003, , 293-311.	0.1	152
20	Coupled Luâ€"Hf and Smâ€"Nd geochronology constrains prograde and exhumation histories of high- and ultrahigh-pressure eclogites from western Norway. Chemical Geology, 2007, 242, 137-154.	1.4	152
21	Thermal structure of the Costa Rica â€" Nicaragua subduction zone. Physics of the Earth and Planetary Interiors, 2005, 149, 187-200.	0.7	150
22	Thermalâ€"petrological controls on the location of earthquakes within subducting plates. Earth and Planetary Science Letters, 2013, 369-370, 178-187.	1.8	145
23	Size and exhumation rate of ultrahigh-pressure terranes linked to orogenic stage. Earth and Planetary Science Letters, 2012, 321-322, 115-120.	1.8	128
24	Building the Pamirs: The view from the underside. Geology, 2003, 31, 849.	2.0	123
25	Arc-parallel flow within the mantle wedge: Evidence from the accreted Talkeetna arc, south central Alaska. Journal of Geophysical Research, 2003, 108, .	3.3	122
26	Paradigms, new and old, for ultrahigh-pressure tectonism. Tectonophysics, 2013, 603, 79-88.	0.9	122
27	Cenozoic deep crust in the Pamir. Earth and Planetary Science Letters, 2011, 312, 411-421.	1.8	117
28	A MATLAB toolbox and <scp>E</scp>xcel workbook for calculating the densities, seismic wave speeds, and major element composition of minerals and rocks at pressure and temperature. Geochemistry, Geophysics, Geosystems, 2016, 17, 616-624.	1.0	115
29	Continental collisions and the creation of ultrahigh-pressure terranes: Petrology and thermochronology of nappes in the central Scandinavian Caledonides. Bulletin of the Geological Society of America, 2005, 117, 117.	1.6	112
30	When did the ultrahigh-pressure rocks reach the surface? A 207Pb/206Pb zircon, 40Ar/39Ar white mica, Si-in-white mica, single-grain provenance study of Dabie Shan synorogenic foreland sediments. Chemical Geology, 2003, 197, 87-110.	1.4	111
31	The giant Shakhdara migmatitic gneiss dome, Pamir, Indiaâ€Asia collision zone: 2. Timing of dome formation. Tectonics, 2013, 32, 1404-1431.	1.3	106
32	Origin of crossâ€chain geochemical variation in Quaternary lavas from the northern Izu arc: Using a quantitative mass balance approach to identify mantle sources and mantle wedge processes. Geochemistry, Geophysics, Geosystems, 2010, 11, .	1.0	99
33	Slow subduction of a thick ultrahighâ€pressure terrane. Tectonics, 2009, 28, .	1.3	88
34	The Hindu Kush Seismic Zone as a Paradigm for the Creation of Ultrahighâ€Pressure Diamondâ€•and Coesiteâ€Bearing Continental Rocks. Journal of Geology, 2001, 109, 143-153.	0.7	82
35	Mafic Highâ€Pressure Rocks Are Preferentially Exhumed From Warm Subduction Settings. Geochemistry, Geophysics, Geosystems, 2018, 19, 2934-2961.	1.0	78
36	Arc Basalt Simulator version 2, a simulation for slab dehydration and fluidâ€fluxed mantle melting for arc basalts: Modeling scheme and application. Geochemistry, Geophysics, Geosystems, 2009, 10, .	1.0	76

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37	Reconstruction of the Talkeetna intraoceanic arc of Alaska through thermobarometry. Journal of Geophysical Research, 2008, 113, .	3.3	75
38	Building the Pamir-Tibetan Plateau-Crustal stacking, extensional collapse, and lateral extrusion in the Central Pamir: 1. Geometry and kinematics. Tectonics, 2017, 36, 342-384.	1.3	75
39	Building the Pamir-Tibetan Plateau-Crustal stacking, extensional collapse, and lateral extrusion in the Central Pamir: 2. Timing and rates. Tectonics, 2017, 36, 385-419.	1.3	74
40	Monazite trace-element and isotopic signatures of (ultra)high-pressure metamorphism: Examples from the Western Gneiss Region, Norway. Chemical Geology, 2015, 409, 99-111.	1.4	70
41	Prograde amphibolite facies to ultrahigh-pressure transition along Nordfjord, western Norway: Implications for exhumation tectonics. Tectonics, 2007, 26, n/a-n/a.	1.3	69
42	Focused radiogenic heating of middle crust caused ultrahigh temperatures in southern Madagascar. Tectonics, 2016, 35, 293-314.	1.3	69
43	Formation, subduction, and exhumation of Penninic oceanic crust in the Eastern Alps: time constraints from 40Ar/39Ar geochronology. Tectonophysics, 2004, 394, 155-170.	0.9	68
44	Intermediate to felsic middle crust in the accreted Talkeetna arc, the Alaska Peninsula and Kodiak Island, Alaska: An analogue for lowâ€velocity middle crust in modern arcs. Tectonics, 2010, 29, .	1.3	59
45	Brittle/ductile and plastic/cataclastic transitions in experimentally deformed and metamorphosed amphibolite. Geophysical Monograph Series, 1990, , 127-147.	0.1	58
46	Reactivation history of the North Anatolian fault zone based on calcite age-strain analyses. Geology, 2019, 47, 465-469.	2.0	55
47	Phase transformations of continental crust during subduction and exhumation: Western Gneiss Region, Norway. European Journal of Mineralogy, 2010, 21, 1097-1118.	0.4	54
48	Seismic anisotropy of the crust: electron-backscatter diffraction measurements from the Basin and Range. Geophysical Journal International, 2013, 195, 1211-1229.	1.0	47
49	Distinguishing eclogite from peridotite: EBSD-based calculations of seismic velocities. Geophysical Journal International, 2013, 193, 489-505.	1.0	46
50	Monazite response to ultrahigh-pressure subduction from Uâ€"Pb dating by laser ablation split stream. Chemical Geology, 2015, 409, 28-41.	1.4	46
51	Metamorphic records of multiple seismic cycles during subduction. Science Advances, 2018, 4, eaaq0234.	4.7	45
52	High-pressure deformation of calcite marble and its transformation to aragonite under non-hydrostatic conditions. Journal of Structural Geology, 1993, 15, 1207-1222.	1.0	44
53	Physical state of Himalayan crust and uppermost mantle: Constraints from seismic attenuation and velocity tomography. Journal of Geophysical Research: Solid Earth, 2014, 119, 567-580.	1.4	43
54	Ultrahighâ€temperature osumilite gneisses in southern Madagascar record combined heat advection and high rates of radiogenic heat production in a longâ€lived highâ€<i>T</i> orogen. Journal of Metamorphic Geology, 2018, 36, 855-880.	1.6	42

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55	Kinematics and vorticity in Kangmar Dome, southern Tibet: Testing midcrustal channel flow models for the Himalaya. Tectonics, 2010, 29, n/a-n/a.	1.3	40
56	<scp>REE</scp> partitioning between monazite and garnet: Implications for petrochronology. Journal of Metamorphic Geology, 2019, 37, 227-237.	1.6	40
57	Diagenesis and fault valve seismicity of crustal faults. Journal of Geophysical Research, 1997, 102, 24459-24467.	3.3	39
58	Age and significance of felsic dikes from the UHP western gneiss region. Tectonics, 2014, 33, 2342-2360.	1.3	39
59	Ascent of the ultrahigh-pressure Western Gneiss Region, Norway. , 2007, , .		38
60	Building the Pamirâ€Tibet Plateauâ€"Crustal stacking, extensional collapse, and lateral extrusion in the Pamir: 3. Thermobarometry and petrochronology of deep Asian crust. Tectonics, 2017, 36, 1743-1766.	1.3	38
61	Himalayan gneiss dome formation in the middle crust and exhumation by normal faulting: New geochronology of Gianbul dome, northwestern India. Bulletin of the Geological Society of America, 2015, 127, 162-180.	1.6	37
62	Fluid-driven resetting of titanite following ultrahigh-temperature metamorphism in southern Madagascar. Chemical Geology, 2019, 504, 38-52.	1.4	37
63	The relationship of intermediate- and deep-focus seismicity to the hydration and dehydration of subducting slabs. Earth and Planetary Science Letters, 2012, 349-350, 153-160.	1.8	36
64	Crustal exhumation of the Western Gneiss Region UHP terrane, Norway: 40Ar/39Ar thermochronology and fault-slip analysis. Tectonophysics, 2013, 608, 1159-1179.	0.9	36
65	Exhuming Norwegian ultrahighâ€pressure rocks: Overprinting extensional structures and the role of the Nordfjordâ€Sogn Detachment Zone. Tectonics, 2007, 26, .	1.3	35
66	Subduction Factory 5: Unusually low Poisson's ratios in subduction zones from elastic anisotropy of peridotite. Journal of Geophysical Research, 2012, 117, .	3.3	35
67	Seismic signatures of a hydrated mantle wedge from antigorite crystal-preferred orientation (CPO). Earth and Planetary Science Letters, 2013, 375, 395-407.	1.8	35
68	Insights into (U)HP metamorphism of the Western Gneiss Region, Norway: A high-spatial resolution and high-precision zircon study. Chemical Geology, 2015, 414, 138-155.	1.4	34
69	Localized ductile shear below the seismogenic zone: Structural analysis of an exhumed strikeâ€slip fault, Austrian Alps. Journal of Geophysical Research, 2007, 112, .	3.3	33
70	Predicted velocity and density structure of the exhuming Papua New Guinea ultrahigh-pressure terrane. Journal of Geophysical Research, 2011, 116, .	3.3	33
71	Doming in compressional orogenic settings: New geochronological constraints from the NW Himalaya. Tectonics, 2006, 25, n/a-n/a.	1.3	30
72	Interpreting titanite Uâ€"Pb dates and Zr thermobarometry in high-grade rocks: empirical constraints on elemental diffusivities of Pb, Al, Fe, Zr, Nb, and Ce. Contributions To Mineralogy and Petrology, 2019, 174, 1.	1.2	27

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73	The Alichur Dome, South Pamir, Western Indiaâ€“Asia Collisional Zone: Detailing the Neogene Shakhdaraâ€“Alichur Synâ€collisional Gneissâ€Dome Complex and Connection to Lithospheric Processes. Tectonics, 2020, 39, e2019TC005735.	1.3	27
74	Multi-step TIMS and CA-TIMS monazite Uâ€“Pb geochronology. Chemical Geology, 2012, 312-313, 58-73.	1.4	26
75	The calcite â†' aragonite transformation in low-Mg marble: Equilibrium relations, transformation mechanisms, and rates. Journal of Geophysical Research, 2005, 110, .	3.3	25
76	Direct observation of fault zone structure at the brittle-ductile transition along the Salzach-Ennstal-Mariazell-Puchberg fault system, Austrian Alps. Journal of Geophysical Research, 2011, 116, .	3.3	24
77	Petrochronology of Wadi Tayin Metamorphic Sole Metasediment, With Implications for the Thermal and Tectonic Evolution of the Samail Ophiolite (Oman/UAE). Tectonics, 2020, 39, e2020TC006135.	1.3	24
78	Linking titanite Uâ€“Pb dates to coupled deformation and dissolutionâ€“reprecipitation. Contributions To Mineralogy and Petrology, 2022, 177, 1.	1.2	22
79	Strain within the ultrahigh-pressure Western Gneiss region of Norway recorded by quartz CPOs. Geological Society Special Publication, 2010, 335, 663-685.	0.8	21
80	Foundering Triggered by the Collision of India and Asia Captured in Xenoliths. Tectonics, 2017, 36, 1913-1933.	1.3	21
81	Protracted Subduction of the European Hyperextended Margin Revealed by Rutile Uâ€Pb Geochronology Across the Doraâ€Maira Massif (Western Alps). Tectonics, 2022, 41, .	1.3	18
82	Reply to comment by R. Bousquet et al. on â€œSubduction factory: 1. Theoretical mineralogy, densities, seismic wave speeds and H2O contentsâ€. Journal of Geophysical Research, 2005, 110, .	3.3	11
83	Uâ€Pb dating of interspersed gabbroic magmatism and hydrothermal metamorphism during lower crustal accretion, Vema lithospheric section, Midâ€Atlantic Ridge. Journal of Geophysical Research: Solid Earth, 2015, 120, 2093-2118.	1.4	11
84	Eocene migmatite formation and diachronous burial revealed by petrochronology in NW Himalaya, Zanskar. Journal of Metamorphic Geology, 2020, 38, 655-691.	1.6	11
85	U-Pb zircon and titanite ages from granulites of the Koraput area â€“ Evidence for Columbia, Rodinia and Gondwana from the Eastern Ghats Province, India. Precambrian Research, 2018, 314, 394-413.	1.2	10
86	Finite pattern of Barrovian metamorphic zones: interplay between thermal reequilibration and post-peak deformation during continental collisionâ€”insights from the Svratka dome (Bohemian) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.9	10
87	Assembly and Tectonic Evolution of Continental Lower Crust: Monazite Petrochronology of the Ivreaâ€Verbano Zone (Val Strona di Omegna). Tectonics, 2022, 41, .	1.3	5
88	India (Tethyan Himalaya Series) in Central Myanmar: Implications for the Evolution of the Eastern Himalayan Syntaxis and the Sagaing Transformâ€Fault System. Geophysical Research Letters, 2022, 49, .	1.5	4
89	LinT, a simplified approach to oxygen-isotope thermometry and speedometry of high-grade rocks: An example from ultrahigh-temperature gneisses of southern Madagascar. Geology, 0, , .	2.0	2
90	REE behavior in warm and cold subducting oceanic crust. International Journal of Earth Sciences, 2022, 111, 905-918.	0.9	2

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91	Presentation of the Dana Medal of the Mineralogical Society of America for 2018 to JÃ¶rg Hermann. American Mineralogist, 2019, 104, 623-623.	0.9	0