Patrick J O'brien

List of Publications by Year
in descending order

63	5,598	66343	118850
papers	citations	42 h-index	62 g-index

63	63	63	2360
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-pressure granulites: formation, recovery of peak conditions and implications for tectonics. Journal of Metamorphic Geology, 2003, 21, 3-20.	3.4	509
2	Zircon geochronology and metamorphic evolution of mafic dykes in the Hengshan Complex of northern China: Evidence for late Palaeoproterozoic extension and subsequent high-pressure metamorphism in the North China Craton. Precambrian Research, 2006, 146, 45-67.	2.7	402
3	High-pressure granulites in the Sanggan area, North China craton: metamorphic evolution, P-T paths and geotectonic significance. Journal of Metamorphic Geology, 2002, 20, 741-756.	3.4	356
4	Thermobarometry of phengite-bearing eclogites in the Dabie Mountains of central China. Journal of Metamorphic Geology, 1997, 15, 239-252.	3.4	246
5	Coesite in Himalayan eclogite and implications for models of India-Asia collision. Geology, 2001, 29, 435.	4.4	243
6	Thermobarometry and Geotectonic Significance of High-Pressure Granulites: Examples from the Moldanubian Zone of the Bohemian Massif in Lower Austria. Journal of Petrology, 1993, 34, 427-459.	2.8	208
7	Linking growth episodes of zircon and metamorphic textures to zircon chemistry: an example from the ultrahigh-temperature granulites of Rogaland (SW Norway). Geological Society Special Publication, 2003, 220, 65-81.	1.3	181
8	Zircon ages for high pressure granulites from South Bohemia, Czech Republic, and their connection to Carboniferous high temperature processes. Contributions To Mineralogy and Petrology, 2000, 138, 127-142.	3.1	174
9	Polyphase zircon in ultrahigh-temperature granulites (Rogaland, SW Norway): constraints for Pb diffusion in zircon. Journal of Metamorphic Geology, 2002, 20, 727-740.	3.4	156
10	Garnet growth at high- and ultra-high pressure conditions and the effect of element fractionation on mineral modes and composition. Lithos, 2008, 103, 309-332.	1.4	139
11	Garnet zoning and reaction textures in overprinted eclogites, Bohemian Massif, European variscides: a record of their thermal history during exhumation. Lithos, 1997, 41, 119-133.	1.4	134
12	Diamond and coesite discovered in Saxony-type granulite: Solution to the Variscan garnet peridotite enigma. Geology, 2011, 39, 667-670.	4.4	127
13	The petrology of two distinct granulite types in the Hengshan Mts, China, and tectonic implications. Journal of Asian Earth Sciences, 2005, 24, 615-627.	2.3	122
14	Combined thermodynamic and rare earth element modelling of garnet growth during subduction: Examples from ultrahigh-pressure eclogite of the Western Gneiss Region, Norway. Earth and Planetary Science Letters, 2008, 272, 488-498.	4.4	117
15	The timing of stabilisation and the exhumation rate for ultra-high pressure rocks in the Western Gneiss Region of Norway. Journal of Metamorphic Geology, 2003, 21, 601-612.	3.4	110
16	Tectonometamorphic evolution of the Bohemian Massif: evidence from high pressure metamorphic rocks. Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie, 1993, 82, 531-555.	1.3	99
17	Petrological and Isotopic Studies on Palaeozoic High-pressure Granulites, Gory Sowie Mts, Polish Sudetes. Journal of Petrology, 1997, 38, 433-456.	2.8	97
18	Subduction followed by collision: Alpine and Himalayan examples. Physics of the Earth and Planetary Interiors, 2001, 127, 277-291.	1.9	97

#	Article	IF	Citations
19	Exhumation of early Tertiary, coesite-bearing eclogites from the Pakistan Himalaya. Journal of the Geological Society, 2003, 160, 367-376.	2.1	97
20	Quantification of electron microprobe compositional maps of rock thin sections: an optimized method and examples. Journal of Metamorphic Geology, 2006, 24, 655-668.	3.4	89
21	Coesite micro-inclusions and the U/Pb age of zircons from the Hareidland Eclogite in the Western Gneiss Region of Norway. Lithos, 2003, 67, 181-190.	1.4	87
22	Eclogites with a short-lived granulite facies overprint in the Moldanubian Zone, Czech Republic: petrology, geochemistry and diffusion modelling of garnet zoning. Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie, 1995, 84, 473.	1.3	85
23	Fluid Migration above a Subducted Slabâ€"Constraints on Amount, Pathways and Major Element Mobility from Partially Overprinted Eclogite-facies Rocks (Sesia Zone, Western Alps). Journal of Petrology, 2011, 52, 457-486.	2.8	84
24	The multistage exhumation history of the Kaghan Valley UHP series, NW Himalaya, Pakistan from U-Pb and 40Ar/39Ar ages. European Journal of Mineralogy, 2010, 22, 703-719.	1.3	81
25	The fundamental Variscan problem: high-temperature metamorphism at different depths and high-pressure metamorphism at different temperatures. Geological Society Special Publication, 2000, 179, 369-386.	1.3	79
26	Challenges in highâ€pressure granulite metamorphism in the era of pseudosections: reaction textures, compositional zoning and tectonic interpretation with examples from the Bohemian Massif. Journal of Metamorphic Geology, 2008, 26, 235-251.	3.4	79
27	Asymmetric zoning profiles in garnet from HP-HT granulite and implications for volume and grain-boundary diffusion. Mineralogical Magazine, 1999, 63, 227-238.	1.4	76
28	Garnet zoning and the identification of equilibrium mineral compositions in high-pressure-temperature granulites from the Moldanubian Zone, Austria. Journal of Metamorphic Geology, 2000, 18, 551-569.	3.4	76
29	Preserved near ultrahigh-pressure melt from continental crust subducted to mantle depths. Geology, 2015, 43, 447-450.	4.4	73
30	Resolving the relationship between high Pâ€"T rocks and gneisses in collisional terranes: an example from the GfÃ¶hl gneissâ€"granulite association in the Moldanubian Zone, Austria. Lithos, 2001, 58, 33-54.	1.4	72
31	Thermodynamic modelling of diffusion-controlled garnet growth. Contributions To Mineralogy and Petrology, 2005, 149, 181-195.	3.1	68
32	Partially retrograded eclogites of the MÃ¼nchberg Massif, Germany: records of a multi-stage Variscan uplift history in the Bohemian Massif. Journal of Metamorphic Geology, 1993, 11, 241-260.	3.4	63
33	The Physico-Chemical Properties of a Subducted Slab from Garnet Zonation Patterns (Sesia Zone,) Tj ETQq1 1 0.784314 rgBT /Overlo	2.8	60
34	Compositional re-equilibration of garnet: the importance of sub-grain boundaries. European Journal of Mineralogy, 2007, 19, 431-438.	1.3	53
35	Eclogite facies relics and a multistage breakdown in metabasites of the KTB pilot hole, NE Bavaria: implications for the Variscan tectonometamorphic evolution of the NW Bohemian Massif. Contributions To Mineralogy and Petrology, 1992, 112, 261-278.	3.1	51
36	The time of eclogite formation in the ultrahigh pressure rocks of the Sulu terrane. Lithos, 2011, 125, 743-756.	1.4	50

#	Article	IF	Citations
37	Crustal evolution of the KTB drill site: From oldest relics to the Late Hercynian granites. Journal of Geophysical Research, 1997, 102, 18203-18220.	3.3	49
38	Metamorphic evolution and fluid composition of garnet-clinopyroxene amphibolites from the Tatra Mountains, Western Carpathians. Lithos, 1996, 39, 57-79.	1.4	48
39	The petrology of retrograded eclogites of the Oberpfalz Forest, northeastern Bavaria, West Germany. Tectonophysics, 1989, 157, 195-212.	2.2	45
40	Eclogites at the north-western margin of the Bohemian Massif: A review. European Journal of Mineralogy, 1991, 3, 707-730.	1.3	45
41	Multi-stage reaction history in different eclogite types from the Pakistan Himalaya and implications for exhumation processes. Lithos, 2010, 114, 70-85.	1.4	44
42	Source and mode of the Permian Panjal Trap magmatism: Evidence from zircon Uâ€“Pb and Hf isotopes and trace element data from the Himalayan ultrahigh-pressure rocks. Lithos, 2016, 260, 286-299.	1.4	44
43	Carbonatitic and granitic melts produced under conditions of primary immiscibility during anatexis in the lower crust. Earth and Planetary Science Letters, 2016, 454, 121-131.	4.4	43
44	Eclogites and other high-pressure rocks in the Himalaya: a review. Geological Society Special Publication, 2019, 483, 183-213.	1.3	43
45	Dehydration melting and devolatilization during exhumation of high-grade metapelites: the Tatra Mountains, Western Carpathians. Journal of Metamorphic Geology, 1999, 17, 379-395.	3.4	41
46	Subduction, peak and multi-stage exhumation metamorphism: Traces from one coesite-bearing eclogite, Tso Morari, western Himalaya. Lithos, 2015, 231, 77-91.	1.4	38
47	Origin of sapphirine-plagioclase symplectites in metabasites from Mitterbachgraben, Dunkelsteinerwald granulite complex, Lower Austria. European Journal of Mineralogy, 1989, 1, 455-466.	1.3	35
48	Type-locality granulites: high-pressure rocks formed at eclogite-facies conditions. Mineralogy and Petrology, 2006, 86, 161-175.	1.1	32
49	Preservation of coesite in exhumed eclogite: insights from Raman mapping. European Journal of Mineralogy, 2008, 20, 827-834.	1.3	32
50	Fluid migration above a subducted slab â€" Thermodynamic and trace element modelling of fluidâ€“rock interaction in partially overprinted eclogite-facies rocks (Sesia Zone, Western Alps). Earth and Planetary Science Letters, 2011, 311, 287-298.	4.4	28
51	Continental Crust at Mantle Depths: Key Minerals and Microstructures. Elements, 2013, 9, 261-266.	0.5	27
52	Cryptic metasomatic agent measured in situ in Variscan mantle rocks: Melt inclusions in garnet of eclogite, Granulitgebirge, Germany. Journal of Metamorphic Geology, 2020, 38, 207-234.	3.4	25
53	High-T, Low-P Formation of Rare Olivine-bearing Symplectites in Variscan Eclogite. Journal of Petrology, 2013, 54, 1375-1398.	2.8	23
54	Apatite fission track and (Uâ€“Th)/He ages from the Higher Himalayan Crystallines, Kaghan Valley, Pakistan: Implications for an Eocene Plateau and Oligocene to Pliocene exhumation. Journal of Asian Earth Sciences, 2012, 59, 14-23.	2.3	19

#	Article	IF	Citations
55	A treasure chest full of nanogranitoids: an archive to investigate crustal melting in the Bohemian Massif. Geological Society Special Publication, 2019, 478, 13-38.	1.3	16
56	Embryos of TTGs in Gore Mountain garnet megacrysts from water-fluxed melting of the lower crust. Earth and Planetary Science Letters, 2021, 569, 117058.	4.4	15
57	The age of deep, steep continental subduction in the NW Himalaya: Relating zircon growth to metamorphic history. Comment on: â€œThe onset of Indiaâ€“Asia continental collision: Early, steep subduction required by the timing of UHP metamorphism in the western Himalayaâ€• by Mary L. Leech, S. Singh, A.K. Jain, Simon L. Klemperer and R.M. Manickavasagam, Earth and Planetary Science Letters 234 (2005) 83â€“97. Earth and Planetary Science Letters, 2006, 245, 814-816.	4.4	14
58	Oxygen isotopes in Indian Plate eclogites (Kaghan Valley, Pakistan): Negative Î´18O values from a high latitude protolith reset by Himalayan metamorphism. Lithos, 2014, 208-209, 471-483.	1.4	12
59	Tso Morari coesite eclogite: pseudosection predictions v. the preserved record and implications for tectonometamorphic models. Geological Society Special Publication, 2019, 474, 5-24.	1.3	11
60	Metamorphic and geochronological evolution of Paleoproterozoic high-pressure ultra-high-temperature pelitic granulite, Chicheng, northern Trans-North China Orogen. Precambrian Research, 2021, 361, 106237.	2.7	11
61	A study of retrogression in eclogites of the Oberpfalz Forest, north-east Bavaria, West Germany, and their significance in the tectonic evolution of the Bohemian Massif. Geological Society Special Publication, 1989, 43, 507-512.	1.3	8
62	Granitoid melt inclusions in orogenic peridotite and the origin of garnet clinopyroxenite. Geology, 0, , .	4.4	7
63	An enigmatic report of unmixing of calcic plagioclase to oligoclase and anorthite finally resolved. European Journal of Mineralogy, 1999, 11, 915-918.	1.3	3