Henry J B Dick

List of Publications by Year
in descending order

86 papers	12,127 citations	50276 46 h-index	53230 85 g-index
87 all docs	87 docs citations	87 times ranked	4160 citing authors

#	Article	IF	Citations
1	Heterogeneity in texture and crystal fabric of intensely hydrated ultramylonitic peridotites along a transform fault, Southwest Indian Ridge. Tectonophysics, 2022, 823, 229206.	2.2	5
2	Sulfide enrichment along igneous layer boundaries in the lower oceanic crust: IODP Hole U1473A, Atlantis Bank, Southwest Indian Ridge. Geochimica Et Cosmochimica Acta, 2022, 320, 179-206.	3.9	6
3	Archean cratonic mantle recycled at a mid-ocean ridge. Science Advances, 2022, 8, .	10.3	30
4	Trace Element and Isotopic Evidence for Recycled Lithosphere from Basalts from 48 to 53Â°E, Southwest Indian Ridge. Journal of Petrology, 2021, 61, .	2.8	7
5	Evidence for Multi-stage Melt Transport in the Lower Ocean Crust: the Atlantis Bank Gabbroic Massif (IODP Hole U1473A, SW Indian Ridge). Journal of Petrology, 2021, 61, .	2.8	19
6	Competing effects of spreading rate, crystal fractionation and source variability on Fe isotope systematics in mid-ocean ridge lavas. Scientific Reports, 2021, 11, 4123.	3.3	11
7	Tectonic Controls on Block Rotation and Sheeted Sill Emplacement in the Xigaze Ophiolite (Tibet): The Construction Mode of Slowâ€Spreading and Ultraslowâ€Spreading Oceanic Crusts. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009297.	2.5	15
8	MORB Melt Transport through Atlantis Bank Oceanic Batholith (SW Indian Ridge). Journal of Petrology, 2021, 62, .	2.8	18
9	Highâ€Temperature Strain Localization and the Nucleation of Oceanic Core Complexes (16.5Â°N,) Tj ETQq1 1 0.784314 rgBT /Overlo	3.4	6
10	The Xigaze ophiolite: fossil ultraslow-spreading ocean lithosphere in the Tibetan Plateau. Journal of the Geological Society, 2021, 178, .	2.1	15
11	Plate-driven micro-hotspots and the evolution of the Dragon Flag melting anomaly, Southwest Indian Ridge. Earth and Planetary Science Letters, 2020, 531, 116002.	4.4	23
12	An Early Cretaceous subduction-modified mantle underneath the ultraslow spreading Gakkel Ridge, Arctic Ocean. Science Advances, 2020, 6, .	10.3	27
13	Recycled arc mantle recovered from the Mid-Atlantic Ridge. Nature Communications, 2020, 11, 3887.	12.8	34
14	Enormous Lithium Isotopic Variations of Abyssal Peridotites Reveal Fast Cooling and Melt/Fluidâ€Rock Interactions. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB020393.	3.4	3
15	Silicaâ€Rich Vein Formation in an Evolving Stress Field, Atlantis Bank Oceanic Core Complex. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008795.	2.5	4
16	Recycling and metabolic flexibility dictate life in the lower oceanic crust. Nature, 2020, 579, 250-255.	27.8	59
17	Dynamic Accretion Beneath a Slowâ€Spreading Ridge Segment: IODP Hole 1473A and the Atlantis Bank Oceanic Core Complex. Journal of Geophysical Research: Solid Earth, 2019, 124, 12631-12659.	3.4	53
18	Emplacement and Highâ€Temperature Evolution of Gabbros of the 16.5Â°N Oceanic Core Complexes (Midâ€Atlantic Ridge): Insights Into the Compositional Variability of the Lower Oceanic Crust. Geochemistry, Geophysics, Geosystems, 2019, 20, 46-66.	2.5	19

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19	The Atlantis Bank Gabbro Massif, Southwest Indian Ridge. Progress in Earth and Planetary Science, 2019, 6, .	3.0	50
20	Sulfide enrichment at an oceanic crust-mantle transition zone: Kane Megamullion (23Â°N, MAR). Geochimica Et Cosmochimica Acta, 2018, 230, 155-189.	3.9	20
21	Occurrence of Felsic Rocks in Oceanic Gabbros from IODP Hole U1473A: Implications for Evolved Melt Migration in the Lower Oceanic Crust. Minerals (Basel, Switzerland), 2018, 8, 583.	2.0	39
22	Magnesium isotopic composition of the oceanic mantle and oceanic Mg cycling. Geochimica Et Cosmochimica Acta, 2017, 206, 151-165.	3.9	47
23	Thin crust and exposed mantle control sulfide differentiation in slow-spreading ridge magmas. Geology, 2017, 45, 935-938.	4.4	13
24	New insights on the origin of troctolites from the breakaway area of the Godzilla Megamullion (Parece Vela backâ€arc basin): The role of meltâ€mantle interaction on the composition of the lower crust. Island Arc, 2016, 25, 220-234.	1.1	22
25	Melt extraction and mantle source at a Southwest Indian Ridge Dragon Bone amagmatic segment on the Marion Rise. Lithos, 2016, 246-247, 48-60.	1.4	24
26	Mantle rock exposures at oceanic core complexes along mid-ocean ridges. Geologos, 2015, 21, 207-231.	0.6	13
27	Ocean rises are products of variable mantle composition, temperature and focused melting. Nature Geoscience, 2015, 8, 68-74.	12.9	28
28	Podiform chromitite formation in a low-Cr/high-Al system: An example from the Southwest Indian Ridge (SWIR). Mineralogy and Petrology, 2014, 108, 533-549.	1.1	16
29	Tracking flux melting and melt percolation in supra-subduction peridotites (Josephine ophiolite, USA). Contributions To Mineralogy and Petrology, 2014, 168, 1.	3.1	42
30	Isotope and trace element insights into heterogeneity of subridge mantle. Geochemistry, Geophysics, Geosystems, 2014, 15, 2438-2453.	2.5	49
31	Development and evolution of detachment faulting along 50 km of the Midâ€Atlantic Ridge near 16.5Â°N. Geochemistry, Geophysics, Geosystems, 2014, 15, 4692-4711.	2.5	32
32	Mylonitic deformation at the Kane oceanic core complex: Implications for the rheological behavior of oceanic detachment faults. Geochemistry, Geophysics, Geosystems, 2013, 14, 3085-3108.	2.5	56
33	Melt-Rock Reaction in the Mantle: Mantle Troctolites from the Parece Vela Ancient Back-Arc Spreading Center. Journal of Petrology, 2013, 54, 861-885.	2.8	60
34	Nonvolcanic tectonic islands in ancient and modern oceans. Geochemistry, Geophysics, Geosystems, 2013, 14, 4698-4717.	2.5	28
35	Thin crust as evidence for depleted mantle supporting the Marion Rise. Nature, 2013, 494, 195-200.	27.8	135
36	The earliest mantle fabrics formed during subduction zone infancy. Earth and Planetary Science Letters, 2013, 377-378, 106-113.	4.4	13

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37	Influence of igneous processes and serpentinization on geochemistry of the Logatchev Massif harzburgites (14Â°45â€²N, Mid-Atlantic Ridge), and comparison with global abyssal peridotites. International Geology Review, 2013, 55, 115-130.	2.1	7
38	Cemented mounds and hydrothermal sediments on the detachment surface at Kane Megamullion: A new manifestation of hydrothermal venting. Geochemistry, Geophysics, Geosystems, 2013, 14, 3352-3378.	2.5	11
39	Dick receives 2011 Harry H. Hess Medal: Response. Eos, 2012, 93, 23-23.	0.1	0
40	Mantle Melting, Melt Transport, and Delivery Beneath a Slow-Spreading Ridge: The Paleo-MAR from 23Â15'N to 23Â45'N. Journal of Petrology, 2010, 51, 425-467.	2.8	133
41	Paired melt lenses at the East Pacific Rise and the pattern of melt flow through the gabbroic layer at a fast-spreading ridge. Lithos, 2009, 112, 73-86.	1.4	46
42	An assessment of upper mantle heterogeneity based on abyssal peridotite isotopic compositions. Journal of Geophysical Research, 2009, 114, .	3.3	113
43	Plutonic foundation of a slowâ€spreading ridge segment: Oceanic core complex at Kane Megamullion, 23Â°30â€²N, 45Â°20â€²W. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	207
44	MORB generation beneath the ultraslow spreading Southwest Indian Ridge (9â€“25Â°E): Major element chemistry and the importance of process versus source. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	113
45	Meltâ€“rock reaction in the lower oceanic crust and its implications for the genesis of mid-ocean ridge basalt. Earth and Planetary Science Letters, 2008, 271, 311-325.	4.4	160
46	Petrology of local concentration of chromian spinel in dunite from the slow-spreading Southwest Indian Ridge. European Journal of Mineralogy, 2007, 19, 871-882.	1.3	39
47	Pyroxenites from the Southwest Indian Ridge, 9-16ÂE: Cumulates from Incremental Melt Fractions Produced at the Top of a Cold Melting Regime. Journal of Petrology, 2007, 48, 647-660.	2.8	68
48	Evolution of the Southwest Indian Ridge from 55Â°45â€²E to 62Â°E: Changes in plate-boundary geometry since 26 Ma. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	2.5	44
49	Nonvolcanic seafloor spreading and corner-flow rotation accommodated by extensional faulting at 15Â°N on the Mid-Atlantic Ridge: A structural synthesis of ODP Leg 209. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	2.5	47
50	Pervasive melt percolation reactions in ultra-depleted refractory harzburgites at the Mid-Atlantic Ridge, 15Â° 20â€²N: ODP Hole 1274A. Contributions To Mineralogy and Petrology, 2007, 153, 303-319.	3.1	201
51	Dating the Growth of Oceanic Crust at a Slow-Spreading Ridge. Science, 2005, 310, 654-657.	12.6	90
52	Hydrothermal venting in magma deserts: The ultraslow-spreading Gakkel and Southwest Indian Ridges. Geochemistry, Geophysics, Geosystems, 2004, 5, .	2.5	93
53	Magmatic srilankite (Ti2ZrO6) in gabbroic vein cutting oceanic peridotites: An unusual product of peridotite-melt interactions beneath slow-spreading ridges. American Mineralogist, 2004, 89, 759-766.	1.9	19
54	Discovery of abundant hydrothermal venting on the ultraslow-spreading Gakkel ridge in the Arctic Ocean. Nature, 2003, 421, 252-256.	27.8	206

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55	Magmatic and amagmatic seafloor generation at the ultraslow-spreading Gakkel ridge, Arctic Ocean. Nature, 2003, 423, 956-961.	27.8	366
56	An ultraslow-spreading class of ocean ridge. Nature, 2003, 426, 405-412.	27.8	852
57	Noble gas signatures of abyssal gabbros and peridotites at an Indian Ocean core complex. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	19
58	Mechanism for generating the anomalous uplift of oceanic core complexes: Atlantis Bank, southwest Indian Ridge. Geology, 2003, 31, 1105.	4.4	61
59	Magmatism and â€œCrust-mantle Boundaryâ€•on the Ultra-slow Spreading Ridge as Observed in Atlantis Bank, Southwest Indian Ridge. Journal of Geography (Chigaku Zasshi), 2003, 112, 705-719.	0.3	4
60	Abyssal peridotite osmium isotopic compositions from cr-spinel. Geochemistry, Geophysics, Geosystems, 2002, 3, 1-24.	2.5	92
61	Discovery of ancient and active hydrothermal systems along the ultra-slow spreading Southwest Indian Ridge 10Â°-16Â°E. Geochemistry, Geophysics, Geosystems, 2002, 3, 1-14.	2.5	110
62	Mineralogy of the mid-ocean-ridge basalt source from neodymium isotopic composition of abyssal peridotites. Nature, 2002, 418, 68-72.	27.8	186
63	The geochemical consequences of late-stage low-grade alteration of lower ocean crust at the SW Indian Ridge: results from ODP Hole 735B (Leg 176). Geochimica Et Cosmochimica Acta, 2001, 65, 3267-3287.	3.9	159
64	Evidence from gravity anomalies for interactions of the Marion and Bouvet hotspots with the Southwest Indian Ridge: effects of transform offsets. Earth and Planetary Science Letters, 2001, 187, 283-300.	4.4	135
65	Coupled major and trace elements as indicators of the extent of melting in mid-ocean-ridge peridotites. Nature, 2001, 410, 677-681.	27.8	528
66	Formation of the lower ocean crust and the crystallization of gabbroic cumulates at a very slowly spreading ridge. Journal of Volcanology and Geothermal Research, 2001, 110, 191-233.	2.1	131
67	A long in situ section of the lower ocean crust: results of ODP Leg 176 drilling at the Southwest Indian Ridge. Earth and Planetary Science Letters, 2000, 179, 31-51.	4.4	456
68	The fingerprint of seawater circulation in a 500-meter section of ocean crust gabbros. Geochimica Et Cosmochimica Acta, 1999, 63, 4059-4080.	3.9	255
69	Focused melt flow and localized deformation in the upper mantle: Juxtaposition of replacive dunite and ductile shear zones in the Josephine peridotite, SW Oregon. Journal of Geophysical Research, 1995, 100, 423-438.	3.3	185
70	Pervasive magnesium loss by marine weathering of peridotite. Geochimica Et Cosmochimica Acta, 1995, 59, 4219-4235.	3.9	311
71	Nd and Sr isotope evidence linking mid-ocean-ridge basalts and abyssal peridotites. Nature, 1994, 371, 57-60.	27.8	109
72	Open system melting and temporal and spatial variation of peridotite and basalt at the Atlantis II Fracture Zone. Journal of Geophysical Research, 1992, 97, 9219-9241.	3.3	297

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73	Petrogenesis of anomalous K-enriched MORB from the Southwest Indian Ridge: 11Â°53â€²E to 14Â°38â€²E. Contributions To Mineralogy and Petrology, 1992, 110, 253-268.	3.1	71
74	Formation of harzburgite by pervasive melt/rock reaction in the upper mantle. Nature, 1992, 358, 635-641.	27.8	597
75	Melting in the oceanic upper mantle: An ion microprobe study of diopsides in abyssal peridotites. Journal of Geophysical Research, 1990, 95, 2661-2678.	3.3	1,091
76	Petrology and Geochemistry of MORB from 25ÂE to 46ÂE along the Southwest Indian Ridge: Evidence for Contrasting Styles of Mantle Enrichment. Journal of Petrology, 1989, 30, 947-986.	2.8	117
77	Cumulate gabbros from the Southwest Indian Ridge, 54ï¿½S-7ï¿½ 16? E: implications for magmatic processes at a slow spreading ridge. Contributions To Mineralogy and Petrology, 1989, 103, 44-63.	3.1	106
78	The oxidation state of the Earth's sub-oceanic mantle from oxygen thermobarometry of abyssal spinel peridotites. Nature, 1989, 341, 526-527.	27.8	32
79	Abyssal peridotites, very slow spreading ridges and ocean ridge magmatism. Geological Society Special Publication, 1989, 42, 71-105.	1.3	350
80	A mechanism for magmatic accretion under spreading centres. Nature, 1984, 312, 146-148.	27.8	253
81	Chromian spinel as a petrogenetic indicator in abyssal and alpine-type peridotites and spatially associated lavas. Contributions To Mineralogy and Petrology, 1984, 86, 54-76.	3.1	1,727
82	Mineralogic variability of the uppermost mantle along mid-ocean ridges. Earth and Planetary Science Letters, 1984, 69, 88-106.	4.4	424
83	Tectonics of ridge-transform intersections at the Kane fracture zone. Marine Geophysical Researches, 1983, 6, 51-98.	1.2	277
84	Compositional Layering in Alpine Peridotites: Evidence for Pressure Solution Creep in the Mantle. Journal of Geology, 1979, 87, 403-416.	1.4	93
85	A Model for the Development of Thin Overthrust Sheets of Crystalline Rock. Geology, 1974, 2, 35.	4.4	78
86	The Plutonic Foundation of a Slow-Spreading Ridge. Geophysical Monograph Series, 0, , 1-39.	0.1	16