Peter B Kelemen

List of Publications by Year
in descending order

181 papers	21,871 citations	6254 80 h-index	9103 144 g-index
187 all docs	187 docs citations	187 times ranked	9262 citing authors

#	Article	IF	Citations
1	Deep Sourced Fluids for Peridotite Carbonation in the Shallow Mantle Wedge of a Fossil Subduction Zone: Sr and C Isotope Profiles of OmanDP Hole BT1B. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	11
2	Listvenite Formation During Mass Transfer into the Leading Edge of the Mantle Wedge: Initial Results from Oman Drilling Project Hole BT1B. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	11
3	Thermal History of Lithosphere Formed Beneath Fast Spreading Ridges: Constraints From the Mantle Transition Zone of the East Pacific Rise at Hess Deep and Oman Drilling Project, Wadi Zeeb, Samail Ophiolite. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	7
4	Geochemical Characterization of the Oman Crustâ€Mantle Transition Zone, OmanDP Holes CM1A and CM2B. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	3
5	Ductile deformation during carbonation of serpentinized peridotite. Nature Communications, 2022, 13, .	12.8	10
6	A Mg Isotopic Perspective on the Mobility of Magnesium During Serpentinization and Carbonation of the Oman Ophiolite. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020237.	3.4	19
7	Highâ€Precision Uâ€Pb Zircon Dating of Late Magmatism in the Samail Ophiolite: A Record of Subduction Initiation. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020758.	3.4	22
8	Lowâ€Temperature Hydrogen Formation During Aqueous Alteration of Serpentinized Peridotite in the Samail Ophiolite. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021981.	3.4	22
9	Deep continental roots and cratons. Nature, 2021, 596, 199-210.	27.8	93
10	Hydrothermal Alteration of the Ocean Crust and Patterns in Mineralization With Depth as Measured by Microâ€Imaging Infrared Spectroscopy. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021976.	3.4	7
11	Geochemical, Biological, and Clumped Isotopologue Evidence for Substantial Microbial Methane Production Under Carbon Limitation in Serpentinites of the Samail Ophiolite, Oman. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG006025.	3.0	19
12	Crack geometry of serpentinized peridotites inferred from onboard ultrasonic data from the Oman Drilling Project. Tectonophysics, 2021, 814, 228978.	2.2	6
13	Accessing the Subsurface Biosphere Within Rocks Undergoing Active Lowâ€Temperature Serpentinization in the Samail Ophiolite (Oman Drilling Project). Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006315.	3.0	27
14	Tracing Carbonate Formation, Serpentinization, and Biological Materials With Microâ€/Mesoâ€Scale Infrared Imaging Spectroscopy in a Mars Analog System, Samail Ophiolite, Oman. Earth and Space Science, 2021, 8, e2021EA001637.	2.6	3
15	The Composition of the Lower Oceanic Crust in the Wadi Khafifah Section of the Southern Samail (Oman) Ophiolite. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021986.	3.4	12
16	Characteristics, Origins, and Biosignature Preservation Potential of Carbonateâ€Bearing Rocks Within and Outside of Jezero Crater. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006898.	3.6	16
17	Nanostructure of serpentinisation products: Importance for water transport and low-temperature alteration. Earth and Planetary Science Letters, 2021, 576, 117212.	4.4	5
18	Characterizing Hydration of the Ocean Crust Using Shortwave Infrared Microimaging Spectroscopy of ICDP Oman Drilling Project Cores. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022676.	3.4	1

#	Article	IF	Citations
19	Major Mineral Fraction and Physical Properties of Carbonated Peridotite (Listvenite) From ICDP Oman Drilling Project Hole BT1B Inferred From Xâ€Ray CT Core Images. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022719.	3.4	11
20	Geochemical Profiles Across the Listveniteâ€Metamorphic Transition in the Basal Megathrust of the Semail Ophiolite: Results From Drilling at OmanDP Hole BT1B. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022733.	3.4	13
21	Initial Results From the Oman Drilling Project Multiâ€Borehole Observatory: Petrogenesis and Ongoing Alteration of Mantle Peridotite in the Weathering Horizon. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022729.	3.4	16
22	Major element mobility during serpentinization, oxidation and weathering of mantle peridotite at low temperatures. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20180433.	3.4	19
23	Phaseâ€Field Modeling of Reactionâ€Driven Cracking: Determining Conditions for Extensive Olivine Serpentinization. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018614.	3.4	25
24	Brittle Deformation of Carbonated Peridotiteâ€”Insights From Listvenites of the Samail Ophiolite (Oman Drilling Project Hole BT1B). Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB020199.	3.4	17
25	Lipid Biomarker Record of the Serpentinite-Hosted Ecosystem of the Samail Ophiolite, Oman and Implications for the Search for Biosignatures on Mars. Astrobiology, 2020, 20, 830-845.	3.0	23
26	Measurement of Volume Change and Mass Transfer During Serpentinization: Insights From the Oman Drilling Project. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018877.	3.4	23
27	Elucidating the differences in the carbon mineralization behaviors of calcium and magnesium bearing alumino-silicates and magnesium silicates for CO2 storage. Fuel, 2020, 277, 117900.	6.4	47
28	Crustal Structure of the Greenlandâ€Iceland Ridge from Joint Refraction and Reflection Seismic Tomography. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019847.	3.4	15
29	Timing of Magnetite Growth Associated With Peridotiteâ€Hosted Carbonate Veins in the SE Samail Ophiolite, Wadi Fins, Oman. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018632.	3.4	11
30	Engineered carbon mineralization in ultramafic rocks for CO2 removal from air: Review and new insights. Chemical Geology, 2020, 550, 119628.	3.3	90
31	Ambient weathering of magnesium oxide for CO2 removal from air. Nature Communications, 2020, 11, 3299.	12.8	95
32	Permeability Profiles Across the Crustâ€Mantle Sections in the Oman Drilling Project Inferred From Dry and Wet Resistivity Data. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018698.	3.4	16
33	Ultramafic Rock Carbonation: Constraints From Listvenite Core BT1B, Oman Drilling Project. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB019060.	3.4	34
34	Oxygen fugacity at the base of the Talkeetna arc, Alaska. Contributions To Mineralogy and Petrology, 2019, 174, 1.	3.1	28
35	Multitracer determination of apparent groundwater ages in peridotite aquifers within the Samail ophiolite, Sultanate of Oman. Earth and Planetary Science Letters, 2019, 516, 37-48.	4.4	28
36	An Overview of the Status and Challenges of CO2 Storage in Minerals and Geological Formations. Frontiers in Climate, 2019, 1, .	2.8	200

#	Article	IF	Citations
37	Iron transformations during low temperature alteration of variably serpentinized rocks from the Samail ophiolite, Oman. Geochimica Et Cosmochimica Acta, 2018, 222, 704-728.	3.9	30
38	In situ carbon mineralization in ultramafic rocks: Natural processes and possible engineered methods. Energy Procedia, 2018, 146, 92-102.	1.8	30
39	A Poroelastic Model of Serpentinization: Exploring the Interplay Between Rheology, Surface Energy, Reaction, and Fluid Flow. Journal of Geophysical Research: Solid Earth, 2018, 123, 8653-8675.	3.4	20
40	Fluid rock interactions on residual mantle peridotites overlain by shallow oceanic limestones: Insights from Wadi Fins, Sultanate of Oman. Chemical Geology, 2018, 498, 139-149.	3.3	40
41	Experimental Investigation of the Pressure of Crystallization of Ca(OH) 2 : Implications for the Reactive Cracking Process. Geochemistry, Geophysics, Geosystems, 2018, 19, 3448-3458.	2.5	5
42	Potential for offsetting diamond mine carbon emissions through mineral carbonation of processed kimberlite: an assessment of De Beers mine sites in South Africa and Canada. Mineralogy and Petrology, 2018, 112, 755-765.	1.1	47
43	Competition Between Crystallizationâ€Induced Expansion and Creep Compaction During Gypsum Formation, and Implications for Serpentinization. Journal of Geophysical Research: Solid Earth, 2018, 123, 5372-5393.	3.4	16
44	Near-solidus melts of MORBâ€‰+â€‰4Âwt% H2O at 0.8â€“2.8ÂGPa applied to issues of subduction magmatism and continent formation. Contributions To Mineralogy and Petrology, 2018, 173, 1.	3.1	38
45	Spatial variations in cooling rate in the mantle section of the Samail ophiolite in Oman: Implications for formation of lithosphere at mid-ocean ridges. Earth and Planetary Science Letters, 2017, 465, 134-144.	4.4	48
46	Low temperature hydrogen production during experimental hydration of partially-serpentinized dunite. Geochimica Et Cosmochimica Acta, 2017, 209, 161-183.	3.9	62
47	Reply to â€œMethane origin in the Samail ophiolite: Comment on â€˜Modern water/rock reactions in Oman hyperalkaline peridotite aquifers and implications for microbial habitabilityâ€™â€•[Geochim. Cosmochim. Acta 179 (2016) 217â€“241]. Geochimica Et Cosmochimica Acta, 2017, 197, 471-473.	3.9	9
48	On the hydration of olivine in ultramafic rocks: Implications from Fe isotopes in serpentinites. Geochimica Et Cosmochimica Acta, 2017, 215, 105-121.	3.9	21
49	Sr and O isotopes in western Aleutian seafloor lavas: Implications for the source of fluids and trace element character of arc volcanic rocks. Earth and Planetary Science Letters, 2017, 475, 169-180.	4.4	28
50	Geological and Geochemical Controls on Subsurface Microbial Life in the Samail Ophiolite, Oman. Frontiers in Microbiology, 2017, 8, 56.	3.5	126
51	Formation of Plagioclase Lherzolite and Associated Duniteâ€“Harzburgiteâ€“Lherzolite Sequences by Multiple Episodes of Melt Percolation and Meltâ€“Rock Reaction: an Example from the Trinity Ophiolite, California, USA. Journal of Petrology, 2016, 57, 815-838.	2.8	38
52	Synchronous formation of the metamorphic sole and igneous crust of the Semail ophiolite: New constraints on the tectonic evolution during ophiolite formation from high-precision Uâ€“Pb zircon geochronology. Earth and Planetary Science Letters, 2016, 451, 185-195.	4.4	154
53	Formation of lower continental crust by relamination of buoyant arc lavas and plutons. Nature Geoscience, 2016, 9, 197-205.	12.9	125
54	Modern water/rock reactions in Oman hyperalkaline peridotite aquifers and implications for microbial habitability. Geochimica Et Cosmochimica Acta, 2016, 179, 217-241.	3.9	102

#	Article	IF	Citations
55	Reevaluating carbon fluxes in subduction zones, what goes down, mostly comes up. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3997-4006.	7.1	492
56	The seismic mid-lithosphere discontinuity. Earth and Planetary Science Letters, 2015, 414, 45-57.	4.4	177
57	Continental Lower Crust. Annual Review of Earth and Planetary Sciences, 2015, 43, 167-205.	11.0	260
58	Applications and limitations of Uâ€“Th disequilibria systematics for determining ages of carbonate alteration minerals in peridotite. Chemical Geology, 2015, 412, 151-166.	3.3	10
59	Peridotite enclaves hosted by Mesoarchaean TTG-suite orthogneisses in the Fiskefjord region of southern West Greenland. GeoResJ, 2015, 7, 22-34.	1.4	33
60	Geochemistry and petrology of listvenite in the Samail ophiolite, Sultanate of Oman: Complete carbonation of peridotite during ophiolite emplacement. Geochimica Et Cosmochimica Acta, 2015, 160, 70-90.	3.9	121
61	Role of Arc Processes in the Formation of Continental Crust. Annual Review of Earth and Planetary Sciences, 2015, 43, 363-404.	11.0	181
62	The Role of Subducted Basalt in the Source of Island Arc Magmas: Evidence from Seafloor Lavas of the Western Aleutians. Journal of Petrology, 2015, 56, 441-492.	2.8	96
63	Continental crust generated in oceanic arcs. Nature Geoscience, 2015, 8, 321-327.	12.9	94
64	Distinctly different parental magmas for calc-alkaline plutons and tholeiitic lavas in the central and eastern Aleutian arc. Earth and Planetary Science Letters, 2015, 431, 119-126.	4.4	26
65	The petrogenesis of ultramafic rocks in the > 3.7 Ga Isua supracrustal belt, southern West Greenland: Geochemical evidence for two distinct magmatic cumulate trends. Gondwana Research, 2015, 28, 565-580.	6.0	57
66	Chemical and morphological changes during olivine carbonation for CO2 storage in the presence of NaCl and NaHCO3. Physical Chemistry Chemical Physics, 2014, 16, 4679.	2.8	145
67	Carbonation rates of peridotite in the Samail Ophiolite, Sultanate of Oman, constrained through 14C dating and stable isotopes. Geochimica Et Cosmochimica Acta, 2014, 126, 371-397.	3.9	70
68	The influence of water and LPO on the initiation and evolution of mantle shear zones. Earth and Planetary Science Letters, 2013, 375, 222-233.	4.4	47
69	Planning the Drilling of the Samail Ophiolite in Oman. Eos, 2013, 94, 32-32.	0.1	0
70	Highly depleted cratonic mantle in West Greenland extending into diamond stability field in the Proterozoic. Lithos, 2013, 168-169, 160-172.	1.4	26
71	Carbon Mineralization: From Natural Analogues to Engineered Systems. Reviews in Mineralogy and Geochemistry, 2013, 77, 305-360.	4.8	174
72	Tectonic development of the Samail ophiolite: Highâ€precision Uâ€Pb zircon geochronology and Smâ€Nd isotopic constraints on crustal growth and emplacement. Journal of Geophysical Research: Solid Earth, 2013, 118, 2085-2101.	3.4	140

#	Article	IF	Citations
73	Constraints on the composition of the Aleutian arc lower crust from V_P/V_S. Geophysical Research Letters, 2013, 40, 2579-2584.	4.0	20
74	Reaction-Driven Cracking During Mineral Hydration, Carbonation and Oxidation. , 2013, , .		6
75	Coexisting serpentine and quartz from carbonate-bearing serpentinized peridotite in the Samail Ophiolite, Oman. Contributions To Mineralogy and Petrology, 2012, 164, 821-837.	3.1	77
76	Reaction path modeling of enhanced in situ CO2 mineralization for carbon sequestration in the peridotite of the Samail Ophiolite, Sultanate of Oman. Chemical Geology, 2012, 330-331, 86-100.	3.3	127
77	Reaction-driven cracking during retrograde metamorphism: Olivine hydration and carbonation. Earth and Planetary Science Letters, 2012, 345-348, 81-89.	4.4	173
78	Rapid crustal accretion and magma assimilation in the Omanâ€U.A.E. ophiolite: High precision Uâ€Pb zircon geochronology of the gabbroic crust. Journal of Geophysical Research, 2012, 117, .	3.3	118
79	Rhenium-osmium isotope systematics and platinum group element concentrations in oceanic crust. Geology, 2012, 40, 199-202.	4.4	50
80	The thermal structure of continental crust in active orogens: insight from Miocene eclogite and granulite xenoliths of the Pamir Mountains. Journal of Metamorphic Geology, 2012, 30, 413-434.	3.4	39
81	Thermochronology of the Talkeetna intraoceanic arc of Alaska: Ar/Ar, Uâ€Th/He, Smâ€Nd, and Luâ€Hf dating. Tectonics, 2011, 30, .	2.8	25
82	Lattice-preferred orientation and microstructure of peridotites from ODP Hole 1274A (15Â°39â€²N), Mid-Atlantic Ridge: Testing models of mantle upwelling and tectonic exhumation. Earth and Planetary Science Letters, 2011, 301, 199-212.	4.4	14
83	Differentiation of the continental crust by relamination. Earth and Planetary Science Letters, 2011, 307, 501-516.	4.4	414
84	Diapirs as the source of the sediment signature in arc lavas. Nature Geoscience, 2011, 4, 641-646.	12.9	330
85	Rates and Mechanisms of Mineral Carbonation in Peridotite: Natural Processes and Recipes for Enhanced, in situ CO₂ Capture and Storage. Annual Review of Earth and Planetary Sciences, 2011, 39, 545-576.	11.0	336
86	Investigation of the strength contrast at the Moho: A case study from the Oman Ophiolite. Geology, 2010, 38, 679-682.	4.4	25
87	Microstructural and Rheological Evolution of a Mantle Shear Zone. Journal of Petrology, 2010, 51, 43-53.	2.8	100
88	The Case for Reactive Crystallization at Mid-Ocean Ridges. Journal of Petrology, 2010, 51, 1913-1940.	2.8	76
89	Composition and Genesis of Depleted Mantle Peridotites from the Wadi Tayin Massif, Oman Ophiolite; Major and Trace Element Geochemistry, and Os Isotope and PGE Systematics. Journal of Petrology, 2010, 51, 201-227.	2.8	152
90	Trapped Melt in the Josephine Peridotite: Implications for Permeability and Melt Extraction in the Upper Mantle. Journal of Petrology, 2010, 51, 185-200.	2.8	19

#	Article	IF	Citations
91	Shallow Mantle Composition and Dynamics: Fifth International Orogenic Lherzolite Conference: Foreword. Journal of Petrology, 2010, 51, 3-7.	2.8	0
92	A Felsic End to Bushveld Differentiation. Journal of Petrology, 2010, 51, 1891-1912.	2.8	111
93	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, .	2.8	59
94	A simple model of reaction-induced cracking applied to serpentinization and carbonation of peridotite. Earth and Planetary Science Letters, 2010, 291, 215-227.	4.4	109
95	Permanent storage of carbon dioxide in geological reservoirs by mineral carbonation. Nature Geoscience, 2009, 2, 837-841.	12.9	425
96	The Origin of the Land under the Sea. Scientific American, 2009, 300, 52-57.	1.0	14
97	Magmatic and metamorphic evolution of the oceanic crust in the western flank of the MAR crest zone at 15Â°44â€²N: Investigation of cores from sites 1275B and 1275D, JOIDES resolution Leg 209. Petrology, 2008, 16, 353-375.	0.9	10
98	Microstructures in Hole 1274A peridotites, ODP Leg 209, Midâ€Atlantic Ridge: Tracking the fate of melts percolating in peridotite as the lithosphere is intercepted. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	42
99	Reconstruction of the Talkeetna intraoceanic arc of Alaska through thermobarometry. Journal of Geophysical Research, 2008, 113, .	3.3	75
100	Significance of the concentration gradients associated with dunite bodies in the Josephine and Trinity ophiolites. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	36
101	Cooling rates in the lower crust of the Oman ophiolite: Ca in olivine, revisited. Earth and Planetary Science Letters, 2008, 267, 69-82.	4.4	74
102	Evolution of olivine lattice preferred orientation during simple shear in the mantle. Earth and Planetary Science Letters, 2008, 272, 501-512.	4.4	94
103	Recycled crust controls contrasting source compositions of Mesozoic and Cenozoic basalts in the North China Craton. Geochimica Et Cosmochimica Acta, 2008, 72, 2349-2376.	3.9	223
104	Geochemistry and magmatic history of eclogites and ultramafic rocks from the Chinese continental scientific drill hole: Subduction and ultrahigh-pressure metamorphism of lower crustal cumulates. Chemical Geology, 2008, 247, 133-153.	3.3	504
105	In situ carbonation of peridotite for CO₂storage. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17295-17300.	7.1	523
106	U-Pb geochronology of volcanic rocks from the Jurassic Talkeetna Formation and detrital zircons from prearc and postarc sequences: Implications for the age of magmatism and inheritance in the Talkeetna arc. , 2007, , 253-271.		21
107	Consistent olivine Mg# in cratonic mantle reflects Archean mantle melting to the exhaustion of orthopyroxene. Geology, 2007, 35, 459.	4.4	138
108	Magmatic development of an intra-oceanic arc: High-precision U-Pb zircon and whole-rock isotopic analyses from the accreted Talkeetna arc, south-central Alaska. Bulletin of the Geological Society of America, 2007, 119, 1168-1184.	3.3	91

#	Article	IF	Citations
109	High-magnesian andesite from Mount Shasta: A product of magma mixing and contamination, not a primitive melt: COMMENT AND REPLY: COMMENT. Geology, 2007, 35, e149-e150.	4.4	7
110	Trace elements in clinopyroxenes from Aleutian xenoliths: Implications for primitive subduction magmatism in an island arc. Earth and Planetary Science Letters, 2007, 256, 617-632.	4.4	39
111	Trace element chemistry of zircons from oceanic crust: A method for distinguishing detrital zircon provenance. Geology, 2007, 35, 643.	4.4	642
112	Trench-Parallel Anisotropy Produced by Foundering of Arc Lower Crust. Science, 2007, 317, 108-111.	12.6	92
113	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
114	A periodic shear-heating mechanism for intermediate-depth earthquakes in the mantle. Nature, 2007, 446, 787-790.	27.8	255
115	Stability of arc lower crust: Insights from the Talkeetna arc section, south central Alaska, and the seismic structure of modern arcs. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	115
116	Osmium isotope systematics of the Proterozoic and Phanerozoic ophiolitic chromitites: In situ ion probe analysis of primary Os-rich PGM. Earth and Planetary Science Letters, 2006, 245, 777-791.	4.4	78
117	Ultra-depleted, shallow cratonic mantle beneath West Greenland: dunitic xenoliths from Ubekendt Ejland. Contributions To Mineralogy and Petrology, 2006, 152, 335-347.	3.1	76
118	A Detailed Geochemical Study of Island Arc Crust: the Talkeetna Arc Section, Southâ€“Central Alaska. Journal of Petrology, 2006, 47, 1051-1093.	2.8	264
119	Arc Crustal Genesis and Evolution. GSA Today, 2006, 16, 20.	2.0	2
120	Stratigraphic and geochemical evolution of an oceanic arc upper crustal section: The Jurassic Talkeetna Volcanic Formation, south-central Alaska. Bulletin of the Geological Society of America, 2005, 117, 902.	3.3	66
121	Subduction erosion of the Jurassic Talkeetna-Bonanza arc and the Mesozoic accretionary tectonics of western North America. Geology, 2005, 33, 881.	4.4	67
122	Observations of Li isotopic variations in the Trinity Ophiolite: Evidence for isotopic fractionation by diffusion during mantle melting. Geochimica Et Cosmochimica Acta, 2005, 69, 735-751.	3.9	169
123	Composition and structure of the central Aleutian island arc from arc-parallel wide-angle seismic data. Geochemistry, Geophysics, Geosystems, 2004, 5, n/a-n/a.	2.5	98
124	Extreme chemical variability as a consequence of channelized melt transport. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	193
125	Crustal Evolution of the Mid-Atlantic Ridge near the Fifteen-Twenty Fracture Zone in the last 5 Ma. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	81
126	Relationship between seismic P-wave velocity and the composition of anhydrous igneous and meta-igneous rocks. Geochemistry, Geophysics, Geosystems, 2003, 4, n/a-n/a.	2.5	105

#	Article	IF	Citations
127	Buoyancy of the continental upper mantle. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	58
128	Structure of the SE Greenland margin from seismic reflection and refraction data: Implications for nascent spreading center subsidence and asymmetric crustal accretion during North Atlantic opening. Journal of Geophysical Research, 2003, 108, .	3.3	146
129	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
130	Along-strike variation in the Aleutian Island Arc: Genesis of high Mg# andesite and implications for continental crust. Geophysical Monograph Series, 2003, , 223-276.	0.1	206
131	Thermal structure due to solid-state flow in the mantle wedge beneath arcs. Geophysical Monograph Series, 2003, , 293-311.	0.1	152
132	Methods for resolving the origin of large igneous provinces from crustal seismology. Journal of Geophysical Research, 2002, 107, ECV 1-1-ECV 1-27.	3.3	113
133	Chemical and isotopic constraints on the generation and transport of magma beneath the East Pacific Rise. Geochimica Et Cosmochimica Acta, 2002, 66, 3481-3504.	3.9	195
134	Consequences of diffuse and channelled porous melt migration on uranium series disequilibria. Geochimica Et Cosmochimica Acta, 2002, 66, 4133-4148.	3.9	89
135	Melt viscosity, temperature and transport processes, Troodos ophiolite, Cyprus. Earth and Planetary Science Letters, 2002, 201, 337-352.	4.4	13
136	Dunite distribution in the Oman Ophiolite: Implications for melt flux through porous dunite conduits. Geochemistry, Geophysics, Geosystems, 2002, 3, 1-21.	2.5	137
137	Osmium isotopes in the Wiedemann Fjord mantle xenoliths: A unique record of cratonic mantle formation by melt depletion in the Archaean. Geochemistry, Geophysics, Geosystems, 2001, 2, n/a-n/a.	2.5	46
138	Petrogenesis of the crust-mantle transition zone and the origin of lower crustal wehrlite in the Oman ophiolite. Geochemistry, Geophysics, Geosystems, 2001, 2, n/a-n/a.	2.5	102
139	Variation of cooling rate with depth in lower crust formed at an oceanic spreading ridge: Plagioclase crystal size distributions in gabbros from the Oman ophiolite. Geochemistry, Geophysics, Geosystems, 2001, 2, n/a-n/a.	2.5	73
140	Causes and consequences of flow organization during melt transport: The reaction infiltration instability in compactible media. Journal of Geophysical Research, 2001, 106, 2061-2077.	3.3	235
141	On the conditions for lower crustal convective instability. Journal of Geophysical Research, 2001, 106, 6423-6446.	3.3	441
142	Gravity anomalies and crustal structure at the southeast Greenland margin. Journal of Geophysical Research, 2001, 106, 8853-8870.	3.3	57
143	Mantle thermal structure and active upwelling during continental breakup in the North Atlantic. Earth and Planetary Science Letters, 2001, 190, 251-266.	4.4	227
144	The role of H2O during crystallization of primitive arc magmas under uppermost mantle conditions and genesis of igneous pyroxenites: an experimental study. Contributions To Mineralogy and Petrology, 2001, 141, 643-658.	3.1	626

#	Article	IF	Citations
145	Orogenic Lherzolites and Mantle Processes: Editorial. Journal of Petrology, 2001, 42, 3-4.	2.8	4
146	Major element heterogeneity in the mantle source of the North Atlantic igneous province. Earth and Planetary Science Letters, 2000, 184, 251-268.	4.4	120
147	Crustal structure of the southeast Greenland margin from joint refraction and reflection seismic tomography. Journal of Geophysical Research, 2000, 105, 21591-21614.	3.3	409
148	Spatial distribution of melt conduits in the mantle beneath oceanic spreading ridges: Observations from the Ingalls and Oman ophiolites. Geochemistry, Geophysics, Geosystems, 2000, 1, n/a-n/a.	2.5	79
149	A review of melt migration processes in the adiabatically upwelling mantle beneath oceanic spreading ridges. , 1999, , 67-102.		1
150	Depleted spinel harzburgite xenoliths in Tertiary dykes from East Greenland: Restites from high degree melting. Earth and Planetary Science Letters, 1998, 154, 221-235.	4.4	150
151	Melt migration through the oceanic lower crust: a constraint from melt percolation modeling with finite solid diffusion. Earth and Planetary Science Letters, 1998, 156, 1-11.	4.4	92
152	Slab melting in the Aleutians: implications of an ion probe study of clinopyroxene in primitive adakite and basalt. Earth and Planetary Science Letters, 1998, 158, 53-65.	4.4	180
153	Post-breakup basaltic magmatism along the East Greenland Tertiary rifted margin. Earth and Planetary Science Letters, 1998, 160, 845-862.	4.4	45
154	Silica enrichment in the continental upper mantle via melt/rock reaction. Earth and Planetary Science Letters, 1998, 164, 387-406.	4.4	476
155	Gold and platinum-group element mineralization in the Kruuse Fjord gabbro complex, East Greenland. Economic Geology, 1997, 92, 490-501.	3.8	15
156	A review of melt migration processes in the adiabatically upwelling mantle beneath oceanic spreading ridges. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1997, 355, 283-318.	3.4	590
157	Three-dimensional flow and reaction in porous media: Implications for the Earth's mantle and sedimentary basins. Journal of Geophysical Research, 1997, 102, 14821-14833.	3.3	96
158	Origin of gabbro sills in the Moho transition zone of the Oman ophiolite: Implications for magma transport in the oceanic lower crust. Journal of Geophysical Research, 1997, 102, 27729-27749.	3.3	167
159	Geochemistry of gabbro sills in the crust-mantle transition zone of the Oman ophiolite: implications for the origin of the oceanic lower crust. Earth and Planetary Science Letters, 1997, 146, 475-488.	4.4	386
160	Evolution of the Kap Edvard Holm Complex: a Mafic Intrusion at a Rifted Continental Margin. Journal of Petrology, 1996, 37, 497-519.	2.8	26
161	A gold-bearing horizon in the Kap Edvard Holm Complex, East Greenland. Economic Geology, 1995, 90, 1288-1300.	3.8	41
162	Genesis of high Mg# andesites and the continental crust. Contributions To Mineralogy and Petrology, 1995, 120, 1-19.	3.1	607

#	Article	IF	Citations
163	Extraction of mid-ocean-ridge basalt from the upwelling mantle by focused flow of melt in dunite channels. Nature, 1995, 375, 747-753.	27.8	732
164	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
165	Experiments on flow focusing in soluble porous media, with applications to melt extraction from the mantle. Journal of Geophysical Research, 1995, 100, 475-496.	3.3	251
166	Origin of thick, high-velocity igneous crust along the U.S. East Coast Margin. Journal of Geophysical Research, 1995, 100, 10077-10094.	3.3	187
167	Channeling instability of upwelling melt in the mantle. Journal of Geophysical Research, 1995, 100, 20433-20450.	3.3	226
168	Genesis of high Mg# andesites and the continental crust. Contributions To Mineralogy and Petrology, 1995, 120, 1-19.	3.1	26
169	Chapter 15 Fluid and Thermal Dissolution Instabilities in Magmatic Systems. International Geophysics, 1994, 57, 355-379.	0.6	9
170	Focussed Flow of Melt in the Upper Mantle: Extraction of MORB Beneath Oceanic Spreading Ridges. Mineralogical Magazine, 1994, 58A, 466-467.	1.4	3
171	Large igneous province on the US Atlantic margin and implications for magmatism during continental breakup. Nature, 1993, 364, 433-436.	27.8	227
172	Relative depletion of niobium in some arc magmas and the continental crust: partitioning of K, Nb, La and Ce during melt/rock reaction in the upper mantle. Earth and Planetary Science Letters, 1993, 120, 111-134.	4.4	446
173	Formation of harzburgite by pervasive melt/rock reaction in the upper mantle. Nature, 1992, 358, 635-641.	27.8	597
174	High-field-strength element depletions in arc basalts due to mantleâ€“magma interaction. Nature, 1990, 345, 521-524.	27.8	339
175	Reaction Between Ultramafic Rock and Fractionating Basaltic Magma II. Experimental Investigation of Reaction Between Olivine Tholeiite and Harzburgite at 1150-1050ÂC and 5 kb. Journal of Petrology, 1990, 31, 99-134.	2.8	177
176	Reaction Between Ultramafic Rock and Fractionating Basaltic Magma I. Phase Relations, the Origin of Calc-alkaline Magma Series, and the Formation of Discordant Dunite. Journal of Petrology, 1990, 31, 51-98.	2.8	493
177	Zircon fission-track ages from the Gasherbrum Diorite, Karakoram Range, northern Pakistan. Geology, 1989, 17, 1044.	4.4	24
178	Assimilation of Ultramafic Rock in Subduction-Related Magmatic Arcs. Journal of Geology, 1986, 94, 829-843.	1.4	118
179	Assimilation of peridotite in zoned calc-alkaline plutonic complexes: evidence from the Big Jim complex, Washington Cascades. Contributions To Mineralogy and Petrology, 1986, 94, 12-28.	3.1	75
180	Periodic Formation of Magma Fractures and Generation of Layered Gabbros in the Lower Crust Beneath Oceanic Spreading Ridges. Geophysical Monograph Series, 0, , 267-289.	0.1	71

#	Article	IF	Citations
181	Scientific Drilling and Related Research in the Samail Ophiolite, Sultanate of Oman. Scientific Drilling, 0, 15, 64-71.	0.6	18