Natsue Abe

List of Publications by Year
in descending order

70 papers	1,946 citations	361413 20 h-index	265206 42 g-index
75 all docs	75 docs citations	75 times ranked	1746 citing authors

#	Article	IF	Citations
1	The origin and evolution of Archean lithospheric mantle. Precambrian Research, 2003, 127, 19-41.	2.7	432
2	Volcanism in Response to Plate Flexure. Science, 2006, 313, 1426-1428.	12.6	262
3	Primitive layered gabbros from fast-spreading lower oceanic crust. Nature, 2014, 505, 204-207.	27.8	125
4	Drilling constraints on lithospheric accretion and evolution at Atlantis Massif, Mid-Atlantic Ridge 30Â°N. Journal of Geophysical Research, 2011, 116, .	3.3	112
5	Reaction of orthopyroxene in peridotite xenoliths with alkali-basalt melt and its implication for genesis of alpine-type chromitite. American Mineralogist, 1995, 80, 1041-1047.	1.9	80
6	Mantle peridotites from the Western Pacific. Gondwana Research, 2007, 11, 180-199.	6.0	73
7	Geochemical characteristics of the uppermost mantle beneath the Japan island arcs: implications for upper mantle evolution. Physics of the Earth and Planetary Interiors, 1998, 107, 233-248.	1.9	72
8	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
9	Petit-spot lava fields off the central Chile trench induced by plate flexure. Geochemical Journal, 2013, 47, 249-257.	1.0	39
10	Pre-subduction metasomatic enrichment of the oceanic lithosphere induced by plate flexure. Nature Geoscience, 2016, 9, 898-903.	12.9	39
11	Podiform chromitite in the arc mantle: chromitite xenoliths from the Takashima alkali basalt, Southwest Japan arc. Mineralium Deposita, 1994, 29, 434-438.	4.1	37
12	TIARES Projectâ€"Tomographic investigation by seafloor array experiment for the Society hotspot. Earth, Planets and Space, 2012, 64, i-iv.	2.5	33
13	Hydration processes in the arc mantle; petrology of the Megata peridotite xenoliths, the Northeast Japan arc.. Journal of Mineralogy, Petrology and Economic Geology, 1992, 87, 305-317.	0.1	31
14	Subsurface structure of the â€œpetitâ€spotâ€• volcanoes on the northwestern Pacific Plate. Geophysical Research Letters, 2007, 34, .	4.0	29
15	Direct evidence for upper mantle structure in the NW Pacific Plate: Microstructural analysis of a petit-spot peridotite xenolith. Earth and Planetary Science Letters, 2011, 302, 194-202.	4.4	28
16	Seismic anisotropy in the uppermost mantle, back-arc region of the northeast Japan arc: Petrophysical analyses of Ichinomegata peridotite xenoliths. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	26
17	Petrology of podiform chromitite from the ocean floor at the 15Â°20'N FZ in the MAR, Site 1271, ODP Leg 209. Journal of Mineralogical and Petrological Sciences, 2011, 106, 97-102.	0.9	25
18	Electrical conductivity of old oceanic mantle in the northwestern Pacific I: 1-D profiles suggesting differences in thermal structure not predictable from a plate cooling model. Earth, Planets and Space, 2017, 69, .	2.5	23

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19	Petrological feature of spinel lherzolite xenolith from Oki-Dogo Island: An implication for variety of the upper mantle peridotite beneath southwestern Japan. Island Arc, 2003, 12, 219-232.	1.1	22
20	Noble gas isotopic compositions of mantle xenoliths from northwestern Pacific lithosphere. Chemical Geology, 2009, 268, 313-323.	3.3	21
21	Expedition 360 summary. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	20
22	Site U1473. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	20
23	Examination of gas hydrate-bearing deep ocean sediments by X-ray Computed Tomography and verification of physical property measurements of sediments. Marine and Petroleum Geology, 2019, 108, 239-248.	3.3	19
24	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
25	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
26	Petrochemistry of serpentinized peridotite from the Iberia Abyssal Plain (ODP Leg 173): its character intermediate between suboceanic and sub-continental upper mantle. Geological Society Special Publication, 2001, 187, 143-159.	1.3	15
27	Petrology of peridotite xenoliths in alkali basalt (11Ma) from Boun, Korea: An insight into the upper mantle beneath the East Asian continental margin.. Journal of Mineralogical and Petrological Sciences, 2001, 96, 89-99.	0.9	15
28	Peridotite xenoliths and essential ejecta from the Ninomegata crater, the Northeastern Japan arc.. Journal of Mineralogy, Petrology and Economic Geology, 1995, 90, 41-49.	0.1	14
29	Petrography and Geochemistry of the mantle xenoliths: Implications for lithospheric mantle beneath the Japan arcs. Ganseki Kobutsu Kagaku, 2005, 34, 143-158.	0.1	14
30	Porosity, permeability, and grain size of sediment cores from gas-hydrate-bearing sites and their implication for overpressure in shallow argillaceous formations: Results from the national gas hydrate program expedition 02, Krishna-Godavari Basin, India. Marine and Petroleum Geology, 2019, 108, 332-347.	3.3	13
31	Significance and Variety of Mantle-crust Boundary in the Oman Ophiolite. Journal of Geography (Chigaku Zasshi), 2003, 112, 750-768.	0.3	12
32	Indian Monsoonal Variations During the Past 80ÂKyr Recorded in NGHPâ€02 Hole 19B, Western Bay of Bengal: Implications From Chemical and Mineral Properties. Geochemistry, Geophysics, Geosystems, 2019, 20, 148-165.	2.5	12
33	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
34	Formation and Evolution of Oceanic Lithosphere: New Insights on Crustal Structure and Igneous Geochemistry from ODP/IODP Sites 1256, U1309, and U1415. Developments in Marine Geology, 2014, , 449-505.	0.4	10
35	Strength characteristics of sediments from a gas hydrate deposit in the Krishnaâ€"Godavari Basin on the eastern margin of India. Marine and Petroleum Geology, 2019, 108, 348-355.	3.3	10
36	Hybridization of Dunite and Gabbroic Materials in Hole 1271B from Mid-Atlantic Ridge 15Â°N: Implications for Melt Flow and Reaction in the Upper Mantle. , 0, , .		10

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37	The MoHole: A Crustal Journey and Mantle Quest, Workshop in Kanazawa, Japan, 3–5 June 2010. Scientific Drilling, 0, 10, 56-63.	0.6	10
38	Submarine lava fields in French Polynesia. Marine Geology, 2016, 373, 39-48.	2.1	9
39	Meltâ€rock interactions and fabric development of peridotites from North Pond in the Kane area, Midâ€Atlantic Ridge: Implications of microstructural and petrological analyses of peridotite samples from IODP Hole U1382A. Geochemistry, Geophysics, Geosystems, 2016, 17, 2298-2322.	2.5	8
40	Garnet xenocryst from petit-spot lavas as an indicator for off-axis mantle refertilization at intermediate spreading ridges. Geology, 2017, 45, 1091-1094.	4.4	8
41	Constraints on the fluid supply rate into and through gas hydrate reservoir systems as inferred from pore-water chloride and in situ temperature profiles, Krishna-Godavari Basin, India. Marine and Petroleum Geology, 2019, 108, 368-376.	3.3	8
42	An origin of the along-arc compositional variation in the Izu-Bonin arc system. Geoscience Frontiers, 2020, 11, 1621-1634.	8.4	8
43	Geological aspects of peridotite and related xenoliths in volcanic rocks: an example from the Japan arcs. Ganseki Kobutsu Kagaku, 2005, 34, 133-142.	0.1	8
44	Investigation of the Petrologic Nature of the Moho toward the Mohole. Journal of Geography (Chigaku Zasshi), 2008, 117, 110-123.	0.3	7
45	Mission Moho: Formation and evolution of oceanic lithosphere. Eos, 2006, 87, 539.	0.1	6
46	Crack geometry of serpentinized peridotites inferred from onboard ultrasonic data from the Oman Drilling Project. Tectonophysics, 2021, 814, 228978.	2.2	6
47	Ophiolites and ultramafic rocks. , 0, , 223-250.		6
48	Hole U1473A remediation operations, Expedition 362T. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	6
49	Equivalent formation strength as a proxy tool for exploring for the location and distribution of gas hydrates. Marine and Petroleum Geology, 2019, 108, 356-367.	3.3	5
50	Workshop report: Exploring deep oceanic crust off Hawai`i. Scientific Drilling, 0, 29, 69-82.	0.6	5
51	Effects of Alteration and Cracks on the Seismic Velocity Structure of Oceanic Lithosphere Inferred From Ultrasonic Measurements of Mafic and Ultramafic Samples Collected by the Oman Drilling Project. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021923.	3.4	5
52	Subsurface Structure of the "Petit-spot" Intra-plate Volcanism, in the Northwestern Pacific. JAMSTEC Report of Research and Development, 2006, 3, 31-42.	0.2	5
53	A cold seep triggered by a hot ridge subduction. Scientific Reports, 2021, 11, 20923.	3.3	5
54	Comments on "Garnet-bearing spinel harzburgite xenolith from Arato-yama alkali basalt, southwest Japan". by Yamamoto et al.. Ganseki Kobutsu Kagaku, 2001, 30, 190-193.	0.1	5

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55	Seismic properties of gabbroic sections in oceanic core complexes: constraints from seafloor drilling. Marine Geophysical Researches, 2019, 40, 557-569.	1.2	4
56	Hole U1415I. Proceedings of the Integrated Ocean Drilling Program Integrated Ocean Drilling Program, 0, , .	1.0	4
57	Special issue â€œEarth Sciences of Mantle Xenoliths: A Window to Earthâ€™s Interiorâ€•Preface. Ganseki Kobutsu Kagaku, 2005, 34, 131-132.	0.1	4
58	Hole U1415AJ. Proceedings of the Integrated Ocean Drilling Program Integrated Ocean Drilling Program, 0, , .	1.0	4
59	Tectonics and mechanism of a spreading ridge subduction at the Chile Triple Junction based on new marine geophysical data. Geochemical Journal, 2013, 47, 137-147.	1.0	3
60	Biotite in olivine gabbros from Atlantis Bank: Evidence for amphibolite-facies metasomatic alteration of the lower oceanic crust. Lithos, 2019, 348-349, 105176.	1.4	3
61	Hole U1415P. Proceedings of the Integrated Ocean Drilling Program Integrated Ocean Drilling Program, 0, , .	1.0	2
62	On porosity determination for hard rock drilling using core samples collected by the Oman Drilling Project. Journal of the Geological Society of Japan, 2020, 126, 713-717.	0.6	2
63	Ship-board determination of whole-rock (ultra-)trace element concentrations by laser ablation-inductively coupled plasma mass spectrometry analysis of pressed powder pellets aboard the D/V <i>Chikyu</i>. Scientific Drilling, 0, 30, 75-99.	0.6	2
64	Simultaneous Measurements of Elastic Wave Velocity and Porosity of Epidosites Collected From the Oman Ophiolite: Implication for Low V _P /V _S Anomaly in the Oceanic Crust. Geophysical Research Letters, 2022, 49, .	4.0	2
65	Trans-Pacific Bathymetry Survey crossing over the Pacific, Antarctic, and Nazca plates. JAMSTEC Report of Research and Development, 2013, 17, 43-57.	0.2	1
66	IODP Expeditions 304 and 305 - Oceanic Core Complex Formation, Atlantis Massif. Scientific Drilling, 2005, , .	0.6	1
67	Preface: Geoscience dynamics in the Patagonia Archipelago^|^mdash;Southern Pacific Ocean. Geochemical Journal, 2013, 47, 93-95.	1.0	0
68	Metasomatized peridotite xenoliths from the cretaceous rift-related Natash volcanics and their bearing on the nature of the lithospheric mantle beneath the southern part of the Eastern Desert of Egypt. Lithos, 2020, 370-371, 105642.	1.4	0
69	Detrital Minerals in Surface Sediments from Hess Deep, Equatorial Pacific: Implications for the Lithologic Spread of Mafic-Ultramafic Rocks. , 0, , .		0
70	U-Pb dating of granitic cobble (dropstone) recovered from inner slope of the Chile Trench (48Â°S): Constraint for its provenance. Geochemical Journal, 2020, 54, 195-201.	1.0	0