Nobumichi Shimizu

List of Publications by Year
in descending order

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67	7,091	76326	98798
papers	citations	40 h-index	67 g-index

68	68	68	4150
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	Evidence for hotspot-related carbonatite metasomatism in the oceanic upper mantle. Nature, 1993, 365, 221-227.	27.8	370
5	Rare earth element diffusion in diopside: influence of temperature, pressure, and ionic radius, and an elastic model for diffusion in silicates. Contributions To Mineralogy and Petrology, 2001, 141, 687-703.	3.1	355
6	Rapid reequilibration of H2O and oxygen fugacity in olivine-hosted melt inclusions. Geology, 2012, 40, 915-918.	4.4	285
7	Strontium and samarium diffusion in diopside. Geochimica Et Cosmochimica Acta, 1984, 48, 1589-1608.	3.9	274
8	Rare earth element diffusion in a natural pyrope single crystal at 2.8ÂGPa. Contributions To Mineralogy and Petrology, 2002, 142, 416-424.	3.1	232
9	Post-entrapment modification of volatiles and oxygen fugacity in olivine-hosted melt inclusions. Earth and Planetary Science Letters, 2013, 374, 145-155.	4.4	193
10	Explosive eruptions at mid-ocean ridges driven by CO2-rich magmas. Nature Geoscience, 2011, 4, 260-263.	12.9	157
11	Carbon solution and partitioning between metallic and silicate melts in a shallow magma ocean: Implications for the origin and distribution of terrestrial carbon. Geochimica Et Cosmochimica Acta, 2013, 102, 191-212.	3.9	129
12	An experimental study of the partitioning of K, Rb, Cs, Sr and Ba between clinopyroxene and liquid at high pressures. Geochimica Et Cosmochimica Acta, 1974, 38, 1789-1798.	3.9	119
13	Open-system melting in the upper mantle: Constraints from the Hayachine-Miyamori ophiolite, northeastern Japan. Journal of Geophysical Research, 1995, 100, 22315-22335.	3.3	118
14	Experimental determination of F and Cl partitioning between lherzolite and basaltic melt. Contributions To Mineralogy and Petrology, 2012, 163, 591-609.	3.1	113
15	Nd and Pb isotope variability in the Indus River System: implications for sediment provenance and crustal heterogeneity in the Western Himalaya. Earth and Planetary Science Letters, 2002, 200, 91-106.	4.4	107
16	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
17	Partitioning of carbon between Fe-rich alloy melt and silicate melt in a magma ocean â€“ Implications for the abundance and origin of volatiles in Earth, Mars, and the Moon. Geochimica Et Cosmochimica Acta, 2014, 139, 447-471.	3.9	92
18	Oxidising agents in sub-arc mantle melts link slab devolatilisation and arc magmas. Nature Communications, 2018, 9, 3500.	12.8	91

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19	Zircon Dating of Oceanic Crustal Accretion. Science, 2009, 323, 1048-1050.	12.6	88
20	Tracing patterns of erosion and drainage in the Paleogene Himalaya through ion probe Pb isotope analysis of detrital K-feldspars in the Indus Molasse, India. Earth and Planetary Science Letters, 2001, 188, 475-491.	4.4	83
21	Trace element partitioning in Earthâ€™s lower mantle and implications for geochemical consequences of partial melting at the coreâ€“mantle boundary. Physics of the Earth and Planetary Interiors, 2004, 146, 249-260.	1.9	81
22	Diffusive fractionation of trace elements during production and transport of melt in Earthâ€™s upper mantle. Earth and Planetary Science Letters, 2002, 198, 93-112.	4.4	80
23	Osmium Isotopic Evidence for Ancient Subcontinental Lithospheric Mantle Beneath the Kerguelen Islands, Southern Indian Ocean. Science, 1998, 280, 418-421.	12.6	79
24	Uranium and thorium diffusion in diopside. Earth and Planetary Science Letters, 1998, 160, 505-519.	4.4	75
25	Carbon and sulfur budget of the silicate Earth explained by accretion of differentiated planetaryÂembryos. Nature Geoscience, 2016, 9, 781-785.	12.9	75
26	Globally elevated titanium, tantalum, and niobium (TITAN) in ocean island basalts with high ³He/⁴He. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	73
27	Evolution of the lithosphere beneath Oahu, Hawaii: rare earth element abundances in mantle xenoliths. Earth and Planetary Science Letters, 1993, 119, 53-69.	4.4	68
28	Volatile cycling of <scp>H₂O</scp>, <scp>CO</scp>₂, <scp>F</scp>, and <scp>C</scp>l in the <scp>HIMU</scp> mantle: A new window provided by melt inclusions from oceanic hot spot lavas at <scp>M</scp>angaia, <scp>C</scp>ook <scp>I</scp>slands. Geochemistry, Geophysics, Geosystems, 2014, 15, 4445-4467.	2.5	67
29	Mantle to surface degassing of carbon- and sulphur-rich alkaline magma at El Hierro, Canary Islands. Earth and Planetary Science Letters, 2017, 460, 268-280.	4.4	67
30	Melt Production Beneath Mt. Shasta from Boron Data in Primitive Melt Inclusions. Science, 2001, 293, 281-283.	12.6	64
31	Coccolithophore productivity response to greenhouse event of the Paleoceneâ€“Eocene Thermal Maximum. Earth and Planetary Science Letters, 2007, 258, 192-206.	4.4	62
32	Cr-spinel, an excellent micro-container for retaining primitive melts â€“ implications for a hydrous plume origin for komatiites. Earth and Planetary Science Letters, 2001, 189, 177-188.	4.4	60
33	Mantle source heterogeneity for South Tyrrhenian magmas revealed by Pb isotopes and halogen contents of olivine-hosted melt inclusions. Chemical Geology, 2012, 334, 266-279.	3.3	60
34	Protracted timescales of lower crustal growth at the fast-spreading East Pacific Rise. Nature Geoscience, 2012, 5, 275-278.	12.9	56
35	Seasonal cycles in biogenic production and export in Northern Bay of Bengal sediment traps. Deep-Sea Research Part II: Topical Studies in Oceanography, 2007, 54, 558-580.	1.4	53
36	Relationship between coccolith Sr/Ca ratios and coccolithophore production and export in the Arabian Sea and Sargasso Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2007, 54, 581-600.	1.4	52

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37	Ion microprobe analyses bearing on the composition of the upper mantle beneath the Basin and Range and Colorado Plateau Provinces. Journal of Geophysical Research, 1993, 98, 14091-14108.	3.3	51
38	Chalcophile behavior of thallium during <scp>MORB</scp> melting and implications for the sulfur content of the mantle. Geochemistry, Geophysics, Geosystems, 2014, 15, 4905-4919.	2.5	51
39	Extreme Chemical Diversity in the Mantle during Eclogitic Diamond Formation: Evidence from 35 Garnet and 5 Pyroxene Inclusions in a Single Diamond. International Geology Review, 1998, 40, 567-578.	2.1	49
40	Contrasting partition behavior of F and Cl during hydrous mantle melting: implications for Cl/F signature in arc magmas. Progress in Earth and Planetary Science, 2014, 1, .	3.0	44
41	Geochemistry of ultramafic inclusions from Salt Lake Crater, Hawaii, and from Southern African kimberlites. Physics and Chemistry of the Earth, 1975, 9, 655-669.	0.3	42
42	B/Ca in coccoliths and relationship to calcification vesicle pH and dissolved inorganic carbon concentrations. Geochimica Et Cosmochimica Acta, 2012, 80, 143-157.	3.9	41
43	Effect of fluorine on near-liquidus phase equilibria of an Feâ€“Mg rich basalt. Chemical Geology, 2012, 312-313, 118-126.	3.3	37
44	Experimental investigation of the S and S-isotope distribution between H2Oâ€“SÂ±Cl fluids and basaltic melts during decompression. Chemical Geology, 2015, 393-394, 36-54.	3.3	36
45	CO2-rich komatiitic melt inclusions in Cr-spinels within beach sand from Gorgona Island, Colombia. Earth and Planetary Science Letters, 2009, 288, 33-43.	4.4	34
46	B content and Si/C ratios from cultured diatoms (Thalassiosira pseudonana and Thalassiosira) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Acta, 2013, 123, 322-337.	3.9	34
47	Mid-Ocean Ridge Melting: Constraints from Lithospheric Xenoliths at Oahu, Hawaii. Journal of Petrology, 1998, 39, 277-295.	2.8	31
48	Insights on coccolith chemistry from a new ion probe method for analysis of individually picked coccoliths. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	2.5	31
49	Volatile (F and Cl) concentrations in Iwate olivine-hosted melt inclusions indicating low-temperature subduction. Earth, Planets and Space, 2014, 66, 81.	2.5	31
50	Petrology, Trace Element and Sr, Nd, Hf Isotope Geochemistry of the North Lanzo Peridotite Massif (Western Alps, Italy). Journal of Petrology, 2012, 53, 2259-2306.	2.8	30
51	â€œPoseidicâ€•explosive eruptions at Loihi Seamount, Hawaii. Geology, 2010, 38, 291-294.	4.4	27
52	Explosive submarine eruptions driven by volatile-coupled degassing at LÅ‘ihi Seamount, Hawaî`i. Earth and Planetary Science Letters, 2010, 295, 497-510.	4.4	26
53	Melt, fluid and crystal inclusions in olivine phenocrysts from Kerguelen plume-derived picritic basalts: evidence for interaction with the Kerguelen Plateau lithosphere. Chemical Geology, 2002, 183, 195-220.	3.3	25
54	The ⁸⁷Sr/⁸⁶Sr and ¹⁴³Nd/¹⁴⁴Nd disequilibrium between Polynesian hot spot lavas and the clinopyroxenes they host: Evidence complementing isotopic disequilibrium in melt inclusions. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	25

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55	Weekly to monthly time scale of melt inclusion entrapment prior to eruption recorded by phosphorus distribution in olivine from mid-ocean ridges. Geology, 2017, 45, 1059-1062.	4.4	25
56	Melt and source mantle compositions in the Late Archaean: A study of strontium and neodymium isotope and trace elements in clinopyroxenes from shoshonitic alkaline rocks. Geochimica Et Cosmochimica Acta, 1996, 60, 4551-4562.	3.9	24
57	Sulfur isotope fractionation between fluid and andesitic melt: An experimental study. Geochimica Et Cosmochimica Acta, 2014, 142, 501-521.	3.9	24
58	Trace element abundances in mantle-derived minerals which bear on compositional complexities in the lithosphere of the Colorado Plateau. Chemical Geology, 2000, 165, 283-305.	3.3	23
59	An experimental study of the grain-scale processes of peridotite melting: implications for major and trace element distribution during equilibrium and disequilibrium melting. Contributions To Mineralogy and Petrology, 2008, 156, 87-102.	3.1	20
60	Temporally variable diagenetic overgrowth on deep-sea nannofossil carbonates across Palaeogene hyperthermals and implications for isotopic analyses. Marine Micropaleontology, 2014, 107, 18-31.	1.2	16
61	Micropicking of nannofossils in preparation for analysis by secondary ion mass spectrometry. Nature Protocols, 2009, 4, 1038-1043.	12.0	15
62	Paleo-elevation and subsidence of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mo>â^¼</mml:mo><mml:mn>145</mml:mn><mml:mspace width="0.25em" /><mml:mtext>Ma</mml:mtext></mml:math> Shatsky Rise inferred from CO2 and H2O in fresh volcanic glass. Earth and Planetary Science Letters, 2013, 383, 37-44.	4.4	14
63	Partitioning of strontium between clinopyroxene and liquid at high pressures: preliminary experiments. Earth and Planetary Science Letters, 1971, 13, 134-138.	4.4	12
64	In-situ measurements of magmatic volatile elements, F, S, and Cl, by electron microprobe, secondary ion mass spectrometry, and heavy ion elastic recoil detection analysis. American Mineralogist, 2020, 105, 616-626.	1.9	12
65	Crystallization depth beneath an oceanic detachment fault (ODP Hole 923A, Midâ€Atlantic Ridge). Geochemistry, Geophysics, Geosystems, 2016, 17, 162-180.	2.5	5
66	Grain scale processes recorded by oxygen isotopes in olivine-hosted melt inclusions from two MORB samples. Chemical Geology, 2019, 511, 11-20.	3.3	4
67	GEOCHEMISTRY OF ULTRAMAFIC INCLUSIONS FROM SALT LAKE CRATER, HAWAII, AND FROM SOUTHERN AFRICAN KIMBERLITES. , 1975, , 655-669.		2