Tatsuhiko Kawamoto

List of Publications by Year
in descending order

53	2,663	186265	197818
papers	citations	28 h-index	49 g-index

54	54	54	2159
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydrous partial melting of lherzolite at 1 GPa: The effect of H2O on the genesis of basaltic magmas. Earth and Planetary Science Letters, 1995, 133, 463-473.	4.4	427
2	Melting Temperature and Partial Melt Chemistry of H2O-Saturated Mantle Peridotite to 11 Gigapascals. Science, 1997, 276, 240-243.	12.6	211
3	Experimental evidence for a hydrous transition zone in the early Earth's mantle. Earth and Planetary Science Letters, 1996, 142, 587-592.	4.4	161
4	Slab melting versus slab dehydration in subduction-zone magmatism. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8177-8182.	7.1	152
5	Changes in the structure of water deduced from the pressure dependence of the Raman OH frequency. Journal of Chemical Physics, 2004, 120, 5867-5870.	3.0	132
6	Mantle wedge infiltrated with saline fluids from dehydration and decarbonation of subducting slab. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9663-9668.	7.1	120
7	Second critical endpoint in the peridotite-H2O system. Journal of Geophysical Research, 2007, 112, .	3.3	96
8	Separation of supercritical slab-fluids to form aqueous fluid and melt components in subduction zone magmatism. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18695-18700.	7.1	88
9	Oxidation state of iron in hydrous mantle phases: implications for subduction and mantle oxygen fugacity. Physics of the Earth and Planetary Interiors, 2004, 143-144, 157-169.	1.9	85
10	Crystal structure of monoclinic hydrous wadsleyite [beta -(Mg,Fe)₂SiO₄]. American Mineralogist, 1997, 82, 270-275.	1.9	82
11	Hydrous phase stability and partial melt chemistry in H2O-saturated KLB-1 peridotite up to the uppermost lower mantle conditions. Physics of the Earth and Planetary Interiors, 2004, 143-144, 387-395.	1.9	76
12	Experimental constraints on differentiation and H2O abundance of calc-alkaline magmas. Earth and Planetary Science Letters, 1996, 144, 577-589.	4.4	73
13	Hydrous Phases and Water Transport in the Subducting Slab. Reviews in Mineralogy and Geochemistry, 2006, 62, 273-289.	4.8	62
14	Dusty and honeycomb plagioclase: indicators of processes in the Uchino stratified magma chamber, Izu Peninsula, Japan. Journal of Volcanology and Geothermal Research, 1992, 49, 191-208.	2.1	60
15	Wadsleyite II: A new high pressure hydrous phase in the peridotite-H2O system. Earth and Planetary Science Letters, 1997, 146, E9-E16.	4.4	60
16	Au-Pd sample containers for melting experiments on iron and water bearing systems. European Journal of Mineralogy, 1994, 6, 381-386.	1.3	57
17	Simulating bubble number density of rhyolitic pumices from Plinian eruptions: constraints from fast decompression experiments. Bulletin of Volcanology, 2010, 72, 735-746.	3.0	53
18	Mg/Si ratios of aqueous fluids coexisting with forsterite and enstatite based on the phase relations in the Mg₂SiO₄-SiO₂-H₂O system. American Mineralogist, 2004, 89, 1433-1437.	1.9	49

#	Article	IF	Citations
19	Determination of the second critical end point in silicate-H2O systems using high-pressure and high-temperature X-ray radiography. Geochimica Et Cosmochimica Acta, 2004, 68, 5189-5195.	3.9	41
20	Silicate melt inclusions in the new millennium: A review of recommended practices for preparation, analysis, and data presentation. Chemical Geology, 2021, 570, 120145.	3.3	40
21	High-pressure phase transition and behavior of protons in brucite Mg(OH) 2 : a high-pressure-temperature study using IR synchrotron radiation. Physics and Chemistry of Minerals, 2002, 29, 396-402.	0.8	37
22	Evolution of carbon dioxide-bearing saline fluids in the mantle wedge beneath the Northeast Japan arc. Contributions To Mineralogy and Petrology, 2014, 168, 1.	3.1	37
23	Pressure response of Raman spectra of water and its implication to the change in hydrogen bond interaction. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2005, 61, 2423-2427.	3.9	36
24	Polybaric degassing of island arc low-K tholeiitic basalt magma recorded by OH concentrations in Ca-rich plagioclase. Earth and Planetary Science Letters, 2011, 308, 259-266.	4.4	36
25	The role of Al-defects on the equation of state of Alâ€“(Mg,Fe)SiO3 perovskite. Earth and Planetary Science Letters, 2007, 263, 167-179.	4.4	35
26	The compressibility of a natural apatite. Physics and Chemistry of Minerals, 2004, 31, 580-584.	0.8	32
27	Raman spectroscopy of cubic boron nitride under high temperature and pressure conditions: A new optical pressure marker. Review of Scientific Instruments, 2004, 75, 2451-2454.	1.3	29
28	Large-ion lithophile elements delivered by saline fluids to the sub-arc mantle. Earth, Planets and Space, 2014, 66, .	2.5	29
29	Slab-derived halogens and noble gases illuminate closed system processes controlling volatile element transport into the mantle wedge. Earth and Planetary Science Letters, 2017, 457, 106-116.	4.4	28
30	Infrared spectromicroscopy and magneto-optical imaging stations at SPring-8. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 467-468, 893-896.	1.6	27
31	Crystal chemistry of wadsleyite II and water in the Earthâ€™s interior. Physics and Chemistry of Minerals, 2005, 31, 691-705.	0.8	27
32	Oxygen K-edge fine structures of water by x-ray Raman scattering spectroscopy under pressure conditions. Journal of Chemical Physics, 2007, 127, 134502.	3.0	27
33	Fluid inclusions in jadeitite and jadeite-rich rock from serpentinite mÃ©langes in northern Hispaniola: Trapped ambient fluids in a cold subduction channel. Lithos, 2018, 308-309, 227-241.	1.4	20
34	Melt inclusion analysis of the Unzen 1991â€“1995 dacite: implications for crystallization processes of dacite magma. Bulletin of Volcanology, 2005, 67, 648-662.	3.0	19
35	Aqueous fluids and sedimentary melts as agents for mantle wedge metasomatism, as inferred from peridotite xenoliths at Pinatubo and Iraya volcanoes, Luzon arc, Philippines. Lithos, 2016, 262, 355-368.	1.4	18
36	Experimental Study of the Stability of a Dolomite + Coesite Assemblage in Contact With Peridotite: Implications for Sediment-Mantle Interaction and Diamond Formation During Subduction. Journal of Petrology, 2012, 53, 391-417.	2.8	17

#	Article	IF	Citations
37	Stability of hydrous minerals in H2O-saturated KLB-1 peridotite up to 15 GPA. AIP Conference Proceedings, 1995, , .	0.4	13
38	Melting behavior of SiO2 up to 120 GPa. Physics and Chemistry of Minerals, 2020, 47, 1.	0.8	12
39	12. Hydrous Phases and Water Transport in the Subducting Slab. , 2006, , 273-290.		11
40	Geochemical and Srâ€“Nd isotopic characteristics and pressureâ€“temperature estimates of mantle xenoliths from the French Massif Central: evidence for melting and multiple metasomatism by silicate-rich carbonatite and asthenospheric melts. Geological Society Special Publication, 2010, 337, 153-175.	1.3	10
41	Critical Phenomena between Magmas and Aqueous Fluids. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2004, 14, 235-241.	0.0	8
42	Special issue â€˜Geofluid processes in subduction zones and mantle dynamicsâ€™. Earth, Planets and Space, 2015, 67, .	2.5	8
43	Chemical composition of fluid inclusions in the Yorii jadeiteâ€“quartz rocks from the Kanto Mountains, Japan. Journal of Mineralogical and Petrological Sciences, 2017, 112, 281-290.	0.9	6
44	Mid infrared throughput with 5.MU.m aperture for H2O determination of an andesitic glass: Comparison of synchrotron radiation source at SPring-8 with conventional light sources.. Geochemical Journal, 2003, 37, 253-259.	1.0	4
45	Comment on: Melting behavior of SiO2 up to 120ÂGPa (Andrault et al. 2020). Physics and Chemistry of Minerals, 2022, 49, 1.	0.8	4
46	Materials Science and Seismological Approaches to Understanding Seismogenic Processes Investigation of Critical Behavior in Basalt-H2O System Using High-pressure and High-temperature X-ray Radiography. Journal of Geography (Chigaku Zasshi), 2003, 112, 970-978.	0.3	2
47	Chemical Composition of Mantle Wedge Fluids. Journal of Geography (Chigaku Zasshi), 2015, 124, 473-501.	0.3	2
48	Two groups of fluid inclusions in the Yunotani eclogite from the Hidaâ€“Gaien Belt: Implications for changes of fluid salinity during exhumation. Journal of Mineralogical and Petrological Sciences, 2019, 114, 302-307.	0.9	2
49	Structure and properties of silicate melts and fluids. Geochimica Et Cosmochimica Acta, 2004, 68, 5011.	3.9	1
50	Study notes on water and magmas in the depths of the Earth. Ganseki Kobutsu Kagaku, 2018, 47, 13-26.	0.1	1
51	(FeH)1â^'xTixO2: A new water carrier to the mantle transition zone. American Mineralogist, 2016, 101, 1021-1022.	1.9	0
52	Special issue "Crustal dynamics: toward integrated view of island arc seismogenesis". Earth, Planets and Space, 2021, 73, .	2.5	0
53	Experimental Mineralogy and Petrology. Encyclopedia of Earth Sciences Series, 2018, , 471-476.	0.1	0