Takumi Kikegawa

List of Publications by Year
in descending order

39	1,272	394421	345221
papers	citations	19 h-index	36 g-index

39	39	39	1312
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In situ determination of the phase boundary between Wadsleyite and Ringwoodite in Mg2SiO4. Geophysical Research Letters, 2000, 27, 803-806.	4.0	121
2	Aluminous hydrous mineral Î´â€AlOOH as a carrier of hydrogen into the coreâ€mantle boundary. Geophysical Research Letters, 2008, 35, .	4.0	103
3	Exploratory studies of silicate melt structure at high pressures and temperatures by in situ X-ray diffraction. Journal of Geophysical Research, 2004, 109, .	3.3	78
4	Fe-Mg partitioning between (Mg, Fe)SiO3post-perovskite, perovskite, and magnesiowÃ¼stite in the Earth's lower mantle. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	77
5	Plagioclase breakdown as an indicator for shock conditions of meteorites. Nature Geoscience, 2010, 3, 41-45.	12.9	71
6	The stability and equation of state for the cotunnite phase of TiO2 up to 70ÂGPa. Physics and Chemistry of Minerals, 2010, 37, 129-136.	0.8	60
7	Compression of iron hydride to 80 GPa and hydrogen in the Earth's inner core. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	59
8	Interaction between iron and post-perovskite at core-mantle boundary and core signature in plume source region. Geophysical Research Letters, 2006, 33, .	4.0	59
9	Iron-water reaction at high pressure and temperature, and hydrogen transport into the core. Physics and Chemistry of Minerals, 2005, 32, 77-82.	0.8	56
10	Stability of the Liquid State of Imidazolium-Based Ionic Liquids under High Pressure at Room Temperature. Journal of Physical Chemistry B, 2015, 119, 8146-8153.	2.6	56
11	In situ X-ray observation of the reaction dolomite = aragonite + magnesite at 900â€“1300 K. American Mineralogist, 2002, 87, 922-930.	1.9	53
12	Dislocation-accommodated grain boundary sliding as the major deformation mechanism of olivine in the Earthâ€™s upper mantle. Science Advances, 2015, 1, e1500360.	10.3	49
13	In situ X-ray observation of decomposition of superhydrous phase B at high pressure and temperature. Geophysical Research Letters, 2003, 30, .	4.0	43
14	Fe-Mg partitioning between perovskite and ferropericlase in the lower mantle. American Mineralogist, 2009, 94, 921-925.	1.9	42
15	Melting of ironâ€“silicon alloy up to the coreâ€“mantle boundary pressure: implications to the thermal structure of the Earthâ€™s core. Physics and Chemistry of Minerals, 2010, 37, 353-359.	0.8	41
16	Thermal equation of state of omphacite. American Mineralogist, 2003, 88, 80-86.	1.9	34
17	Partitioning of potassium between iron and silicate at the core-mantle boundary. Geophysical Research Letters, 2006, 33, .	4.0	27
18	In situ X-ray experiment on the structure of hydrous Mg-silicate melt under high pressure and high temperature. Geophysical Research Letters, 2007, 34, .	4.0	24

#	Article	IF	Citations
19	Time-resolved X-ray diffraction analysis of the experimental dehydration of serpentine at high pressure. Journal of Mineralogical and Petrological Sciences, 2009, 104, 105-109.	0.9	24
20	Formation of metastable cubic-perovskite in high-pressure phase transformation of Ca(Mg, Fe,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 70	1.9	21
21	Effect of incorporation of iron and aluminum on the thermoelastic properties of magnesium silicate perovskite. Physics and Chemistry of Minerals, 2007, 34, 131-143.	0.8	17
22	Superplasticity in hydrous melt-bearing dunite: Implications for shear localization in Earthâ€™s upper mantle. Earth and Planetary Science Letters, 2012, 335-336, 59-71.	4.4	17
23	Decarbonation and melting in MgCO₃â€“SiO₂ system at high temperature and high pressure. Journal of Mineralogical and Petrological Sciences, 2015, 110, 179-188.	0.9	17
24	Compressibility of phase Egg AlSiO₃OH: Equation of state and role of water at high pressure. American Mineralogist, 2003, 88, 1408-1411.	1.9	16
25	X-ray diffraction study of high pressure transition in InOOH. Journal of Mineralogical and Petrological Sciences, 2008, 103, 152-155.	0.9	15
26	In situ observation and determination of liquid immiscibility in the Feâ€Oâ€S melt at 3 GPa using a synchrotron Xâ€ray radiographic technique. Geophysical Research Letters, 2007, 34, .	4.0	14
27	Rheology of fineâ€grained forsterite aggregate at deep upper mantle conditions. Journal of Geophysical Research: Solid Earth, 2014, 119, 253-273.	3.4	14
28	Phase Transitions in CsH 2 PO 4 Under High Pressure. Ferroelectrics, 2003, 285, 83-89.	0.6	13
29	Stability and bulk modulus of Ni3S, a new nickel sulfur compound, and the melting relations of the system Ni-NiS up to 10 GPa. American Mineralogist, 2011, 96, 558-565.	1.9	13
30	A simple opposed-anvil apparatus for high pressure and temperature experiments above 10 GPa. High Pressure Research, 2011, 31, 592-602.	1.2	7
31	Deformation cubic anvil press and stress and strain measurements using monochromatic X-rays at high pressure and high temperature. High Pressure Research, 2011, 31, 399-406.	1.2	7
32	New antiferromagnetic order with pressure-induced superconductivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>EuFe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2018, 98, .	3.2	6
33	Density and seismic velocities of chromitite body in oceanic mantle peridotite. American Mineralogist, 2010, 95, 1422-1428.	1.9	5
34	P-V-T equation of state of hydrous phase A up to 10.5 GPa. American Mineralogist, 2021, 106, 1-6.	1.9	4
35	Thermal equation of state of lawsonite up to 10 GPa and 973 K. Journal of Mineralogical and Petrological Sciences, 2015, 110, 235-240.	0.9	3
36	Determination of Stability Filed of Delta-AlOOH Under High Pressure and Temperature. AIP Conference Proceedings, 2006, , .	0.4	2

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37	Pressure-Induced Phase Transition in K_xFe_{2â^'}_yS₂. Journal of the Physical Society of Japan, 2017, 86, 033705.	1.6	2
38	Variations of lattice constants and thermal expansion coefficients of indium at high pressure and high temperature. High Pressure Research, 2018, 38, 406-413.	1.2	2
39	Evaluation of isomer shifts via 57Fe nuclear forward scattering technique with Î±-Fe under external magnetic field. Hyperfine Interactions, 2020, 241, 1.	0.5	0