Takayuki Ishii

List of Publications by Year
in descending order

46	855	516561 16	501076 28
papers	citations	h-index	g-index

47	47	47	541
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Post-spinel transitions in pyrolite and Mg2SiO4 and akimotoiteâ€“perovskite transition in MgSiO3: Precise comparison by high-pressure high-temperature experiments with multi-sample cell technique. Earth and Planetary Science Letters, 2011, 309, 185-197.	1.8	79
2	Synthesis of paracrystalline diamond. Nature, 2021, 599, 605-610.	13.7	70
3	High-pressure phase transitions in FeCr2O4 and structure analysis of new post-spinel FeCr2O4 and Fe2Cr2O5 phases with meteoritical and petrological implications. American Mineralogist, 2014, 99, 1788-1797.	0.9	54
4	Phase Relations of Harzburgite and MORB up to the Uppermost Lower Mantle Conditions: Precise Comparison With Pyrolite by Multisample Cell Highâ€Pressure Experiments With Implication to Dynamics of Subducted Slabs. Journal of Geophysical Research: Solid Earth, 2019, 124, 3491-3507.	1.4	49
5	High-pressure high-temperature transitions in MgCr2O4 and crystal structures of new Mg2Cr2O5 and post-spinel MgCr2O4 phases with implications for ultrahigh-pressure chromitites in ophiolites. American Mineralogist, 2015, 100, 59-65.	0.9	43
6	A Breakthrough in Pressure Generation by a Kawai-Type Multi-Anvil Apparatus with Tungsten Carbide Anvils. Engineering, 2019, 5, 434-440.	3.2	43
7	High-pressure phase transitions and subduction behavior of continental crust at pressureâ€“temperature conditions up to the upper part of the lower mantle. Earth and Planetary Science Letters, 2012, 357-358, 31-41.	1.8	42
8	Phase Relations in the System MgSiO₃â€Al₂O₃ up to 2300ÂK at Lower Mantle Pressures. Journal of Geophysical Research: Solid Earth, 2017, 122, 7775-7788.	1.4	40
9	Phase relations and mineral chemistry in pyrolitic mantle at 1600â€“2200â€¯Â°C under pressures up to the uppermost lower mantle: Phase transitions around the 660-km discontinuity and dynamics of upwelling hot plumes. Physics of the Earth and Planetary Interiors, 2018, 274, 127-137.	0.7	31
10	Sharp 660-km discontinuity controlled by extremely narrow binary post-spinel transition. Nature Geoscience, 2019, 12, 869-872.	5.4	31
11	Complete agreement of the post-spinel transition with the 660-km seismic discontinuity. Scientific Reports, 2018, 8, 6358.	1.6	27
12	Pressure generation to 65â€…GPa in a Kawai-type multi-anvil apparatus with tungsten carbide anvils. High Pressure Research, 2017, 37, 507-515.	0.4	25
13	Spin Transition of Iron in Î´â€(Al,Fe)OOH Induces Thermal Anomalies in Earth's Lower Mantle. Geophysical Research Letters, 2020, 47, e2020GL087036.	1.5	22
14	High-pressure high-temperature phase relations in FeTiO3 up to 35 GPa and 1600ÂÂ°C. Physics and Chemistry of Minerals, 2017, 44, 63-73.	0.3	19
15	Extreme conditions research using the large-volume press at the P61B endstation, PETRA III. Journal of Synchrotron Radiation, 2022, 29, 409-423.	1.0	19
16	Single crystal synthesis of Î´-(Al,Fe)OOH. American Mineralogist, 2017, 102, 1953-1956.	0.9	18
17	High pressure-temperature phase relations of basaltic crust up to mid-mantle conditions. Earth and Planetary Science Letters, 2022, 584, 117472.	1.8	18
18	Dry metastable olivine and slab deformation in a wet subducting slab. Nature Geoscience, 2021, 14, 526-530.	5.4	17

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19	The stability of Fe5O6 and Fe4O5 at high pressure and temperature. American Mineralogist, 2019, 104, 1356-1359.	0.9	16
20	Effect of Water on Lattice Thermal Conductivity of Ringwoodite and Its Implications for the Thermal Evolution of Descending Slabs. Geophysical Research Letters, 2020, 47, e2020GL087607.	1.5	16
21	Stability and Solubility of the FeAlO₃ Component in Bridgmanite at Uppermost Lower Mantle Conditions. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018447.	1.4	15
22	Depressed 660-km discontinuity caused by akimotoiteâ€“bridgmanite transition. Nature, 2022, 601, 69-73.	13.7	15
23	Synthesis and crystal structure of LiNbO3-type Mg3Al2Si3O12: A possible indicator of shock conditions of meteorites. American Mineralogist, 2017, 102, 1947-1952.	0.9	14
24	High-Pressure Phase Relations and Crystal Structures of Postspinel Phases in MgV2O4, FeV2O4, and MnCr2O4: Crystal Chemistry of AB2O4 Postspinel Compounds. Inorganic Chemistry, 2018, 57, 6648-6657.	1.9	14
25	Thermodynamic investigation on phase equilibrium boundary between calcium ferrite-type MgAl2O4 and MgO+Î±-Al2O3. Physics of the Earth and Planetary Interiors, 2012, 212-213, 100-105.	0.7	11
26	Aluminum and hydrogen partitioning between bridgmanite and high-pressure hydrous phases: Implications for water storage in the lower mantle. Earth and Planetary Science Letters, 2022, 583, 117441.	1.8	11
27	Structural independence of hydrogen-bond symmetrisation dynamics at extreme pressure conditions. Nature Communications, 2022, 13, .	5.8	10
28	A shallow origin of so-called ultrahigh-pressure chromitites, based on single-crystal X-ray structure analysis of the high-pressure Mg₂Cr₂O₅phase, with modified ludwigite-type structure. American Mineralogist, 2017, 102, 2113-2118.	0.9	9
29	In situ high-pressure nuclear magnetic resonance crystallography in one and two dimensions. Matter and Radiation at Extremes, 2021, 6, .	1.5	9
30	High-pressure phase transitions in MgCr2O4Â·Mg2SiO4 composition: Reactions between olivine and chromite with implications for ultrahigh-pressure chromitites. American Mineralogist, 2018, 103, 161-170.	0.9	8
31	Highâ€Pressure Elasticity of Î´â€²(Al,Fe)OOH Single Crystals and Seismic Detectability of Hydrous MORB in the Shallow Lower Mantle. Geophysical Research Letters, 2021, 48, e2021GL094185.	1.5	7
32	Synthesis and crystal structure of Mg-bearing Fe9O11: New insight in the complexity of Fe-Mg oxides at conditions of the deep upper mantle. American Mineralogist, 2018, , .	0.9	6
33	Discovery of Newâ€Structured Postâ€Spinel MgFe 2 O 4 : Crystal Structure and Highâ€Pressure Phase Relations. Geophysical Research Letters, 2020, 47, e2020GL087490.	1.5	6
34	Vibrational anisotropy of <i>Î´</i>-(Al,Fe)OOH single crystals as probed by nuclear resonant inelastic X-ray scattering. European Journal of Mineralogy, 2021, 33, 485-502.	0.4	6
35	A simplified rapid-quench multi-anvil technique. Review of Scientific Instruments, 2021, 92, 113902.	0.6	6
36	High-pressure phase relations in the system TiO2â€“ZrO2 to 12ÂGPa: stability of Î±PbO2-type srilankite solid solutions of (Ti1â€“x , Zr x)O2 (0Ââ‰ÂxÂâ‰Â0.6). Physics and Chemistry of Minerals, 2012, 39, 797-802.	0.3	5

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37	Shocked chromites in fossil L chondrites: A Raman spectroscopy and transmission electron microscopy study. Meteoritics and Planetary Science, 2017, 52, 1776-1796.	0.7	4
38	Determination of phase relations of the olivineâ€“ahrensite transition in the Mg2SiO4â€“Fe2SiO4 system at 1740ÂK using modern multi-anvil techniques. Contributions To Mineralogy and Petrology, 2021, 176, 1.	1.2	4
39	High-pressure syntheses and crystal structure analyses of a new low-density CaFe2O4-related and CaTi2O4-type MgAl2O4 phases. American Mineralogist, 2021, 106, 1105-1112.	0.9	3
40	Simultaneous generation of ultrahigh pressure and temperature to 50ÂGPa and 3300ÂK in multi-anvil apparatus. Review of Scientific Instruments, 2021, 92, 103902.	0.6	3
41	Equations of state of Î±-SiC (6H) and Î²Ê¹-Mg2Si1.1 from single-crystal X-ray diffraction data and novel high-pressure magnesium silicide Mg2Si7. Physics and Chemistry of Minerals, 2022, 49, 1.	0.3	3
42	A New Approach Determining a Phase Transition Boundary Strictly Following a Definition of Phase Equilibrium: An Example of the Post-Spinel Transition in Mg2SiO4 System. Minerals (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 3	0.8	3
43	The elastic properties and anisotropic behavior of MgSiO3 akimotoite at transition zone pressures. Physics of the Earth and Planetary Interiors, 2021, 320, 106786.	0.7	2
44	The electrical conductivity of Fe4O5, Fe5O6, and Fe7O9 up to 60 GPa. Physics and Chemistry of Minerals, 2022, 49, .	0.3	2
45	Crystal Structure of a Novel Fe-Mg Oxide and Deep Earth Science. Nihon Kessho Gakkaishi, 2019, 61, 205-206.	0.0	0
46	Development of High-Pressure Technology with Kawai-Type Multi-Anvil Presses and its Application to Geoscience. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2020, 30, 156-165.	0.1	0