

# Takumi Kikegawa

## List of Publications by Year in descending order

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39  
papers

1,272  
citations

394421

19  
h-index

345221

36  
g-index

39  
all docs

39  
docs citations

39  
times ranked

1312  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | P-V-T equation of state of hydrous phase A up to 10.5 GPa. <i>American Mineralogist</i> , 2021, 106, 1-6.   | 1.9  | 4         |
| 2  | Evaluation of isomer shifts via $^{57}\text{Fe}$ nuclear forward scattering technique with $\hat{\mu}$ -Fe under external magnetic field. <i>Hyperfine Interactions</i> , 2020, 241, 1.                     | 0.5  | 0         |
| 3  | New antiferromagnetic order with pressure-induced superconductivity in $\text{EuFe}_2\text{As}_2$ . <i>Physical Review B</i> , 2018, 98, .  | 1.2  | 2         |
| 4  | Variations of lattice constants and thermal expansion coefficients of indium at high pressure and high temperature. <i>High Pressure Research</i> , 2018, 38, 406-413.                                      | 1.2  | 2         |
| 5  | Pressure-Induced Phase Transition in $\text{KxFe}_2\text{SyS}_2$ . <i>Journal of the Physical Society of Japan</i> , 2017, 86, 033705.  | 1.6  | 2         |
| 6  | Dislocation-accommodated grain boundary sliding as the major deformation mechanism of olivine in the Earth's upper mantle. <i>Science Advances</i> , 2015, 1, e1500360.                                     | 10.3 | 49        |
| 7  | Decarbonation and melting in $\text{MgCO}_3\text{-SiO}_2$ system at high temperature and high pressure. <i>Journal of Mineralogical and Petrological Sciences</i> , 2015, 110, 179-188.                     | 0.9  | 17        |
| 8  | Stability of the Liquid State of Imidazolium-Based Ionic Liquids under High Pressure at Room Temperature. <i>Journal of Physical Chemistry B</i> , 2015, 119, 8146-8153.                                    | 2.6  | 56        |
| 9  | Thermal equation of state of lawsonite up to 10 GPa and 973 K. <i>Journal of Mineralogical and Petrological Sciences</i> , 2015, 110, 235-240.  | 0.9  | 3         |
| 10 | Rheology of fine-grained forsterite aggregate at deep upper mantle conditions. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 253-273.  | 3.4  | 14        |
| 11 | Superplasticity in hydrous melt-bearing dunite: Implications for shear localization in Earth's upper mantle. <i>Earth and Planetary Science Letters</i> , 2012, 335-336, 59-71.                             | 4.4  | 17        |
| 12 | A simple opposed-anvil apparatus for high pressure and temperature experiments above 10 GPa. <i>High Pressure Research</i> , 2011, 31, 592-602.   | 1.2  | 7         |
| 13 | Deformation cubic anvil press and stress and strain measurements using monochromatic X-rays at high pressure and high temperature. <i>High Pressure Research</i> , 2011, 31, 399-406.                       | 1.2  | 7         |
| 14 | Stability and bulk modulus of $\text{Ni}_3\text{S}$ , a new nickel sulfur compound, and the melting relations of the system $\text{Ni-NiS}$ up to 10 GPa. <i>American Mineralogist</i> , 2011, 96, 558-565. | 1.9  | 13        |
| 15 | The stability and equation of state for the cotunnite phase of $\text{TiO}_2$ up to 70 GPa. <i>Physics and Chemistry of Minerals</i> , 2010, 37, 129-136.   | 0.8  | 60        |
| 16 | Melting of iron-silicon alloy up to the core-mantle boundary pressure: implications to the thermal structure of the Earth's core. <i>Physics and Chemistry of Minerals</i> , 2010, 37, 353-359.             | 0.8  | 41        |
| 17 | Plagioclase breakdown as an indicator for shock conditions of meteorites. <i>Nature Geoscience</i> , 2010, 3, 41-45.  | 12.9 | 71        |
| 18 | Density and seismic velocities of chromitite body in oceanic mantle peridotite. <i>American Mineralogist</i> , 2010, 95, 1422-1428.   | 1.9  | 5         |

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|----|--|-----|-----------|
| 19 | Time-resolved X-ray diffraction analysis of the experimental dehydration of serpentine at high pressure. <i>Journal of Mineralogical and Petrological Sciences</i> , 2009, 104, 105-109.               | 0.9 | 24        |
| 20 | Fe-Mg partitioning between perovskite and ferropericlae in the lower mantle. <i>American Mineralogist</i> , 2009, 94, 921-925.   | 1.9 | 42        |
| 21 | Aluminous hydrous mineral $\gamma$ -AlOOH as a carrier of hydrogen into the core-mantle boundary. <i>Geophysical Research Letters</i> , 2008, 35, .  | 4.0 | 103       |
| 22 | X-ray diffraction study of high pressure transition in InOOH. <i>Journal of Mineralogical and Petrological Sciences</i> , 2008, 103, 152-155.  | 0.9 | 15        |
| 23 | In situ observation and determination of liquid immiscibility in the Fe-O melt at 3 GPa using a synchrotron X-ray radiographic technique. <i>Geophysical Research Letters</i> , 2007, 34, .            | 4.0 | 14        |
| 24 | In situ X-ray experiment on the structure of hydrous Mg-silicate melt under high pressure and high temperature. <i>Geophysical Research Letters</i> , 2007, 34, .                                      | 4.0 | 24        |
| 25 | Effect of incorporation of iron and aluminum on the thermoelastic properties of magnesium silicate perovskite. <i>Physics and Chemistry of Minerals</i> , 2007, 34, 131-143.                           | 0.8 | 17        |
| 26 | Partitioning of potassium between iron and silicate at the core-mantle boundary. <i>Geophysical Research Letters</i> , 2006, 33, .   | 4.0 | 27        |
| 27 | Interaction between iron and post-perovskite at core-mantle boundary and core signature in plume source region. <i>Geophysical Research Letters</i> , 2006, 33, .                                      | 4.0 | 59        |
| 28 | Determination of Stability Field of $\gamma$ -AlOOH Under High Pressure and Temperature. <i>AIP Conference Proceedings</i> , 2006, , .   | 0.4 | 2         |
| 29 | Iron-water reaction at high pressure and temperature, and hydrogen transport into the core. <i>Physics and Chemistry of Minerals</i> , 2005, 32, 77-82.  | 0.8 | 56        |
| 30 | Formation of metastable cubic-perovskite in high-pressure phase transformation of $\text{Ca}(\text{Mg}, \text{Fe})_2\text{Si}_2\text{O}_7$ . <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.  | 1.9 | 21        |
| 31 | Fe-Mg partitioning between $(\text{Mg}, \text{Fe})\text{SiO}_3$ post-perovskite, perovskite, and magnesiowüstite in the Earth's lower mantle. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a. | 4.0 | 77        |
| 32 | Compression of iron hydride to 80 GPa and hydrogen in the Earth's inner core. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.   | 4.0 | 59        |
| 33 | Exploratory studies of silicate melt structure at high pressures and temperatures by in situ X-ray diffraction. <i>Journal of Geophysical Research</i> , 2004, 109, .                                  | 3.3 | 78        |
| 34 | In situ X-ray observation of decomposition of superhydrous phase B at high pressure and temperature. <i>Geophysical Research Letters</i> , 2003, 30, .   | 4.0 | 43        |
| 35 | Phase Transitions in $\text{CsH}_2\text{PO}_4$ Under High Pressure. <i>Ferroelectrics</i> , 2003, 285, 83-89.  | 0.6 | 13        |
| 36 | Compressibility of phase $\gamma$ -AlSiO <sub>3</sub> OH: Equation of state and role of water at high pressure. <i>American Mineralogist</i> , 2003, 88, 1408-1411.                                    | 1.9 | 16        |

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|----|---|-----|-----------|
| 37 | Thermal equation of state of omphacite. <i>American Mineralogist</i> , 2003, 88, 80-86.   | 1.9 | 34        |
| 38 | In situ X-ray observation of the reaction dolomite = aragonite + magnesite at 900–1300 K. <i>American Mineralogist</i> , 2002, 87, 922-930.                                   | 1.9 | 53        |
| 39 | In situ determination of the phase boundary between Wadsleyite and Ringwoodite in Mg <sub>2</sub> SiO <sub>4</sub> . <i>Geophysical Research Letters</i> , 2000, 27, 803-806. | 4.0 | 121       |