

Tomoo Katsura

List of Publications by Year in descending order

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Version: 2024-02-01

212
papers

8,800
citations

50566

48
h-index

58552

86
g-index

219
all docs

219
docs citations

219
times ranked

4652
citing authors

#	ARTICLE	IF	CITATIONS
1	The effect of oxygen fugacity on ionic conductivity in olivine. <i>Geoscience Frontiers</i> , 2022, 13, 101270.	4.3	1
2	Rapid-quenching of high-pressure depolymerized hydrous silicate (peridotitic) glasses. <i>Journal of Non-Crystalline Solids</i> , 2022, 578, 121347.	1.5	5
3	Depressed 660-km discontinuity caused by akimotoite-bridgmanite transition. <i>Nature</i> , 2022, 601, 69-73.	13.7	15
4	Small effect of water incorporation on dislocation mobility in olivine: Negligible creep enhancement and water-induced fabric transition in the asthenosphere. <i>Earth and Planetary Science Letters</i> , 2022, 579, 117360.	1.8	0
5	A Revised Adiabatic Temperature Profile for the Mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	1.4	34
6	Extreme conditions research using the large-volume press at the P61B endstation, PETRA III. <i>Journal of Synchrotron Radiation</i> , 2022, 29, 409-423.	1.0	19
7	Water Enhancement of Si Self-Diffusion in Wadsleyite. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	1.4	0
8	High pressure-temperature phase relations of basaltic crust up to mid-mantle conditions. <i>Earth and Planetary Science Letters</i> , 2022, 584, 117472.	1.8	18
9	A New Approach Determining a Phase Transition Boundary Strictly Following a Definition of Phase Equilibrium: An Example of the Post-Spinel Transition in Mg ₂ SiO ₄ System. <i>Minerals (Basel)</i> 11(10):1078-1093, 2021. DOI: 10.3390/min11101078	1.0	1
10	Aluminum solubility in bridgmanite up to 3000 K at the top lower mantle. <i>Geoscience Frontiers</i> , 2021, 12, 929-935.	4.3	0
11	Independent hydrogen incorporation in wadsleyite from oxygen fugacity and non-dissociation of H ₂ O in the reducing mantle transition zone. <i>Earth and Planetary Science Letters</i> , 2021, 557, 116755.	1.8	7
12	The grain growth kinetics of bridgmanite at the topmost lower mantle. <i>Earth and Planetary Science Letters</i> , 2021, 561, 116820.	1.8	7
13	Water Solubility in Fe-Bearing Wadsleyite at Mantle Transition Zone Temperatures. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL092836.	1.5	4
14	High-pressure syntheses and crystal structure analyses of a new low-density CaFe ₂ O ₄ -related and CaTi ₂ O ₄ -type MgAl ₂ O ₄ phases. <i>American Mineralogist</i> , 2021, 106, 1105-1112.	0.9	3
15	Determination of phase relations of the olivine-ahrensite transition in the Mg ₂ SiO ₄ -Fe ₂ SiO ₄ system at 1740 K using modern multi-anvil techniques. <i>Contributions To Mineralogy and Petrology</i> , 2021, 176, 1.	1.2	4
16	Bridgmanite is nearly dry at the top of the lower mantle. <i>Earth and Planetary Science Letters</i> , 2021, 570, 117088.	1.8	14
17	Direct Viscosity Measurement of Peridotite Melt to Lower-Mantle Conditions: A Further Support for a Fractional Magma-Ocean Solidification at the Top of the Lower Mantle. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094507.	1.5	7
18	Asthenosphere dynamics based on the H ₂ O dependence of element diffusivity in olivine. <i>National Science Review</i> , 2021, 8, nwaa278.	4.6	5

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19	Simultaneous generation of ultrahigh pressure and temperature to 50ÅGPa and 3300ÅK in multi-anvil apparatus. Review of Scientific Instruments, 2021, 92, 103902.	0.6	3
20	A simplified rapid-quench multi-anvil technique. Review of Scientific Instruments, 2021, 92, 113902.	0.6	6
21	Synthesis of paracrystalline diamond. Nature, 2021, 599, 605-610.	13.7	70
22	Pressure Destabilizes Oxygen Vacancies in Bridgmanite. Journal of Geophysical Research: Solid Earth, 2021, 126, .	1.4	5
23	A Novel High-Pressure Tin Oxynitride Sn ₂ N ₂ O. Chemistry - A European Journal, 2020, 26, 2187-2194.	1.7	9
24	High water solubility of ringwoodite at mantle transition zone temperature. Earth and Planetary Science Letters, 2020, 531, 115987.	1.8	34
25	Boron-doped diamond synthesized by chemical vapor deposition as a heating element in a multi-anvil apparatus. High Pressure Research, 2020, 40, 369-378.	0.4	6
26	A strip-type boron-doped diamond heater synthesized by chemical vapor deposition for large-volume presses. Review of Scientific Instruments, 2020, 91, 095108.	0.6	5
27	A rapid-quench technique for multi-anvil high-pressure-temperature experiments. Review of Scientific Instruments, 2020, 91, 065105.	0.6	11
28	Oxygen Vacancy Substitution Linked to Ferric Iron in Bridgmanite at 27ÅGPa. Geophysical Research Letters, 2020, 47, e2019GL086296.	1.5	8
29	The Effect of Water on Ionic Conductivity in Olivine. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB019313.	1.4	22
30	Stability and Solubility of the FeAlO ₃ Component in Bridgmanite at Uppermost Lower Mantle Conditions. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018447.	1.4	15
31	Pressure Dependence of Proton Incorporation and Water Solubility in Olivine. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018813.	1.4	8
32	Discovery of Ternary Silicon Titanium Nitride with Spinel-Type Structure. Scientific Reports, 2020, 10, 7372.	1.6	8
33	A Plain Derivation of Birch-Murnaghan Equations of State, and Comparison with Other Equations of State. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2020, 30, 237-249.	0.1	0
34	Oxygen Vacancy Ordering in Aluminous Bridgmanite in the Earth's Lower Mantle. Geophysical Research Letters, 2019, 46, 8731-8740.	1.5	12
35	Strong correlation of oxygen vacancies in bridgmanite with Mg/Si ratio. Earth and Planetary Science Letters, 2019, 523, 115697.	1.8	14
36	High-pressure synthesis of ultraincompressible hard rhenium nitride pernitride Re ₂ (N ₂)(N) ₂ stable at ambient conditions. Nature Communications, 2019, 10, 2994.	5.8	65

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37	A new (Mg _{0.5} Fe _{0.53+})(Si _{0.5} Al _{0.53+})O ₃ LiNbO ₃ -type phase synthesized at lower mantle conditions. <i>American Mineralogist</i> , 2019, 104, 1213-1216.	0.9	7
38	Pressure-Induced Emission Enhancement and Multicolor Emission for 1,2,3,4-Tetraphenyl-1,3-cyclopentadiene: Controlled Structure Evolution. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 5557-5562.	2.1	33
39	Sharp 660-km discontinuity controlled by extremely narrow binary post-spinel transition. <i>Nature Geoscience</i> , 2019, 12, 869-872.	5.4	31
40	A Breakthrough in Pressure Generation by a Kawai-Type Multi-Anvil Apparatus with Tungsten Carbide Anvils. <i>Engineering</i> , 2019, 5, 434-440.	3.2	43
41	Activation of [100](001) slip system by water incorporation in olivine and the cause of seismic anisotropy decrease with depth in the asthenosphere. <i>American Mineralogist</i> , 2019, 104, 47-52.	0.9	5
42	Increase of the oxygen vacancy component in bridgmanite with temperature. <i>Earth and Planetary Science Letters</i> , 2019, 505, 141-151.	1.8	17
43	Hardness of polycrystalline SiO ₂ coesite. <i>Journal of the American Ceramic Society</i> , 2019, 102, 2251-2256.	1.9	6
44	A Simple Derivation of the Birch–Murnaghan Equations of State (EOSs) and Comparison with EOSs Derived from Other Definitions of Finite Strain. <i>Minerals (Basel, Switzerland)</i> , 2019, 9, 745.	0.8	101
45	Structure, crystal chemistry and compressibility of iron-rich silicate perovskite at pressures up to 95 GPa. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, e262-e262.	0.0	0
46	Complete agreement of the post-spinel transition with the 660-km seismic discontinuity. <i>Scientific Reports</i> , 2018, 8, 6358.	1.6	27
47	Mg lattice diffusion in iron-free olivine and implications to conductivity anomaly in the oceanic asthenosphere. <i>Earth and Planetary Science Letters</i> , 2018, 484, 204-212.	1.8	24
48	Negative activation volume of oxygen self-diffusion in forsterite. <i>Physics of the Earth and Planetary Interiors</i> , 2018, 275, 1-8.	0.7	6
49	Thermal expansion of coesite determined by synchrotron powder X-ray diffraction. <i>Physics and Chemistry of Minerals</i> , 2018, 45, 873-881.	0.3	8
50	Pressure, temperature, water content, and oxygen fugacity dependence of the Mg grain-boundary diffusion coefficient in forsterite. <i>American Mineralogist</i> , 2018, 103, 1354-1361.	0.9	7
51	A nearly zero temperature gradient furnace system for high pressure multi-anvil experiments. <i>High Pressure Research</i> , 2018, 38, 243-249.	0.4	3
52	Experimental determination of melt interconnectivity and electrical conductivity in the upper mantle. <i>Earth and Planetary Science Letters</i> , 2017, 463, 286-297.	1.8	44
53	Identical activation volumes of dislocation mobility in the [100](010) and [001](010) slip systems in natural olivine. <i>Geophysical Research Letters</i> , 2017, 44, 2687-2692.	1.5	5
54	Pressure dependence of transverse acoustic phonon energy in ferropericlase across the spin transition. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 245401.	0.7	6

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55	A nearly water-saturated mantle transition zone inferred from mineral viscosity. <i>Science Advances</i> , 2017, 3, e1603024.	4.7	79
56	Phase Relations in the System $\text{MgSiO}_3\text{-Al}_2\text{O}_3$ up to 2300 K at Lower Mantle Pressures. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 7775-7788.	1.4	40
57	Why and How to Write a High-Impact Review Paper: Lessons From Eight Years of Editorial Board Service to <i>Reviews of Geophysics</i> . <i>Reviews of Geophysics</i> , 2017, 55, 860-863.	9.0	1
58	Pressure generation to 65 GPa in a Kawai-type multi-anvil apparatus with tungsten carbide anvils. <i>High Pressure Research</i> , 2017, 37, 507-515.	0.4	25
59	Synthesis and crystal structure of LiNbO_3 -type $\text{Mg}_3\text{Al}_2\text{Si}_3\text{O}_{12}$: A possible indicator of shock conditions of meteorites. <i>American Mineralogist</i> , 2017, 102, 1947-1952.	0.9	14
60	Electrical conductivity of the oceanic asthenosphere and its interpretation based on laboratory measurements. <i>Tectonophysics</i> , 2017, 717, 162-181.	0.9	16
61	Experimental geophysics measurement of physical and chemical properties of major mantle minerals at high pressures and temperatures. <i>Ganseki Kobutsu Kagaku</i> , 2017, 46, 1-14.	0.1	0
62	Generation of pressures over 40 GPa using Kawai-type multi-anvil press with tungsten carbide anvils. <i>Review of Scientific Instruments</i> , 2016, 87, 024501.	0.6	64
63	Temperature dependence of [100](010) and [001](010) dislocation mobility in natural olivine. <i>Earth and Planetary Science Letters</i> , 2016, 441, 81-90.	1.8	15
64	Si and O self-diffusion in hydrous forsterite and iron-bearing olivine from the perspective of defect chemistry. <i>Physics and Chemistry of Minerals</i> , 2016, 43, 119-126.	0.3	9
65	New constraints on upper mantle creep mechanism inferred from silicon grain-boundary diffusion rates. <i>Earth and Planetary Science Letters</i> , 2016, 433, 350-359.	1.8	41
66	Nucleation process of an M2 earthquake in a deep gold mine in South Africa inferred from on-fault foreshock activity. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 5574-5594.	1.4	23
67	A Complete Solid Solution with Rutile-Type Structure in $\text{SiO}_2\text{-GeO}_2$ System at 12 GPa and 1600°C. <i>Journal of the American Ceramic Society</i> , 2015, 98, 4111-4116.	1.9	6
68	Heterogeneity of Electrical Conductivity in the Oceanic Upper Mantle. , 2015, , 173-204.		7
69	No effect of water on oxygen self-diffusion rate in forsterite. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 7598-7606.	1.4	25
70	Electrical conductivity anisotropy in partially molten peridotite under shear deformation. <i>Earth and Planetary Science Letters</i> , 2014, 405, 98-109.	1.8	42
71	Elastic properties of iron-bearing wadsleyite to 17.7 GPa: Implications for mantle mineral models. <i>Physics of the Earth and Planetary Interiors</i> , 2014, 228, 92-96.	0.7	30
72	Silicate diffusion in alkali-carbonatite and hydrous melts at 16.5 and 24 GPa: Implication for the melt transport by dissolution-precipitation in the transition zone and uppermost lower mantle. <i>Physics of the Earth and Planetary Interiors</i> , 2013, 225, 1-11.	0.7	30

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73	Electrical Conductivity of Mantle Minerals: Role of Water in Conductivity Anomalies. Annual Review of Earth and Planetary Sciences, 2013, 41, 605-628.	4.6	122
74	Small effect of water on upper-mantle rheology based on silicon self-diffusion coefficients. Nature, 2013, 498, 213-215.	13.7	141
75	Crystal structure, Raman and FTIR spectroscopy, and equations of state of OH-bearing MgSiO ₃ akimotoite. Contributions To Mineralogy and Petrology, 2013, 166, 1375-1388.	1.2	6
76	Single-crystal metastable high-temperature clinoenstatite quenched rapidly from high temperature and high pressure. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2013, 69, 541-546.	0.5	5
77	Bond strengths of New Carbon-nitride-Related material C ₂ N ₂ (CH ₂). Journal of Physics: Conference Series, 2012, 377, 012028.	0.3	3
78	Electrical conductivity of partial molten carbonate peridotite. Physics of the Earth and Planetary Interiors, 2012, 194-195, 1-9.	0.7	48
79	Re-evaluation of electrical conductivity of anhydrous and hydrous wadsleyite. Earth and Planetary Science Letters, 2012, 337-338, 56-67.	1.8	40
80	High silicon self-diffusion coefficient in dry forsterite. Earth and Planetary Science Letters, 2012, 345-348, 95-103.	1.8	67
81	Electrical conductivity of enstatite as a function of water content: Implications for the electrical structure in the upper mantle. Earth and Planetary Science Letters, 2012, 357-358, 11-20.	1.8	52
82	The large-volume press beamline at the extension of PETRA. Acta Crystallographica Section A: Foundations and Advances, 2012, 68, s52-s52.	0.3	0
83	Pressless split-sphere apparatus equipped with scaled-up Kawai-cell for mineralogical studies at 10-20 GPa. American Mineralogist, 2011, 96, 541-548.	0.9	17
84	Phase boundary between perovskite and post-perovskite structures in MnGeO ₃ determined by in situ X-ray diffraction measurements using sintered diamond anvils. American Mineralogist, 2011, 96, 89-92.	0.9	10
85	Effect of iron content on electrical conductivity of ferropericlavite with implications for the spin transition pressure. Journal of Geophysical Research, 2011, 116, .	3.3	42
86	Silicon and magnesium diffusion in a single crystal of MgSiO ₃ perovskite. Journal of Geophysical Research, 2011, 116, .	3.3	37
87	High pressure generation using scaled-up Kawai-cell. Physics of the Earth and Planetary Interiors, 2011, 189, 92-108.	0.7	59
88	Variations in electrical conductivity of rocks above metamorphic conditions. Tectonophysics, 2011, 504, 116-121.	0.9	13
89	Ordering in double carbonates and implications for processes at subduction zones. Contributions To Mineralogy and Petrology, 2011, 161, 439-450.	1.2	30
90	Electrical conductivity of dry and hydrous NaAlSi ₃ O ₈ glasses and liquids at high pressures. Contributions To Mineralogy and Petrology, 2011, 162, 501-513.	1.2	44

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91	Systematic study of hydrogen incorporation into Fe-free wadsleyite. <i>Physics and Chemistry of Minerals</i> , 2011, 38, 75-84.	0.3	31
92	Stability and bulk modulus of Ni ₃ S, a new nickel sulfur compound, and the melting relations of the system Ni-NiS up to 10 GPa. <i>American Mineralogist</i> , 2011, 96, 558-565.	0.9	13
93	Crystal Structure of New Carbon-Nitride-Related Material C ₂ N ₂ (CH ₂). <i>Japanese Journal of Applied Physics</i> , 2011, 50, 095503.	0.8	13
94	Electrical conductivity of mantle peridotite at the uppermost lower mantle condition. <i>Journal of Physics: Conference Series</i> , 2010, 215, 012102.	0.3	1
95	Synthesis and characterization of strontium-calcium phosphate $\text{Ca}_{3-x}\text{Sr}_x(\text{PO}_4)_2$ (0 ≤ x ≤ 2). <i>Materials Chemistry and Physics</i> , 2010, 120, 348-350.	2.0	9
96	Electrical conductivity measurements of periclase under high pressure and high temperature. <i>Physica B: Condensed Matter</i> , 2010, 405, 53-56.	1.3	11
97	A Peculiar Site Preference of Boron in MgAl ₂ B ₄ O ₄ (x = 0.0, 0.11, and 0.13) Spinel under High Pressure and High Temperature. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2010, 636, 472-475.	0.6	8
98	Crystal structure of anhydrous phase X, K _{1.93} (Mg _{2.02} Cr _{0.02})Si _{2.00} O ₇ . <i>Journal of Mineralogical and Petrological Sciences</i> , 2010, 105, 303-308.	0.4	13
99	Performance of semi-sintered ceramics as pressure-transmitting media up to 30 GPa. <i>High Pressure Research</i> , 2010, 30, 443-450.	0.4	36
100	Stishovite single-crystal growth and application to silicon self-diffusion measurements. <i>American Mineralogist</i> , 2010, 95, 135-143.	0.9	28
101	High pressure generation and investigation of the spin transition of ferropericlase (Mg _{0.83} Fe _{0.17})O. <i>Journal of Physics: Conference Series</i> , 2010, 215, 012099.	0.3	5
102	Pressure-temperature cartography of Fe-Si immiscible system. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 3659-3667.	1.6	60
103	Pressure generation and investigation of the post-perovskite transformation in MgGeO ₃ by squeezing the Kawai-cell equipped with sintered diamond anvils. <i>Earth and Planetary Science Letters</i> , 2010, 293, 84-89.	1.8	43
104	Electrical conductivity of basaltic and carbonatite melt-bearing peridotites at high pressures: Implications for melt distribution and melt fraction in the upper mantle. <i>Earth and Planetary Science Letters</i> , 2010, 295, 593-602.	1.8	113
105	Adiabatic temperature profile in the mantle. <i>Physics of the Earth and Planetary Interiors</i> , 2010, 183, 212-218.	0.7	373
106	Aluminum Nitride Crystal Growth from an Al-N System at 6.0 GPa and 1800 °C. <i>Crystal Growth and Design</i> , 2010, 10, 2563-2570.	1.4	16
107	Electrical conductivity of olivine, wadsleyite and ringwoodite. <i>Gansekai Kobutsu Kagaku</i> , 2009, 38, 33-38.	0.1	0
108	Determination of high-pressure phase equilibria of Fe ₂ O ₃ using the Kawai-type apparatus equipped with sintered diamond anvils. <i>American Mineralogist</i> , 2009, 94, 205-209.	0.9	29

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109	Water solubility in forsterite at 8–14 GPa. Doklady Earth Sciences, 2009, 425, 432-435.	0.2	9
110	Boron-doped diamond heater and its application to large-volume, high-pressure, and high-temperature experiments. Review of Scientific Instruments, 2009, 80, 023907.	0.6	41
111	The effect of water on the electrical conductivity of olivine aggregates and its implications for the electrical structure of the upper mantle. Earth and Planetary Science Letters, 2009, 288, 291-300.	1.8	194
112	Hydrogen incorporation into forsterite in $Mg_2SiO_4 \cdot 2Mg(CO_3) \cdot 2H_2O$ and $Mg_2SiO_4 \cdot H_2O$ at 7.5–14.0 GPa. Russian Geology and Geophysics, 2009, 50, 1129-1138.	0.3	12
113	Electrical conductivity of the major upper mantle minerals: a review. Russian Geology and Geophysics, 2009, 50, 1139-1145.	0.3	6
114	Electrical conductivity of wadsleyite as a function of temperature and water content. Physics of the Earth and Planetary Interiors, 2009, 174, 10-18.	0.7	62
115	Thermal expansion of forsterite at high pressures determined by in situ X-ray diffraction: The adiabatic geotherm in the upper mantle. Physics of the Earth and Planetary Interiors, 2009, 174, 86-92.	0.7	39
116	Effect of iron content on electrical conductivity of ringwoodite, with implications for electrical structure in the transition zone. Physics of the Earth and Planetary Interiors, 2009, 174, 3-9.	0.7	43
117	Texture of (Mg,Fe)SiO ₃ perovskite and ferro-periclase aggregate: Implications for rheology of the lower mantle. Physics of the Earth and Planetary Interiors, 2009, 174, 138-144.	0.7	39
118	A new 6-axis apparatus to squeeze the Kawai-cell of sintered diamond cubes. Physics of the Earth and Planetary Interiors, 2009, 174, 264-269.	0.7	21
119	Reply to Comments on "Electrical conductivity of wadsleyite as a function of temperature and water content" by Manthilake et al.. Physics of the Earth and Planetary Interiors, 2009, 174, 22-23.	0.7	21
120	<i>P-V-T</i> relations of wadsleyite determined by in situ X-ray diffraction in a large-volume high-pressure apparatus. Geophysical Research Letters, 2009, 36, .	1.5	27
121	Correction to "P-V-T relations of the MgSiO ₃ perovskite determined by in situ X-ray diffraction using a large-volume high-pressure apparatus". Geophysical Research Letters, 2009, 36, .	1.5	5
122	The temperature-pressure-volume equation of state of platinum. Journal of Applied Physics, 2009, 105, .	1.1	59
123	Single crystal growth of wadsleyite. American Mineralogist, 2009, 94, 1130-1136.	0.9	21
124	<i>P-V-T</i> relations of MgSiO ₃ perovskite determined by in situ X-ray diffraction using a large-volume high-pressure apparatus. Geophysical Research Letters, 2009, 36, .	1.5	39
125	Deviatoric stress and mean pressure in MgO compressed in a Kawai-type apparatus above 30GPa: Evidence for reduction of deviatoric stress by annealing. Journal of Physics and Chemistry of Solids, 2008, 69, 2261-2264.	1.9	2
126	Precise determination of elastic constants by high-resolution inelastic X-ray scattering. Journal of Synchrotron Radiation, 2008, 15, 618-623.	1.0	28

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127	Dry mantle transition zone inferred from the conductivity of wadsleyite and ringwoodite. <i>Nature</i> , 2008, 451, 326-329.	13.7	190
128	In situ X-ray diffraction of pyrolite to 40 GPa using Kawai-type apparatus with sintered diamond anvils: possibility for the existence of iron-rich metallic particles in the lower mantle. <i>High Pressure Research</i> , 2008, 28, 351-362.	0.4	4
129	Critical Behavior of the Ferromagnetic Perovskite BaRuO_3 . <i>Physical Review Letters</i> , 2008, 101, 077206.	2.9	48
130	Electrical conductivity of majorite garnet and its implications for electrical structure in the mantle transition zone. <i>Physics of the Earth and Planetary Interiors</i> , 2008, 170, 193-200.	0.7	61
131	No interconnection of ferropericline in post-spinel phase inferred from conductivity measurement. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	30
132	High-pressure synthesis of the cubic perovskite BaRuO_3 and evolution of ferromagnetism in ARuO_3 (A = Ca, Sr, Ba) ruthenates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 7115-7119.	3.3	171
133	Manufacture of a New 6-axis Apparatus. <i>Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu</i> , 2008, 18, 208-213.	0.1	0
134	Growth of large (1 mm) MgSiO_3 perovskite single crystals: A thermal gradient method at ultrahigh pressure. <i>American Mineralogist</i> , 2007, 92, 1744-1749.	0.9	32
135	Electrical conductivity measurement of gneiss under mid- to lower crustal P - T conditions. <i>Tectonophysics</i> , 2007, 434, 93-101.	0.9	26
136	Phase-relation studies of mantle minerals by in situ X-ray diffraction using multianvil apparatus. , 2007, , .		5
137	Electrical conductivity measurements of brucite under crustal pressure and temperature conditions. <i>Earth, Planets and Space</i> , 2007, 59, 645-648.	0.9	21
138	Pressure dependence of electrical conductivity of (Mg,Fe) SiO_3 ilmenite. <i>Physics and Chemistry of Minerals</i> , 2007, 34, 249-255.	0.3	33
139	Aluminum substitution mechanisms in perovskite-type MgSiO_3 : an investigation by Rietveld analysis. <i>Physics and Chemistry of Minerals</i> , 2007, 34, 257-267.	0.3	37
140	Phase boundary between ilmenite and perovskite structures in MnGeO_3 determined by in situ X-ray diffraction measurements. <i>Physics and Chemistry of Minerals</i> , 2007, 34, 269-273.	0.3	8
141	Tourmaline breakdown in a pelitic system: implications for boron cycling through subduction zones. <i>Contributions To Mineralogy and Petrology</i> , 2007, 155, 19-32.	1.2	36
142	Mantle, Electrical Conductivity, <i>Mineralogy</i> . , 2007, , 684-688.		1
143	Hydrous olivine unable to account for conductivity anomaly at the top of the asthenosphere. <i>Nature</i> , 2006, 443, 973-976.	13.7	258
144	Equation of state of $(\text{Mg}_{0.8}\text{Fe}_{0.2})_2\text{SiO}_4$ ringwoodite from synchrotron X-ray diffraction up to 20 GPa and 1700 K. <i>European Journal of Mineralogy</i> , 2006, 18, 523-528.	0.4	3

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145	Electrical conductivity of FeTiO ₃ ilmenite at high temperature and high pressure. <i>Physical Review B</i> , 2006, 73, .	1.1	19
146	Temperature dependence of the elastic moduli of ringwoodite. <i>Physics of the Earth and Planetary Interiors</i> , 2005, 148, 353-359.	0.7	19
147	Decomposition of brucite up to 20 GPa: evidence for high MgO-solubility in the liquid phase. <i>European Journal of Mineralogy</i> , 2005, 17, 261-267.	0.4	15
148	High-pressure generation in the Kawai-type apparatus equipped with sintered diamond anvils: application to the wurtzite- ϵ -rocksalt transformation in GaN. , 2005, , 451-460.		11
149	High-pressure generation in the Kawai-type apparatus equipped with sintered diamond anvils Application to the wurtzite-rocksalt transformation in GaN. , 2005, , 451-460.		2
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