List of Publications by Year in descending order

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KEI HIDOSE

#	Article	IF	CITATIONS
1	Post-Perovskite Phase Transition in MgSiO3. Science, 2004, 304, 855-858.	12.6	1,234
2	Partial melting of dry peridotites at high pressures: Determination of compositions of melts segregated from peridotite using aggregates of diamond. Earth and Planetary Science Letters, 1993, 114, 477-489.	4.4	868
3	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
4	The Structure of Iron in Earth's Inner Core. Science, 2010, 330, 359-361.	12.6	408
5	The fate of subducted basaltic crust in the Earth's lower mantle. Nature, 1999, 397, 53-56.	27.8	374
6	Experimentally determined postspinel transformation boundary in Mg2SiO4using MgO as an internal pressure standard and its geophysical implications. Journal of Geophysical Research, 2004, 109, .	3.3	342
7	Melting experiments on lherzolite KLB-1 under hydrous conditions and generation of high-magnesian andesitic melts. Geology, 1997, 25, 42.	4.4	302
8	Phase transition and density of subducted MORB crust in the lower mantle. Earth and Planetary Science Letters, 2005, 237, 239-251.	4.4	289
9	Phase transitions in pyrolitic mantle around 670-km depth: Implications for upwelling of plumes from the lower mantle. Journal of Geophysical Research, 2002, 107, ECV 3-1-ECV 3-13.	3.3	278
10	Geochemical Variations in Vanuatu Arc Lavas: the Role of Subducted Material and a Variable Mantle Wedge Composition. Journal of Petrology, 1997, 38, 1331-1358.	2.8	259
11	The high conductivity of iron and thermal evolution of the Earth's core. Physics of the Earth and Planetary Interiors, 2013, 224, 88-103.	1.9	251
12	The elasticity of the MgSiO3 post-perovskite phase in the Earth's lowermost mantle. Nature, 2004, 430, 442-445.	27.8	248
13	Composition and State of the Core. Annual Review of Earth and Planetary Sciences, 2013, 41, 657-691.	11.0	246
14	Melting experiments on homogeneous mixtures of peridotite and basalt: application to the genesis of ocean island basalts. Earth and Planetary Science Letters, 1998, 162, 45-61.	4.4	239
15	Stability of magnesite and its high-pressure form in the lowermost mantle. Nature, 2004, 427, 60-63.	27.8	234
16	Low Core-Mantle Boundary Temperature Inferred from the Solidus of Pyrolite. Science, 2014, 343, 522-525.	12.6	224
17	A perovskitic lower mantle inferred from high-pressure, high-temperature sound velocity data. Nature, 2012, 485, 90-94.	27.8	220
18	Partial melt compositions of carbonated peridotite at 3 GPa and role of CO2in alkali-basalt magma generation. Geophysical Research Letters, 1997, 24, 2837-2840.	4.0	219

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19	Spin crossover and iron-rich silicate melt in the Earth's deep mantle. Nature, 2011, 473, 199-202.	27.8	212
20	Experimental determination of the electrical resistivity of iron at Earth's core conditions. Nature, 2016, 534, 95-98.	27.8	209
21	Post-perovskite phase transition and mineral chemistry in the pyrolitic lowermost mantle. Geophysical Research Letters, 2005, 32, .	4.0	186
22	Water in Earth's Lower Mantle. Science, 2002, 295, 1885-1887.	12.6	175
23	Subsolidus and melting phase relations of basaltic composition in the uppermostlower mantle. Geochimica Et Cosmochimica Acta, 2002, 66, 2099-2108.	3.9	175
24	Coesite and clinopyroxene exsolution lamellae in chromites: In-situ ultrahigh-pressure evidence from podiform chromitites in the Luobusa ophiolite, southern Tibet. Lithos, 2009, 109, 314-322.	1.4	173
25	Crystallization of silicon dioxide and compositional evolution of the Earth's core. Nature, 2017, 543, 99-102.	27.8	161
26	The Pyrite-Type High-Pressure Form of Silica. Science, 2005, 309, 923-925.	12.6	151
27	Postperovskite phase transition and its geophysical implications. Reviews of Geophysics, 2006, 44, .	23.0	149
28	Highly intense monochromatic X-ray diffraction facility for high-pressure research at SPring-8. High Pressure Research, 2008, 28, 163-173.	1.2	140
29	Persistence of strong silica-enriched domains in the Earth's lower mantle. Nature Geoscience, 2017, 10, 236-240.	12.9	138
30	Solubilities of O and Si in liquid iron in equilibrium with (Mg,Fe)SiO3perovskite and the light elements in the core. Geophysical Research Letters, 2005, 32, .	4.0	129
31	A critical evaluation of pressure scales at high temperatures by in situ X-ray diffraction measurements. Physics of the Earth and Planetary Interiors, 2004, 143-144, 515-526.	1.9	127
32	The Electrical Conductivity of Post-Perovskite in Earth's D'' Layer. Science, 2008, 320, 89-91.	12.6	127
33	Determination of post-perovskite phase transition boundary up to 4400ÂK and implications for thermal structure in D″ layer. Earth and Planetary Science Letters, 2009, 277, 130-136.	4.4	124
34	The naked planet Earth: Most essential pre-requisite for the origin and evolution of life. Geoscience Frontiers, 2013, 4, 141-165.	8.4	122
35	Compression of FeSi, Fe ₃ C, Fe _{0.95} O, and FeS under the core pressures and implication for light element in the Earth's core. Journal of Geophysical Research, 2010, 115, .	3.3	117
36	Sulfur in the Earth's inner core. Earth and Planetary Science Letters, 2001, 193, 509-514.	4.4	113

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37	Stability of CaCl2-type and α-PbO2-type SiO2at high pressure and temperature determined by in-situ X-ray measurements. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	113
38	Lattice thermal conductivity of MgSiO3 perovskite and post-perovskite at the core–mantle boundary. Earth and Planetary Science Letters, 2012, 349-350, 109-115.	4.4	113
39	Experimental and Theoretical Evidence for Pressure-Induced Metallization in FeO with Rocksalt-Type Structure. Physical Review Letters, 2012, 108, 026403.	7.8	111
40	Phase transitions in pyrolite and MORB at lowermost mantle conditions: Implications for a MORB-rich pile above the core–mantle boundary. Earth and Planetary Science Letters, 2008, 267, 107-117.	4.4	109
41	Stability and equation of state of MgGeO3post-perovskite phase. American Mineralogist, 2005, 90, 262-265.	1.9	107
42	In situ measurements of the phase transition boundary in Mg3Al2Si3O12: implications for the nature of the seismic discontinuities in the Earth's mantle. Earth and Planetary Science Letters, 2001, 184, 567-573.	4.4	106
43	Precise determination of post-stishovite phase transition boundary and implications for seismic heterogeneities in the mid-lower mantle. Physics of the Earth and Planetary Interiors, 2010, 183, 104-109.	1.9	102
44	Determination of post-perovskite phase transition boundary in MgSiO3using Au and MgO pressure standards. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	94
45	Phase relations of iron and iron–nickel alloys up to 300ÂGPa: Implications for composition and structure of the Earth's inner core. Earth and Planetary Science Letters, 2008, 273, 379-385.	4.4	89
46	Phase transition in Al-bearing CaSiO3 perovskite: implications for seismic discontinuities in the lower mantle. Physics of the Earth and Planetary Interiors, 2004, 145, 67-74.	1.9	86
47	Post-stishovite phase boundary in SiO2 determined by in situ X-ray observations. Earth and Planetary Science Letters, 2002, 197, 187-192.	4.4	84
48	Equation of state of the postperovskite phase synthesized from a natural (Mg,Fe)SiO3 orthopyroxene. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3039-3043.	7.1	84
49	Pressureâ€volumeâ€ŧemperature relations in MgO: An ultrahigh pressureâ€ŧemperature scale for planetary sciences applications. Journal of Geophysical Research, 2008, 113, .	3.3	84
50	New developments in high-pressure X-ray diffraction beamline for diamond anvil cell at SPring-8. Matter and Radiation at Extremes, 2020, 5, .	3.9	84
51	Trace element partitioning in Earth's lower mantle and implications for geochemical consequences of partial melting at the core–mantle boundary. Physics of the Earth and Planetary Interiors, 2004, 146, 249-260.	1.9	81
52	Melting curve of iron to 290 GPa determined in a resistance-heated diamond-anvil cell. Earth and Planetary Science Letters, 2019, 510, 45-52.	4.4	81
53	The structure of Fe–Si alloy in Earth's inner core. Earth and Planetary Science Letters, 2015, 418, 11-19.	4.4	77
54	Phase relations in the system Fe-FeSi at 21 GPa. American Mineralogist, 2004, 89, 273-276.	1.9	76

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55	Solubilities of nitrogen and noble gases in silicate melts under various oxygen fugacities: implications for the origin and degassing history of nitrogen and noble gases in the earth. Geochimica Et Cosmochimica Acta, 2004, 68, 387-401.	3.9	74
56	The Soret diffusion in laser-heated diamond-anvil cell. Physics of the Earth and Planetary Interiors, 2010, 180, 172-178.	1.9	74
57	High-pressure behavior of MnGeO3 and CdGeO3 perovskites and the post-perovskite phase transition. Physics and Chemistry of Minerals, 2006, 32, 721-725.	0.8	73
58	Partitioning of iron between perovskite/postperovskite and ferropericlase in the lower mantle. Journal of Geophysical Research, 2008, 113, .	3.3	73
59	Melting experiments on Fe–Fe 3 S system to 254 GPa. Earth and Planetary Science Letters, 2017, 464, 135-141.	4.4	73
60	Solubility of FeO in (Mg,Fe)SiO3 perovskite and the post-perovskite phase transition. Physics of the Earth and Planetary Interiors, 2007, 160, 319-325.	1.9	72
61	Compression of <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"><mml:mrow><mml:msub><mml:mtext>H</mml:mtext><mml:mn>2</mml:mn></mml:msub>< to 126 GPa and implications for hydrogen-bond symmetrization: Synchrotron x-ray diffraction measurements and density-functional calculations. Physical Review B, 2008, 77</mml:mrow></mml:math>	mml:mtex 3.2	t>Q72
62	In situ measurements of the majorite-akimotoite-perovskite phase transition boundaries in MgSiO3. Geophysical Research Letters, 2001, 28, 4351-4354.	4.0	71
63	Light elements in the Earth's core. Nature Reviews Earth & Environment, 2021, 2, 645-658.	29.7	69
64	Clapeyron slope of the post-perovskite phase transition in CalrO3. Geophysical Research Letters, 2005, 32, .	4.0	68
65	Sound velocity of MgSiO3 post-perovskite phase: A constraint on the D″ discontinuity. Earth and Planetary Science Letters, 2007, 259, 18-23.	4.4	66
66	Phase relations in Mg3Al2Si3O12to 180 GPa: Effect of Al on post-perovskite phase transition. Geophysical Research Letters, 2005, 32, .	4.0	65
67	Phase transition boundary between B1 and B8 structures of FeO up to 210GPa. Physics of the Earth and Planetary Interiors, 2010, 179, 157-163.	1.9	65
68	Melting experiments on peridotite to lowermost mantle conditions. Journal of Geophysical Research: Solid Earth, 2014, 119, 4684-4694.	3.4	65
69	Phase transition in CaSiO3 perovskite. Earth and Planetary Science Letters, 2007, 260, 564-569.	4.4	64
70	Liquid ironâ€hydrogen alloys at outer core conditions by firstâ€principles calculations. Geophysical Research Letters, 2015, 42, 7513-7520.	4.0	64
71	Experimental evidence for hydrogen incorporation into Earth's core. Nature Communications, 2021, 12, 2588.	12.8	63
72	Simultaneous volume measurements of Au and MgO to 140GPa and thermal equation of state of Au based on the MgO pressure scale. Physics of the Earth and Planetary Interiors, 2008, 167, 149-154.	1.9	61

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73	Thermal conductivity of ferropericlase in the Earth's lower mantle. Earth and Planetary Science Letters, 2017, 465, 29-37.	4.4	61
74	Cr-spinel, an excellent micro-container for retaining primitive melts – implications for a hydrous plume origin for komatiites. Earth and Planetary Science Letters, 2001, 189, 177-188.	4.4	60
75	Thermoelastic property and high-pressure stability of Fe7C3: Implication for iron-carbide in the Earth's core. American Mineralogist, 2011, 96, 1158-1165.	1.9	60
76	Phase Transition of FeO and Stratification in Earth's Outer Core. Science, 2011, 334, 792-794.	12.6	60
77	North Fiji Basin basalts and their magma sources: Part I. Incompatible element constraints. Marine Geology, 1994, 116, 153-178.	2.1	59
78	Electrical conductivities of pyrolitic mantle and MORB materials up to the lowermost mantle conditions. Earth and Planetary Science Letters, 2010, 289, 497-502.	4.4	59
79	Electrical resistivity of substitutionally disordered hcp Fe–Si and Fe–Ni alloys: Chemically-induced resistivity saturation in the Earth's core. Earth and Planetary Science Letters, 2016, 451, 51-61.	4.4	59
80	Geochemical Variations in Vanuatu Arc Lavas: the Role of Subducted Material and a Variable Mantle Wedge Composition. Journal of Petrology, 1997, 38, 1331-1358.	2.8	59
81	Reconciling magmaâ€ocean crystallization models with the presentâ€day structure of the Earth's mantle. Geochemistry, Geophysics, Geosystems, 2017, 18, 2785-2806.	2.5	58
82	Elasticity of MgO to 130ÂGPa: Implications for lower mantle mineralogy. Earth and Planetary Science Letters, 2009, 277, 123-129.	4.4	57
83	High-temperature compression of ferropericlase and the effect of temperature on iron spin transition. Earth and Planetary Science Letters, 2010, 297, 691-699.	4.4	57
84	High-pressure melting experiments on Fe–Si alloys and implications for silicon as a light element in the core. Earth and Planetary Science Letters, 2016, 456, 47-54.	4.4	57
85	Au-Pd sample containers for melting experiments on iron and water bearing systems. European Journal of Mineralogy, 1994, 6, 381-386.	1.3	57
86	Stability of phase A in antigorite (serpentine) composition determined by in situ X-ray pressure observations. Physics of the Earth and Planetary Interiors, 2005, 151, 276-289.	1.9	56
87	Potential host phase of aluminum and potassium in the Earth's lower mantle. American Mineralogist, 2001, 86, 740-746.	1.9	55
88	Experimental evidence of superionic conduction in H2O ice. Journal of Chemical Physics, 2012, 137, 194505.	3.0	55
89	Carbon-depleted outer core revealed by sound velocity measurements of liquid iron–carbon alloy. Nature Communications, 2015, 6, 8942.	12.8	55
90	Equation of State of Liquid Iron under Extreme Conditions. Physical Review Letters, 2020, 124, 165701.	7.8	55

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91	The valence state and partitioning of iron in the Earth's lowermost mantle. Journal of Geophysical Research, 2011, 116, .	3.3	54
92	Perovskite in Earth's deep interior. Science, 2017, 358, 734-738.	12.6	54
93	Melt–crystal density crossover in a deep magma ocean. Earth and Planetary Science Letters, 2019, 516, 202-211.	4.4	54
94	The structure of Feâ \in Ni alloy in Earth's inner core. Geophysical Research Letters, 2012, 39, .	4.0	53
95	Electrical resistivity and thermal conductivity of hcp Fe–Ni alloys under high pressure: Implications for thermal convection in the Earth's core. Physics of the Earth and Planetary Interiors, 2015, 247, 2-10.	1.9	53
96	The North Fiji Basin basalts and their magma sources: Part II. Sr-Nd isotopic and trace element constraints. Marine Geology, 1994, 116, 179-195.	2.1	51
97	High pressure and high temperature phase transitions of FeO. Physics of the Earth and Planetary Interiors, 2004, 146, 273-282.	1.9	51
98	Magnesium Partitioning Between Earth's Mantle and Core and its Potential to Drive an Early Exsolution Geodynamo. Geophysical Research Letters, 2018, 45, 13,240.	4.0	50
99	Simultaneous volume measurements of post-perovskite and perovskite in MgSiO3 and their thermal equations of state. Earth and Planetary Science Letters, 2008, 265, 515-524.	4.4	49
100	Structural distortion of CaSnO3 perovskite under pressure and the quenchable post-perovskite phase as a low-pressure analogue to MgSiO3. Physics of the Earth and Planetary Interiors, 2010, 181, 54-59.	1.9	47
101	Chemical equilibrium between ferropericlase and molten iron to 134 GPa and implications for iron content at the bottom of the mantle. Geophysical Research Letters, 2008, 35, .	4.0	46
102	Water solubility in majoritic garnet in subducting oceanic crust. Geophysical Research Letters, 2003, 30, .	4.0	45
103	High-pressure form of pyrite-type germanium dioxide. Physical Review B, 2003, 68, .	3.2	45
104	Ferric iron in Al-bearing post-perovskite. Geophysical Research Letters, 2006, 33, .	4.0	44
105	Thermal diffusivity measurement in a diamond anvil cell using a light pulse thermoreflectance technique. Measurement Science and Technology, 2011, 22, 024011.	2.6	43
106	Melting experiments on the Fe–C binary system up to 255 GPa: Constraints on the carbon content in the Earth's core. Earth and Planetary Science Letters, 2019, 515, 135-144.	4.4	43
107	Segregation of core melts by permeable flow in the lower mantle. Earth and Planetary Science Letters, 2004, 224, 249-257.	4.4	42
108	Phase relations of iron–silicon alloys at high pressure and high temperature. Physics and Chemistry of Minerals, 2009, 36, 511-518.	0.8	42

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109	Spin crossover, structural change, and metallization in NiAs-type FeO at high pressure. Physical Review B, 2011, 84, .	3.2	42
110	Iron partitioning in pyrolitic lower mantle. Physics and Chemistry of Minerals, 2013, 40, 107-113.	0.8	42
111	Hydrogen Limits Carbon in Liquid Iron. Geophysical Research Letters, 2019, 46, 5190-5197.	4.0	42
112	Experimental study of reaction between perovskite and molten iron to 146ÂGPa and implications for chemically distinct buoyant layer at the top of the core. Physics and Chemistry of Minerals, 2009, 36, 355-363.	0.8	40
113	High pressure generation using double-stage diamond anvil technique: problems and equations of state of rhenium. High Pressure Research, 2018, 38, 107-119.	1.2	39
114	The effect of melt segregation on polybaric mantle melting: Estimation from the incremental melting experiments. Physics of the Earth and Planetary Interiors, 1998, 107, 111-118.	1.9	38
115	Unsolved problems in the lowermost mantle. Geophysical Research Letters, 2006, 33, .	4.0	38
116	Liquid ironâ€sulfur alloys at outer core conditions by firstâ€principles calculations. Geophysical Research Letters, 2014, 41, 6712-6717.	4.0	38
117	Measurements of lattice thermal conductivity of MgO to coreâ€mantle boundary pressures. Geophysical Research Letters, 2014, 41, 4542-4547.	4.0	37
118	Chemical compositions of the outer core examined by first principles calculations. Earth and Planetary Science Letters, 2020, 531, 116009.	4.4	37
119	Development of in situ Brillouin spectroscopy at high pressure and high temperature with synchrotron radiation and infrared laser heating system: Application to the Earth's deep interior. Physics of the Earth and Planetary Interiors, 2009, 174, 282-291.	1.9	35
120	The effect of iron spin transition on electrical conductivity of (Mg,Fe)O magnesiowuestite. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2007, 83, 97-100.	3.8	33
121	The influence of sulfur on the electrical resistivity of hcp iron: Implications for the core conductivity of Mars and Earth. Geophysical Research Letters, 2017, 44, 8254-8259.	4.0	33
122	In situ X-ray diffraction measurements of the fcc–hcp phase transition boundary of an Fe–Ni alloy in an internally heated diamond anvil cell. Physics and Chemistry of Minerals, 2012, 39, 329-338.	0.8	32
123	Stability and compressibility of a new ironâ€nitride <i>β</i> â€Fe ₇ N ₃ to core pressures. Geophysical Research Letters, 2015, 42, 5206-5211.	4.0	32
124	Sound velocity of liquid Feâ€Niâ€S at high pressure. Journal of Geophysical Research: Solid Earth, 2017, 122, 3624-3634.	3.4	32
125	Compression of Fe–Si–H alloys to core pressures. Geophysical Research Letters, 2016, 43, 3686-3692.	4.0	31
126	Phase transition between theCaCl2-type andαâ^'PbO2-type structures of germanium dioxide. Physical Review B, 2003, 68, .	3.2	30

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127	Iron partitioning between perovskite and post-perovskite: A transmission electron microscope study. American Mineralogist, 2008, 93, 1678-1681.	1.9	30
128	High-pressure experimental evidence for metal FeO with normal NiAs-type structure. Physical Review B, 2010, 82, .	3.2	29
129	Decomposition of Fe ₃ S above 250 GPa. Geophysical Research Letters, 2013, 40, 4845-4849.	4.0	29
130	Phase boundary between rutile-type and CaCl ₂ -type germanium dioxide determined by in situ X-ray observations. American Mineralogist, 2002, 87, 99-102.	1.9	28
131	The electrical resistance measurements of (Mg,Fe)SiO3 perovskite at high pressures and implications for electronic spin transition of iron. Physics of the Earth and Planetary Interiors, 2010, 180, 154-158.	1.9	28
132	A new experimental approach for incremental batch melting of peridotite at 1.5 GPa. Geophysical Research Letters, 1994, 21, 2139-2142.	4.0	27
133	The compressibility of a natural composition calcium ferrite-type aluminous phase to 70 GPa. Physics of the Earth and Planetary Interiors, 2002, 131, 311-318.	1.9	27
134	Equation of state of hexagonal aluminous phase in basaltic composition to 63 GPa at 300 K. Physics and Chemistry of Minerals, 2002, 29, 527-531.	0.8	27
135	Discovery of Post-Perovskite and New Views on the Core-Mantle Boundary Region. Elements, 2008, 4, 183-189.	0.5	27
136	Reconciling the post-perovskite phase with seismological observations of lowermost mantle structure. Geophysical Monograph Series, 2007, , 129-153.	0.1	26
137	Seismic anisotropy of post-perovskite and the lowermost mantle. Geophysical Monograph Series, 2007, , 171-189.	0.1	26
138	Resistivity saturation of hcp Fe-Si alloys in an internally heated diamond anvil cell: A key to assessing the Earth's core conductivity. Earth and Planetary Science Letters, 2020, 543, 116357.	4.4	26
139	Equation of state of Al-bearing stishovite to 40 GPa at 300 K. American Mineralogist, 2002, 87, 1486-1489.	1.9	25
140	The effect of iron and aluminum incorporation on lattice thermal conductivity of bridgmanite at the Earth's lower mantle. Earth and Planetary Science Letters, 2017, 474, 25-31.	4.4	25
141	Stability of fcc phase FeH to 137 GPa. American Mineralogist, 2020, 105, 917-921.	1.9	25
142	Deformation of MnGeO ₃ postâ€perovskite at lower mantle pressure and temperature. Geophysical Research Letters, 2010, 37, .	4.0	24
143	Sound velocity measurement in liquid water up to 25 GPa and 900 K: Implications for densities of water at lower mantle conditions. Earth and Planetary Science Letters, 2010, 289, 479-485.	4.4	24
144	Sound velocity measurements of CaSiO3 perovskite to 133GPa and implications for lowermost mantle seismic anomalies. Earth and Planetary Science Letters, 2012, 349-350, 1-7.	4.4	24

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145	Electrical resistivity of fcc phase iron hydrides at high pressures and temperatures. Comptes Rendus - Geoscience, 2019, 351, 147-153.	1.2	24
146	New high-pressure B2 phase of FeS above 180 GPa. American Mineralogist, 2008, 93, 492-494.	1.9	23
147	Thermoelastic properties of ice VII and its high-pressure polymorphs: Implications for dynamics of cold slab subduction in the lower mantle. Earth and Planetary Science Letters, 2010, 299, 474-482.	4.4	23
148	Stabilities of NAL and Ca-ferrite-type phases on the join NaAlSiO4-MgAl2O4 at high pressure. Physics and Chemistry of Minerals, 2011, 38, 557-560.	0.8	23
149	The advanced ion-milling method for preparation of thin film using ion slicer: Application to a sample recovered from diamond-anvil cell. Review of Scientific Instruments, 2009, 80, 013901.	1.3	22
150	High-temperature compression experiments of CaSiO3 perovskite to lowermost mantle conditions and its thermal equation of state. Physics and Chemistry of Minerals, 2013, 40, 81-91.	0.8	22
151	Nature of the Volume Isotope Effect in Ice. Physical Review Letters, 2015, 115, 173005.	7.8	22
152	An Experimental Examination of Thermal Conductivity Anisotropy in hcp Iron. Frontiers in Earth Science, 2018, 6, .	1.8	22
153	Melting experiments on Fe–Si–S alloys to core pressures: Silicon in the core?. American Mineralogist, 2018, 103, 742-748.	1.9	22
154	Experimental Determination of Composition of Melt Formed by Equilibrium Partial Melting of Peridotite at High Pressures Using Aggregates of Diamond Grains Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 1992, 68, 63-68.	3.8	21
155	Pressure-induced structural evolution of pyrite-type SiO2. Physics and Chemistry of Minerals, 2011, 38, 591-597.	0.8	21
156	Post-stishovite transition in hydrous aluminous SiO2. Physics of the Earth and Planetary Interiors, 2016, 255, 18-26.	1.9	21
157	Phase transition in SiC from zinc-blende to rock-salt structure and implications for carbon-rich extrasolar planets. American Mineralogist, 2017, 102, 2230-2234.	1.9	21
158	Thermal conductivity of Fe-bearing post-perovskite in the Earth's lowermost mantle. Earth and Planetary Science Letters, 2020, 547, 116466.	4.4	21
159	Simultaneous high-pressure and high-temperature volume measurements of ice VII and its thermal equation of state. Physical Review B, 2010, 82, .	3.2	20
160	Static compression of B2 KCl to 230 GPa and its P-V-T equation of state. American Mineralogist, 2019, 104, 718-723.	1.9	20
161	A new high-pressure and high-temperature polymorph of FeS. Physics and Chemistry of Minerals, 2007, 34, 335-343.	0.8	19
162	Lattice-preferred orientation of lower mantle materials and seismic anisotropy in the D″ layer. Geophysical Monograph Series, 2007, , 69-78.	0.1	18

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163	Sound velocities of Na0.4Mg0.6Al1.6Si0.4O4 NAL and CF phases to 73ÂGPa determined by Brillouin scattering method. Physics and Chemistry of Minerals, 2013, 40, 195-201.	0.8	18
164	Ferric iron content in (Mg,Fe)SiO3 perovskite and post-perovskite at deep lower mantle conditions. American Mineralogist, 2008, 93, 1899-1902.	1.9	17
165	Thermal diffusivities of MgSiO3 and Al-bearing MgSiO3 perovskites. American Mineralogist, 2014, 99, 94-97.	1.9	17
166	Measurements of sound velocity in iron–nickel alloys by femtosecond laser pulses in a diamond anvil cell. Physics and Chemistry of Minerals, 2018, 45, 589-595.	0.8	17
167	Fe ₂ S: The Most Feâ€Rich Iron Sulfide at the Earth's Inner Core Pressures. Geophysical Research Letters, 2019, 46, 11944-11949.	4.0	17
168	The stability of Fe5O6 and Fe4O5 at high pressure and temperature. American Mineralogist, 2019, 104, 1356-1359.	1.9	16
169	Melting Experiments on Liquidus Phase Relations in the Feâ€Sâ€O Ternary System Under Core Pressures. Geophysical Research Letters, 2019, 46, 5137-5145.	4.0	16
170	Highâ€Temperature Equation of State of FeH: Implications for Hydrogen in Earth's Inner Core. Geophysical Research Letters, 2022, 49, .	4.0	16
171	Crystal structures of (Mg _{1- <i>x</i>} ,Fe _{<i>x</i>})SiO ₃ postperovskite at high pressures. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1035-1040.	7.1	15
172	High-pressure experiments on phase transition boundaries between corundum, Rh2O3(II)-and CalrO3-type structures in Al2O3. American Mineralogist, 2013, 98, 335-339.	1.9	15
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