Shigeaki Ono

List of Publications by Year in Descending Order

97 papers	4,875 citations	37 h-index	68 g-index
98 ext. papers	5,240 ext. citations	4.1 avg, IF	5.67 L-index

#	Paper	IF	Citations
97	Equation of State Determination for Rhenium Using First-Principles Molecular Dynamics Calculations and High-Pressure Experiments. *Advances in Condensed Matter Physics*, **2022**, 2022, 1-6	1	
96	Overview of the Special Issue "Hard-rock Drilling Science: Challenges of Mantle Drilling". *Journal of Geography (Chigaku Zasshi)*, **2021**, 130, 453-455	0.5	
95	Crucial Scientific Issues in Earth Science Revealed Only by Mantle Drilling: Understanding the Current State of the Oceanic Plates of a Life-bearing Planet. *Journal of Geography (Chigaku Zasshi)*, **2021**, 130, 483-506	0.5	2
94	Introduction to the Special Issue "Hard-rock Drilling Science: Challenges of Mantle Drilling". *Journal of Geography (Chigaku Zasshi)*, **2021**, 130, 457-459	0.5	
93	Phase transition in ZnSe at high pressures and high temperatures. *Journal of Physics and Chemistry of Solids*, **2020**, 141, 109409	3.9	1
92	Fate of subducted argon in the deep mantle. *Scientific Reports*, **2020**, 10, 1393	4.9	3
91	Phase transition of ZnS at high pressures and temperatures. *Phase Transitions*, **2018**, 91, 9-14	1.3	8
90	Phase transformation of GaAs at high pressures and temperatures. *Journal of Physics and Chemistry of Solids*, **2018**, 113, 1-4	3.9	14
89	Decomposition boundary from high-pressure clinoenstatite to wadsleyite + stishovite in MgSiO3. *American Mineralogist*, **2018**, 103, 1512-1515	2.9	2
88	High-pressure phase transition of bismuth. *High Pressure Research*, **2018**, 38, 414-421	1.6	6
87	Determination of the phase boundary of GaP using in situ high pressure and high-temperature X-ray diffraction. *High Pressure Research*, **2017**, 37, 28-35	1.6	9
86	Precise determination of the phase boundary between coesite and stishovite in SiO2. *Physics of the Earth and Planetary Interiors*, **2017**, 264, 1-6	2.3	23
85	Reaction boundary between akimotoite and ringwoodite + stishovite in MgSiO3. *Physics and Chemistry of Minerals*, **2017**, 44, 425-430	1.6	4
84	Overview of the Drilling Project on the Bend-fault Hydrology in Old Incoming Plate. *Journal of Geography (Chigaku Zasshi)*, **2017**, 126, 247-262	0.5	5
83	Overview of the Special Issue "The Forefront of Subducting Oceanic Plate Science: Oceanic Drilling in the Outer Rise Region". *Journal of Geography (Chigaku Zasshi)*, **2017**, 126, 105-108	0.5	
82	Titanium boride equation of state determined by in-situ X-ray diffraction. *Heliyon*, **2016**, 2, e00220	3.6	8
81	Relationship between structural variation and spin transition of iron under high pressures and high temperatures. *Solid State Communications*, **2015**, 203, 1-4	1.6	1

80	In situ Raman spectroscopy of cubic boron nitride to 90 GPa and 800 K. *Journal of Physics and Chemistry of Solids*, **2015**, 76, 120-124	3.9	3
79	Zeta-Fe2O3--A new stable polymorph in iron(III) oxide family. *Scientific Reports*, **2015**, 5, 15091	4.9	54
78	Influence of pressure and temperature on the electrical conductivity of dolomite. *Physics and Chemistry of Minerals*, **2015**, 42, 773-779	1.6	5
77	Determination of the phase boundary of the omega to beta transition in Zr using in situ high-pressure and high-temperature X-ray diffraction. *Journal of Solid State Chemistry*, **2015**, 225, 110-113	2.3	10
76	Raman spectra of culet face of diamond anvils and application as optical pressure sensor to high temperatures. *Journal of Applied Physics*, **2014**, 116, 053517	2.5	12
75	Large-ion lithophile elements delivered by saline fluids to the sub-arc mantle. *Earth, Planets and Space*, **2014**, 66,	2.9	24
74	In situ observation of a phase transition in Fe2SiO4 at high pressure and high temperature. *Physics and Chemistry of Minerals*, **2013**, 40, 811-816	1.6	17
73	Equation of state and elasticity of B2-type FeSi: Implications for silicon in the inner core. *Physics of the Earth and Planetary Interiors*, **2013**, 224, 32-37	2.3	9
72	Electrical conductivity of aragonite in the subducted slab. *European Journal of Mineralogy*, **2013**, 25, 11-15	2.2	8
71	Elastic Properties of CaSiO3 Perovskite from ab initio Molecular Dynamics. *Entropy*, **2013**, 15, 4300-4309	2.8	3
70	Separation of supercritical slab-fluids to form aqueous fluid and melt components in subduction zone magmatism. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 18695-700	11.5	66
69	Slab melting versus slab dehydration in subduction-zone magmatism. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 8177-82	11.5	123
68	In situ observation of a garnet/perovskite transition in CaGeO3. *Physics and Chemistry of Minerals*, **2011**, 38, 735-740	1.6	33
67	Elastic, thermal and structural properties of platinum. *Journal of Physics and Chemistry of Solids*, **2011**, 72, 169-175	3.9	18
66	Determination of the phase boundary of the ferroelastic rutile to CaCl2 transition in RuO2 using in situ high-pressure and high-temperature Raman spectroscopy. *Physical Review B*, **2011**, 84,	3.3	12
65	Density and seismic velocities of chromitite body in oceanic mantle peridotite. *American Mineralogist*, **2010**, 95, 1422-1428	2.9	3
64	Letter. High-pressure magnetic transition in hcp-Fe. *American Mineralogist*, **2010**, 95, 880-883	2.9	25
63	Magnetic transition of iron carbide at high pressures. *Physics of the Earth and Planetary Interiors*, **2010**, 180, 1-6	2.3	48

62	Multiple Approaches from Theoretical Simulations and High-Pressure Experiments to Determine Accurate Equation of State for Materials. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2010**, 20, 244-251	0	
61	Review of five years of activity at IFREE /JAMSTEC. *JAMSTEC Report of Research and Development*, **2009**, 9, 2_43-2_94	0	0
60	First-principles molecular dynamics calculations of the equation of state for tantalum. *International Journal of Molecular Sciences*, **2009**, 10, 4342-51	6.3	16
59	Experimental constraints on the temperature profile in the lower mantle. *Physics of the Earth and Planetary Interiors*, **2008**, 170, 267-273	2.3	39
58	High-pressure phase transformations of FeS: Novel phases at conditions of planetary cores. *Earth and Planetary Science Letters*, **2008**, 272, 481-487	5.3	46
57	Novel high-pressure structures of MgCO3, CaCO3 and CO2 and their role in Earth's lower mantle. *Earth and Planetary Science Letters*, **2008**, 273, 38-47	5.3	187
56	Ab initio molecular dynamics simulations for thermal equation of state of B2-type NaCl. *Journal of Applied Physics*, **2008**, 103, 023510	2.5	19
55	First-principles simulation of high-pressure polymorphs in MgAl2O4. *Physics and Chemistry of Minerals*, **2008**, 35, 381-386	1.6	28
54	Second critical endpoint in the peridotite-H2O system. *Journal of Geophysical Research*, **2007**, 112,		82
53	Effect of incorporation of iron and aluminum on the thermoelastic properties of magnesium silicate perovskite. *Physics and Chemistry of Minerals*, **2007**, 34, 131-143	1.6	13
52	New high-pressure phases in BaCO3. *Physics and Chemistry of Minerals*, **2007**, 34, 215-221	1.6	25
51	In situ observation of the decomposition of kyanite at high pressures and high temperatures. *American Mineralogist*, **2007**, 92, 1624-1629	2.9	13
50	Equation of state of the high-pressure polymorph of FeSi to 67 GPa. *European Journal of Mineralogy* , **2007**, 19, 183-187	2.2	18
49	High-pressure transition of CaCO3. *American Mineralogist*, **2007**, 92, 1246-1249	2.9	74
48	The Lehmann Discontinuity Due to Dehydration of Subducted Sediment **2007**, 1, 1-4		5
47	The stability and compressibility of MgAl2O4 high-pressure polymorphs. *Physics and Chemistry of Minerals*, **2006**, 33, 200-206	1.6	34
46	Letter. High-pressure study of FeS, between 20 and 120 GPa, using synchrotron X-ray powder diffraction. *American Mineralogist*, **2006**, 91, 1941-1944	2.9	18
45	Equation of state of CaIrO3-type MgSiO3 up to 144 GPa. *American Mineralogist*, **2006**, 91, 475-478	2.9	46

44	Aluminum substitution in stishovite and MgSiO3 perovskite: High-resolution 27Al NMR. *American Mineralogist*, **2006**, 91, 337-343	2.9	13
43	High-pressure phases of CaCO3: Crystal structure prediction and experiment. *Earth and Planetary Science Letters*, **2006**, 241, 95-103	5.3	291
42	Stability and compressibility of the high-pressure phases of Al2O3 up to 200 GPa: Implications for the electrical conductivity of the base of the lower mantle. *Earth and Planetary Science Letters*, **2006**, 246, 326-335	5.3	71
41	Mg□e partitioning between olivine and ultramafic melts at high pressures. *Geochimica Et Cosmochimica Acta*, **2006**, 70, 757-766	5.5	31
40	Structural property of CsCl-type sodium chloride under pressure. *Solid State Communications*, **2006**, 137, 517-521	1.6	35
39	The high-pressure phase of alumina and implications for Earth's D'' layer. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 10828-31	11.5	99
38	Compressibility of the calcium aluminosilicate, CAS, phase to 44 GPa. *Physics of the Earth and Planetary Interiors*, **2005**, 150, 331-338	2.3	11
37	In situ X-ray observations of phase assemblages in peridotite and basalt compositions at lower mantle conditions: Implications for density of subducted oceanic plate. *Journal of Geophysical Research*, **2005**, 110,		66
36	In situ X-ray observation of phase transformation in Fe2O3 at high pressures and high temperatures. *Journal of Physics and Chemistry of Solids*, **2005**, 66, 1714-1720	3.9	54
35	High-pressure and high-temperature synthesis of a cubic IrO2 polymorph. *Physica B: Condensed Matter*, **2005**, 363, 140-145	2.8	14
34	A high-pressure and high-temperature synthesis of platinum carbide. *Solid State Communications*, **2005**, 133, 55-59	1.6	141
33	A new high-pressure phase of strontium carbonate. *Physics and Chemistry of Minerals*, **2005**, 32, 8-12	1.6	21
32	Post-aragonite phase transformation in CaCO3 at 40 GPa. *American Mineralogist*, **2005**, 90, 667-671	2.9	98
31	Mg/Si ratios of aqueous fluids coexisting with forsterite and enstatite based on the phase relations in the Mg2SiO4-SiO2-H2O system. *American Mineralogist*, **2004**, 89, 1433-1437	2.9	38
30	Phase transition of Ca-perovskite and stability of Al-bearing Mg-perovskite in the lower mantle. *American Mineralogist*, **2004**, 89, 1480-1485	2.9	52
29	Equations of state of ZrSiO4phases in the upper mantle. *American Mineralogist*, **2004**, 89, 185-188	2.9	36
28	Stability of magnesite and its high-pressure form in the lowermost mantle. *Nature*, **2004**, 427, 60-3	50.4	215
27	Theoretical and experimental evidence for a post-perovskite phase of MgSiO3 in Earth's D" layer. *Nature*, **2004**, 430, 445-8	50.4	809

26	Phase transition of zircon at high P-T conditions. *Contributions To Mineralogy and Petrology*, **2004**, 147, 505-509	3.5	38
25	High-pressure phase transition of hematite, Fe2O3. *Journal of Physics and Chemistry of Solids*, **2004**, 65, 1527-1530	3.9	69
24	Determination of the second critical end point in silicate-H2O systems using high-pressure and high-temperature X-ray radiography. *Geochimica Et Cosmochimica Acta*, **2004**, 68, 5189-5195	5.5	37
23	Segregation of core melts by permeable flow in the lower mantle. *Earth and Planetary Science Letters*, **2004**, 224, 249-257	5.3	39
22	High pressure and high temperature phase transitions of FeO. *Physics of the Earth and Planetary Interiors*, **2004**, 146, 273-282	2.3	46
21	The equation of state of orthorhombic perovskite in a peridotitic mantle composition to 80 GPa: implications for chemical composition of the lower mantle. *Physics of the Earth and Planetary Interiors*, **2004**, 145, 9-17	2.3	29
20	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	2.3	78
19	Structural refinements of high-pressure phases in germanium dioxide. *Acta Crystallographica Section B: Structural Science*, **2003**, 59, 701-8		20
18	Stability of CaCl2-type and □PbO2-type SiO2 at high pressure and temperature determined by in-situ X-ray measurements. *Geophysical Research Letters*, **2003**, 30, n/a-n/a	4.9	94
17	Connectivity of aqueous fluid in eclogite and its implications for fluid migration in the Earth's interior. *Journal of Geophysical Research*, **2003**, 108,		38
16	Post-spinel transition in Mg2SiO4 determined by high P□T in situ X-ray diffractometry. *Physics of the Earth and Planetary Interiors*, **2003**, 136, 11-24	2.3	181
15	Phase transition between the CaCl2-type and □bO2-type structures of germanium dioxide. *Physical Review B*, **2003**, 68,	3.3	26
14	High-pressure form of pyrite-type germanium dioxide. *Physical Review B*, **2003**, 68,	3.3	39
13	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	1.6	24
12	Phase boundary between rutile-type and CaCl2-type germanium dioxide determined by in situ X-ray observations. *American Mineralogist*, **2002**, 87, 99-102	2.9	23
11	Letters. Equation of state of Al-bearing stishovite to 40 GPa at 300 K. *American Mineralogist*, **2002**, 87, 1486-1489	2.9	15
10	Post-stishovite phase boundary in SiO2 determined by in situ X-ray observations. *Earth and Planetary Science Letters*, **2002**, 197, 187-192	5.3	77
9	Aqueous fluid connectivity in pyrope aggregates: water transport into the deep mantle by a subducted oceanic crust without any hydrous minerals. *Earth and Planetary Science Letters*, **2002**, 203, 895-903	5.3	26

8	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	2.3	24
7	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	5.3	94
6	Mineralogy of subducted basaltic crust (MORB) from 25 to 37 GPa, and chemical heterogeneity of the lower mantle. *Earth and Planetary Science Letters*, **2001**, 190, 57-63	5.3	213
5	Compressibility of Mg0.9Al0.2Si0.9O3 perovskite. *Proceedings of the Japan Academy Series B: Physical and Biological Sciences*, **2000**, 76, 103-107	4	23
4	High temperature stability limit of phase egg, AlSiO3(OH). *Contributions To Mineralogy and Petrology*, **1999**, 137, 83-89	3.5	47
3	Stability limits of hydrous minerals in sediment and mid-ocean ridge basalt compositions: Implications for water transport in subduction zones. *Journal of Geophysical Research*, **1998**, 103, 18253-18267		174
2	Compositional change of majoritic garnet in a MORB composition from 7 to 17 GPa and 1400 to 1600°C. *Physics of the Earth and Planetary Interiors*, **1996**, 96, 171-179	2.3	74
1	Workshop report on hard-rock drilling into mid-Cretaceous Pacific oceanic crust on the Hawaiian North Arch. *Scientific Drilling*,26, 47-58		6