Nobumasa Funamori

List of Publications by Year
in descending order

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60 papers	2,465 citations	186265 28 h-index	189892 50 g-index
60 all docs	60 docs citations	60 times ranked	1709 citing authors

#	Article	IF	Citations
1	Structure of sodium silicate water glassâ€”X-ray scattering experiments and force-field molecular dynamics simulations. Journal of Non-Crystalline Solids, 2022, 579, 121370.	3.1	4
2	Conceptual design of the Hybrid Ring with superconducting linac. Journal of Synchrotron Radiation, 2022, 29, 118-124.	2.4	5
3	X-ray zooming microscopy with two Fresnel zone plates. Review of Scientific Instruments, 2022, 93, 033701.	1.3	2
4	X-ray zooming optics for analyzer-based multi-contrast computed tomography. Journal of Synchrotron Radiation, 2022, 29, 787-793.	2.4	0
5	Kinetic model for phase transformation of noncrystalline solids: Application to permanent densification of SiO2 glass. Physical Review B, 2021, 103, .	3.2	1
6	In Situ Observation of the Phase Transition Behavior of Shocked Baddeleyite. Geophysical Research Letters, 2020, 47, e2020GL089592.	4.0	5
7	Effect of sulfur on sound velocity of liquid iron under Martian core conditions. Nature Communications, 2020, 11, 1954.	12.8	13
8	X-ray and Neutron Study on the Structure of Hydrous SiO2 Glass up to 10 GPa. Minerals (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4	2.0	9
9	Development of shock-dynamics study with synchrotron-based time-resolved X-ray diffraction using an Nd:glass laser system. Journal of Synchrotron Radiation, 2020, 27, 371-377.	2.4	5
10	Long Periodic Structure of a Roomâ€Temperature Ionic Liquid by Highâ€Pressure Smallâ€Angle Xâ€Ray Scattering and Wideâ€Angle Xâ€Ray Scattering: 1â€Decylâ€3â€Methylimidazolium Chloride. ChemPhysChem, 2018, 19, 1441-1447.	2.8	13
11	High-pressure glass formation of a series of 1-alkyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide homologues. Physical Chemistry Chemical Physics, 2018, 20, 199-205.	2.8	15
12	Coexistence of two states in optically homogeneous silica glass during the transformation in short-range order. Physical Review B, 2018, 98, .	3.2	13
13	Nature of the transformation in liquid iodine at 4 GPa. Physical Review B, 2017, 96, .	3.2	5
14	Towards a consensus on the pressure and composition dependence of sound velocity in the liquid Feâ€“S system. Physics of the Earth and Planetary Interiors, 2016, 257, 230-239.	1.9	31
15	Muonium in Stishovite: Implications for the Possible Existence of Neutral Atomic Hydrogen in the Earth's Deep Mantle. Scientific Reports, 2015, 5, 8437.	3.3	3
16	Enhanced plasticity of silica glass at high pressure. Physical Review B, 2015, 91, .	3.2	28
17	Stability of the Liquid State of Imidazolium-Based Ionic Liquids under High Pressure at Room Temperature. Journal of Physical Chemistry B, 2015, 119, 8146-8153.	2.6	56
18	Solving the problem of inconsistency in the reported equations of state for h-BN. High Pressure Research, 2015, 35, 123-129.	1.2	11

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19	Equation of state for silicate melts: A comparison between static and shock compression. Geophysical Research Letters, 2014, 41, 50-54.	4.0	4
20	Crystal structures and stabilities of cristobalite-helium phases at high pressures. American Mineralogist, 2014, 99, 184-189.	1.9	11
21	Equation of state of silicate melts with densified intermediate-range order at the pressure condition of the Earthâ€™s deep upper mantle. Physics and Chemistry of Minerals, 2013, 40, 299-307.	0.8	10
22	Anomalous behavior of cristobalite in helium under high pressure. Physics and Chemistry of Minerals, 2013, 40, 3-10.	0.8	22
23	Differential strain and residual anisotropy in silica glass. Journal of Applied Physics, 2013, 114, .	2.5	25
24	Pressure-induced structural change of intermediate-range order in poly(4-methyl-1-pentene) melt. Physical Review E, 2012, 85, 021807.	2.1	21
25	Helium penetrates into silica glass and reduces its compressibility. Nature Communications, 2011, 2, 345.	12.8	88
26	In situ X-ray diffraction study on pressure-induced structural changes in hydrous forsterite and enstatite melts. Earth and Planetary Science Letters, 2011, 308, 115-123.	4.4	12
27	Compression behavior of densified SiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>glass. Physical Review B, 2011, 84, .	3.2	57
28	High-pressure structural transformation of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>SiO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu up to 100 GPa. Physical Review B, 2010, 82, .	3.2	138
29	High-pressure in situ structure measurement of low-Z noncrystalline materials with a diamond-anvil cell by an x-ray diffraction method. Review of Scientific Instruments, 2010, 81, 043906.	1.3	14
30	Density contrast between silicate melts and crystals in the deep mantle: An integrated view based on static-compression data. Earth and Planetary Science Letters, 2010, 295, 435-440.	4.4	32
31	Sato and Funamori Reply:. Physical Review Letters, 2009, 102, .	7.8	11
32	A cubic boron nitride gasket for diamond-anvil experiments. Review of Scientific Instruments, 2008, 79, 053903.	1.3	53
33	Sixfold-Coordinated Amorphous Polymorph of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>SiO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>under High Pressure. Physical Review Letters, 2008, 101, 255502.	7.8	174
34	High-pressure in situ density measurement of low-Z noncrystalline materials with a diamond-anvil cell by an x-ray absorption method. Review of Scientific Instruments, 2008, 79, 073906.	1.3	18
35	In situ X-ray experiment on the structure of hydrous Mg-silicate melt under high pressure and high temperature. Geophysical Research Letters, 2007, 34, .	4.0	24
36	Heating in a diamond-anvil cell using relaxation oscillations of a Q-switched Nd:YAG laser. Review of Scientific Instruments, 2006, 77, 093903.	1.3	7

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37	Post-PbCl2phase transformation ofTeO2. Physical Review B, 2005, 72, .	3.2	10
38	Pressure dependence of the structure of liquid group 14 elements. Journal of Physics Condensed Matter, 2004, 16, S989-S996.	1.8	29
39	Exploratory studies of silicate melt structure at high pressures and temperatures by in situ X-ray diffraction. Journal of Geophysical Research, 2004, 109, .	3.3	78
40	Pressure-Induced Structural Change of Liquid Silicon. Physical Review Letters, 2002, 88, 255508.	7.8	78
41	Structural transformation of liquid tellurium at high pressures and temperatures. Physical Review B, 2001, 65, .	3.2	48
42	Post-garnet transition in a natural pyrope: a multi-anvil study based on in situ X-ray diffraction and transmission electron microscopy. Physics of the Earth and Planetary Interiors, 2000, 122, 175-186.	1.9	30
43	Mineral assemblages of basalt in the lower mantle. Journal of Geophysical Research, 2000, 105, 26037-26043.	3.3	53
44	Garnet-perovskite transformation under conditions of the Earth's lower mantle: an analytical transmission electron microscopy study. Physics of the Earth and Planetary Interiors, 1999, 116, 117-131.	1.9	84
45	High-pressure transformations in MgAl2O4. Journal of Geophysical Research, 1998, 103, 20813-20818.	3.3	95
46	Analytical electron microscopy of the garnet-perovskite transformation in a laser-heated diamond anvil cell. Geophysical Monograph Series, 1998, , 409-417.	0.1	27
47	Transformation in Garnet from Orthorhombic Perovskite to LiNbO3 Phase on Release of Pressure. Science, 1997, 275, 513-515.	12.6	50
48	High-Pressure Transformation of Al2O3. Science, 1997, 278, 1109-1111.	12.6	132
49	High-pressure and high-temperature phase relations in diopside CaMgSi2O6. Physics of the Earth and Planetary Interiors, 1997, 104, 363-370.	1.9	41
50	Broadening of x-ray powder diffraction lines under nonhydrostatic stress. Journal of Applied Physics, 1997, 82, 142-146.	2.5	42
51	Thermoelastic properties of MgSiO3perovskite determined by in situ X ray observations up to 30 GPa and 2000 K. Journal of Geophysical Research, 1996, 101, 8257-8269.	3.3	196
52	High-pressure and high-temperaturein situx-ray Diffraction study of iron to above 30 Gpa using MA8-type apparatus. Geophysical Research Letters, 1996, 23, 953-956.	4.0	87
53	Amorphization of Serpentine at High Pressure and High Temperature. Science, 1996, 272, 1468-1470.	12.6	50
54	Lattice strains in crystals under uniaxial stress field. Journal of Applied Physics, 1996, 80, 739-746.	2.5	109

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55	Chemical composition of the lower mantle inferred from the equation of state of MgSiO 3 perovskite. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1996, 354, 1371-1384.	3.4	22
56	Thermal expansivity of MgSiO3perovskite under high pressures up to 20 GPa. Geophysical Research Letters, 1995, 22, 1005-1008.	4.0	80
57	Deviatoric stress measurement under uniaxial compression by a powder xâ€ray diffraction method. Journal of Applied Physics, 1994, 75, 4327-4331.	2.5	84
58	Stability field of the orthorhombic perovskite type of MgSiO3. AIP Conference Proceedings, 1994, , .	0.4	0
59	Feature Articles on Earth Science. In Situ X-ray Diffraction Studies under Lower Mantle Conditions.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1994, 3, 49-54.	0.0	1
60	High pressure and high temperature in situ Xâ€ray observation of MgSiO₃ Perovskite under lower mantle conditions. Geophysical Research Letters, 1993, 20, 387-390.	4.0	99