

Yanbin Wang

List of Publications by Year in descending order

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papers

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34493

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7399
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#	ARTICLE	IF	CITATIONS
1	A multi-faceted experimental study on the dynamic behavior of MgSiO ₃ glass in the Earth's deep interior. <i>American Mineralogist</i> , 2022, 107, 1313-1324.	0.9	2
2	Sound velocity and compressibility of melts along the hedenbergite (CaFeSi ₂ O ₆)-diopside (CaMgSi ₂ O ₆) join at high pressure: Implications for stability and seismic signature of Fe-rich melts in the mantle. <i>Earth and Planetary Science Letters</i> , 2022, 577, 117250.	1.8	7
3	Extreme dislocation-mediated plasticity of yttria-stabilized zirconia. <i>Materials Today Physics</i> , 2022, 22, 100588.	2.9	1
4	Metamorphism-facilitated faulting in deforming orthopyroxene: Implications for global intermediate-depth seismicity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2112386119.	3.3	3
5	A machine-learning-based method of detecting and picking the first <i>P</i> -wave arrivals of acoustic emission events in laboratory experiments. <i>Geophysical Journal International</i> , 2022, 230, 1818-1823.	1.0	5
6	Experimental Evidence Supporting an Overturned Iron-Titanium-Rich Melt Layer in the Deep Lunar Interior. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	5
7	Synthesis of the Candidate Topological Compound Ni ₃ Pb ₂ . <i>Journal of the American Chemical Society</i> , 2022, 144, 11943-11948.	6.6	1
8	Application of the double-difference relocation method to acoustic emission events in high-pressure deformation experiments. <i>Physics and Chemistry of Minerals</i> , 2022, 49, .	0.3	1
9	Shear wave velocities across the olivine-wadsleyite-ringwoodite transitions and sharpness of the 410 km seismic discontinuity. <i>Earth and Planetary Science Letters</i> , 2022, 593, 117690.	1.8	1
10	Temperature-dependent hardness of zinc-blende structured covalent materials. <i>Science China Materials</i> , 2021, 64, 2280-2288.	3.5	16
11	Plastic Deformation and Strengthening Mechanisms of Nanopolycrystalline Diamond. <i>ACS Nano</i> , 2021, 15, 8283-8294.	7.3	3
12	Enhanced visibility of subduction slabs by the formation of dense hydrous phase A. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095487.	1.5	8
13	Observation of 9-Fold Coordinated Amorphous TiO ₂ at High Pressure. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 374-379.	2.1	10
14	Strength and plastic deformation of polycrystalline diamond composites. <i>High Pressure Research</i> , 2020, 40, 35-53.	0.4	4
15	Structural Evolution of SiO_2 Glass with Si Coordination Number Greater than 6. <i>Physical Review Letters</i> , 2020, 125, 205701.	2.9	24
16	High-pressure elastic properties of dolomite melt supporting carbonate-induced melting in deep upper mantle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 18285-18291.	3.3	15
17	Toward an international practical pressure scale: A proposal for an IPPS ruby gauge (IPPS-Ruby2020). <i>High Pressure Research</i> , 2020, 40, 299-314.	0.4	143
18	Intersectional nanotwinned diamond-the hardest polycrystalline diamond by design. <i>Npj Computational Materials</i> , 2020, 6, .	3.5	20

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19	Hierarchically structured diamond composite with exceptional toughness. <i>Nature</i> , 2020, 582, 370-374.	13.7	141
20	Direct Observation of Room-Temperature Dislocation Plasticity in Diamond. <i>Matter</i> , 2020, 2, 1222-1232.	5.0	48
21	Equations of state, phase relations, and oxygen fugacity of the Ru-RuO ₂ buffer at high pressures and temperatures. <i>American Mineralogist</i> , 2020, 105, 333-343.	0.9	6
22	Density of NaAlSi ₂ O ₆ Melt at High Pressure and Temperature Measured by In-Situ X-ray Microtomography. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 161.	0.8	4
23	High-Pressure Sound Velocity Measurements of Liquids Using In Situ Ultrasonic Techniques in a Multianvil Apparatus. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 126.	0.8	12
24	The Indo-Eurasia convergent margin and earthquakes in and around Tibetan Plateau. <i>Journal of Mineralogical and Petrological Sciences</i> , 2020, 115, 118-137.	0.4	4
25	Unraveling microstrain-promoted structural evolution and thermally driven phase transition in O_3 nanocrystals at high pressure. <i>Physical Review B</i> , 2020, 102.		
26	Compression of porous aluminum: combined ultrasonic and microtomography measurements with lattice-Boltzmann permeability simulations. <i>High Pressure Research</i> , 2019, 39, 438-456.	0.4	0
27	Experimental evidence for wall-rock pulverization during dynamic rupture at ultra-high pressure conditions. <i>Earth and Planetary Science Letters</i> , 2019, 528, 115832.	1.8	14
28	Reaction-induced embrittlement of the lower continental crust. <i>Geology</i> , 2019, 47, 235-238.	2.0	37
29	An upgraded and integrated large-volume high-pressure facility at the GeoSoilEnviroCARS bending magnet beamline of the Advanced Photon Source. <i>Comptes Rendus - Geoscience</i> , 2019, 351, 269-279.	0.4	5
30	Continuous strengthening in nanotwinned diamond. <i>Npj Computational Materials</i> , 2019, 5, .	3.5	32
31	A Paris-Edinburgh Cell for High-Pressure and High-Temperature Structure Studies on Silicate Liquids Using Monochromatic Synchrotron Radiation. <i>Minerals (Basel, Switzerland)</i> , 2019, 9, 715.	0.8	7
32	Approaching diamond's theoretical elasticity and strength limits. <i>Nature Communications</i> , 2019, 10, 5533.	5.8	73
33	Strengthening-softening transition in yield strength of nanotwinned Cu. <i>Scripta Materialia</i> , 2019, 162, 372-376.	2.6	24
34	Controlling Dimensionality in the Ni-Bi System with Pressure. <i>Chemistry of Materials</i> , 2019, 31, 955-959.	3.2	8
35	Pressure-induced structural change in MgSiO ₃ glass at pressures near the Earth's core-mantle boundary. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 1742-1747.	3.3	34
36	An internally consistent pressure calibration of geobarometers applicable to the Earth's upper mantle using in situ XRD. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 222, 421-435.	1.6	7

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37	Pressure Dependence of the Liquidus and Solidus Temperatures in the Fe–P Binary System Determined by In Situ Ultrasonics: Implications to the Solidification of Fe–P Liquids in Planetary Cores. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1113-1124.	1.5	11
38	Dislocation behaviors in nanotwinned diamond. <i>Science Advances</i> , 2018, 4, eaat8195.	4.7	40
39	Ultrasonic Velocity of Diopside Liquid at High Pressure and Temperature: Constraints on Velocity Reduction in the Upper Mantle Due to Partial Melts. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 8676-8690.	1.4	15
40	Lower-crustal earthquakes in southern Tibet are linked to eclogitization of dry metastable granulite. <i>Nature Communications</i> , 2018, 9, 3483.	5.8	30
41	Thermally Induced Anomaly in the Shear Behavior of Magnetite at High Pressure. <i>Physical Review Applied</i> , 2018, 10, .	1.5	3
42	Harry W. Green II (1940–2017). <i>Eos</i> , 2018, 99, .	0.1	0
43	Role of plastic deformation in tailoring ultrafine microstructure in nanotwinned diamond for enhanced hardness. <i>Science China Materials</i> , 2017, 60, 178-185.	3.5	21
44	Dehydration-driven stress transfer triggers intermediate-depth earthquakes. <i>Nature Communications</i> , 2017, 8, 15247.	5.8	152
45	Compressed glassy carbon: An ultrastrong and elastic interpenetrating graphene network. <i>Science Advances</i> , 2017, 3, e1603213.	4.7	110
46	Creating Binary Cu–Bi Compounds via High-Pressure Synthesis: A Combined Experimental and Theoretical Study. <i>Chemistry of Materials</i> , 2017, 29, 5276-5285.	3.2	39
47	Deep melting reveals liquid structural memory and anomalous ferromagnetism in bismuth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 3375-3380.	3.3	12
48	Laboratory earthquakes triggered during eclogitization of lawsonite-bearing blueschist. <i>Earth and Planetary Science Letters</i> , 2017, 459, 320-331.	1.8	88
49	A laboratory nanoseismological study on deep-focus earthquake micromechanics. <i>Science Advances</i> , 2017, 3, e1601896.	4.7	30
50	Beyond sixfold coordinated Si in SiO ₂ glass at ultrahigh pressures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 10041-10046.	3.3	88
51	Local structure of liquid gallium under pressure. <i>Scientific Reports</i> , 2017, 7, 5666.	1.6	19
52	Faulting of natural serpentinite: Implications for intermediate-depth seismicity. <i>Earth and Planetary Science Letters</i> , 2017, 474, 138-147.	1.8	42
53	Anomalous density and elastic properties of basalt at high pressure: Reevaluating of the effect of melt fraction on seismic velocity in the Earth's crust and upper mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 4232-4248.	1.4	29
54	Coexistence of multiple metastable polytypes in rhombohedral bismuth. <i>Scientific Reports</i> , 2016, 6, 20337.	1.6	16

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55	Discovery of a Superconducting Cu-Bi Intermetallic Compound by High-Pressure Synthesis. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13446-13449.	7.2	46
56	Sound velocities of aluminum-bearing stishovite in the mantle transition zone. <i>Geophysical Research Letters</i> , 2016, 43, 4239-4246.	1.5	16
57	Ultrahard stitching of nanotwinned diamond and cubic boron nitride in C2-BN composite. <i>Scientific Reports</i> , 2016, 6, 30518.	1.6	24
58	Elastic wave velocities in polycrystalline Mg ₃ Al ₂ Si ₃ O ₁₂ -pyrope garnet to 24 GPa and 1300 K. <i>American Mineralogist</i> , 2016, 101, 991-997.	0.9	22
59	The effects of shear deformation on planetesimal core segregation: Results from in-situ X-ray micro-tomography. <i>American Mineralogist</i> , 2016, 101, 1996-2004.	0.9	12
60	Imaging in 3D under pressure: a decade of high-pressure X-ray microtomography development at GSECARS. <i>Progress in Earth and Planetary Science</i> , 2016, 3, .	1.1	13
61	Experimental evidence supports mantle partial melting in the asthenosphere. <i>Science Advances</i> , 2016, 2, e1600246.	4.7	98
62	On velocity anomalies beneath southeastern China: An investigation combining mineral physics studies and seismic tomography observations. <i>Gondwana Research</i> , 2016, 31, 200-217.	3.0	7
63	The W-WO ₂ oxygen fugacity buffer (WWO) at high pressure and temperature: Implications for O ₂ buffering and metal-silicate partitioning. <i>American Mineralogist</i> , 2016, 101, 211-221.	0.9	7
64	Ultra-high-pressure polyamorphism in GeO ₂ glass with coordination number >6. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3436-3441.	3.3	75
65	Phase Evolution of Oil Well Cements with Nano-additive at Elevated Temperature/Pressure. <i>ACI Materials Journal</i> , 2016, 113, .	0.3	2
66	Acoustic travel time gauges for in-situ determination of pressure and temperature in multi-anvil apparatus. <i>Journal of Applied Physics</i> , 2015, 118, .	1.1	25
67	X-ray imaging for studying behavior of liquids at high pressures and high temperatures using Paris-Edinburgh press. <i>Review of Scientific Instruments</i> , 2015, 86, 072207.	0.6	13
68	High Pressure Phase-Transformation Induced Texture Evolution and Strengthening in Zirconium Metal: Experiment and Modeling. <i>Scientific Reports</i> , 2015, 5, 12552.	1.6	21
69	Nanoarchitected materials composed of fullerene-like spheroids and disordered graphene layers with tunable mechanical properties. <i>Nature Communications</i> , 2015, 6, 6212.	5.8	57
70	High-pressure viscosity of liquid Fe and FeS revisited by falling sphere viscometry using ultrafast X-ray imaging. <i>Physics of the Earth and Planetary Interiors</i> , 2015, 241, 57-64.	0.7	38
71	High-pressure, high-temperature plastic deformation of sintered diamonds. <i>Diamond and Related Materials</i> , 2015, 59, 95-103.	1.8	13
72	Image-based Stokes flow modeling in bulk proppant packs and propped fractures under high loading stresses. <i>Journal of Petroleum Science and Engineering</i> , 2015, 135, 391-402.	2.1	32

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73	Crystallographic evidence for simultaneous growth in graphic granite. <i>Gondwana Research</i> , 2015, 27, 1550-1559.	3.0	13
74	18. High-pressure Apparatus Integrated with Synchrotron Radiation. , 2014, , 745-778.		0
75	High-pressure experimental studies on geo-liquids using synchrotron radiation at the Advanced Photon Source. <i>Journal of Earth Science (Wuhan, China)</i> , 2014, 25, 939-958.	1.1	7
76	Study of liquid gallium as a function of pressure and temperature using synchrotron x-ray microtomography and x-ray diffraction. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	24
77	Ultralow viscosity of carbonate melts at high pressures. <i>Nature Communications</i> , 2014, 5, 5091.	5.8	124
78	Phase stability of the $\text{SrMn}_3\text{O}_{10}$ hexagonal perovskite system at high pressure and temperature. <i>Physical Review B</i> , 2014, 90, .	1.1	29
79	Toward comprehensive studies of liquids at high pressures and high temperatures: Combined structure, elastic wave velocity, and viscosity measurements in the Paris-Edinburgh cell. <i>Physics of the Earth and Planetary Interiors</i> , 2014, 228, 269-280.	0.7	96
80	Contrasting sound velocity and intermediate-range structural order between polymerized and depolymerized silicate glasses under pressure. <i>Earth and Planetary Science Letters</i> , 2014, 391, 288-295.	1.8	34
81	Experimental investigation of phase transformations of olivine and enstatite at the lower part of the mantle transition zone: Implications for structure of the 660 km seismic discontinuity. <i>Science China Earth Sciences</i> , 2014, 57, 592-599.	2.3	2
82	Atomistic insight into viscosity and density of silicate melts under pressure. <i>Nature Communications</i> , 2014, 5, 3241.	5.8	133
83	High-pressure Apparatus Integrated with Synchrotron Radiation. <i>Reviews in Mineralogy and Geochemistry</i> , 2014, 78, 745-777.	2.2	24
84	Sound velocity of Fe-S liquids at high pressure: Implications for the Moon's molten outer core. <i>Earth and Planetary Science Letters</i> , 2014, 396, 78-87.	1.8	80
85	Contrasting behavior of intermediate-range order structures in jadeite glass and melt. <i>Physics of the Earth and Planetary Interiors</i> , 2014, 228, 281-286.	0.7	15
86	Nanotwinned diamond with unprecedented hardness and stability. <i>Nature</i> , 2014, 510, 250-253.	13.7	611
87	Ponded melt at the boundary between the lithosphere and asthenosphere. <i>Nature Geoscience</i> , 2013, 6, 1041-1044.	5.4	144
88	Anomaly in the viscosity of liquid KCl at high pressures. <i>Physical Review B</i> , 2013, 87, .	1.1	25
89	Ultrahard nanotwinned cubic boron nitride. <i>Nature</i> , 2013, 493, 385-388.	13.7	662
90	Tian et al. reply. <i>Nature</i> , 2013, 502, E2-E3.	13.7	10

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91	Deep-Focus Earthquake Analogs Recorded at High Pressure and Temperature in the Laboratory. <i>Science</i> , 2013, 341, 1377-1380.	6.0	120
92	Orientation Relations During the \pm Phase Transition of Zirconium: <i>In Situ</i> Texture Observations at High Pressure and Temperature. <i>Physical Review Letters</i> , 2013, 111, 195701.	2.9	57
93	High-pressure, high-temperature deformation of CaGeO_3 (perovskite) \pm MgO aggregates: Implications for multiphase rheology of the lower mantle. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 3389-3408.	1.0	25
94	Phase transitions of harzburgite and buckled slab under eastern China. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 1182-1199.	1.0	22
95	A New Era in Mineral Physics. <i>Eos</i> , 2013, 94, 57-57.	0.1	0
96	A Large Volume Multi-Anvil Apparatus for the Earth Sciences Community in Taiwan. <i>Terrestrial, Atmospheric and Oceanic Sciences</i> , 2012, 23, 647.	0.3	2
97	Structure of jadeite melt at high pressures up to 4.9 GPa. <i>Journal of Applied Physics</i> , 2012, 111, 112623.	1.1	39
98	Cell assemblies for reproducible multi-anvil experiments (the COMPRES assemblies). <i>American Mineralogist</i> , 2012, 97, 353-368.	0.9	101
99	Texture and elastic strains in hcp-iron plastically deformed up to 17.5 GPa and 600 K: experiment and model. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2012, 20, 024005.	0.8	27
100	Simultaneous structure and elastic wave velocity measurement of SiO_2 glass at high pressures and high temperatures in a Paris-Edinburgh cell. <i>Review of Scientific Instruments</i> , 2012, 83, 033905.	0.6	56
101	Creep of phyllosilicates at the onset of plate tectonics. <i>Earth and Planetary Science Letters</i> , 2012, 345-348, 142-150.	1.8	59
102	Deformation of olivine under mantle conditions: An in situ high-pressure, high-temperature study using monochromatic synchrotron radiation. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	34
103	Acoustic velocities of pure and iron-bearing magnesium silicate perovskite measured to 25 GPa and 1200 K. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	45
104	An experimental study of phase transformations in olivine under pressure and temperature conditions corresponding to the mantle transition zone. <i>Science Bulletin</i> , 2012, 57, 894-901.	1.7	7
105	In situ determination of the spinel-post-spinel transition in Fe_3O_4 at high pressure and temperature by synchrotron X-ray diffraction. <i>American Mineralogist</i> , 2011, 96, 820-827.	0.9	13
106	Thermal equation of state of CaIrO_3 post-perovskite. <i>Physics and Chemistry of Minerals</i> , 2011, 38, 407-417.	0.3	9
107	Combined ultrasonic elastic wave velocity and microtomography measurements at high pressures. <i>Review of Scientific Instruments</i> , 2011, 82, 023906.	0.6	27
108	High-pressure x-ray diffraction studies on the structure of liquid silicate using a Paris-Edinburgh type large volume press. <i>Review of Scientific Instruments</i> , 2011, 82, 015103.	0.6	58

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109	In situ high-pressure and high-temperature X-ray microtomographic imaging during large deformation: A new technique for studying mechanical behavior of multiphase composites. , 2011, 7, 40-53.		25
110	Recent advances in high pressure and temperature rheological studies. Journal of Earth Science (Wuhan, China), 2010, 21, 495-516.	1.1	11
111	The thermal equation of state of FeTiO ₃ ilmenite based on in situ X-ray diffraction at high pressures and temperatures. American Mineralogist, 2010, 95, 1708-1716.	0.9	13
112	Recent developments in computed tomography at GSECARS. Proceedings of SPIE, 2010, , .	0.8	9
113	High-Pressure Research at the Advanced Photon Source. Synchrotron Radiation News, 2010, 23, 32-38.	0.2	5
114	Large Volume Presses for High-Pressure Studies Using Synchrotron Radiation. NATO Science for Peace and Security Series B: Physics and Biophysics, 2010, , 81-96.	0.2	3
115	Rheology at High Pressures and High Temperatures. NATO Science for Peace and Security Series B: Physics and Biophysics, 2010, , 97-110.	0.2	3
116	A combination of a Drickamer anvil apparatus and monochromatic X-rays for stress and strain measurements under high pressure. Journal of Synchrotron Radiation, 2009, 16, 742-747.	1.0	7
117	Non-cubic crystal symmetry of CaSiO ₃ perovskite up to 18 GPa and 1600 K. Earth and Planetary Science Letters, 2009, 282, 268-274.	1.8	20
118	High pressure effects on the iron-iron oxide and nickel-nickel oxide oxygen fugacity buffers. Earth and Planetary Science Letters, 2009, 286, 556-564.	1.8	135
119	The large-volume high-pressure facility at GSECARS: A "Swiss-army-knife" approach to synchrotron-based experimental studies. Physics of the Earth and Planetary Interiors, 2009, 174, 270-281.	0.7	56
120	Elasticity of (Mg _{0.87} Fe _{0.13}) ₂ SiO ₄ wadsleyite to 12 GPa and 1073 K. Physics of the Earth and Planetary Interiors, 2009, 174, 98-104.	0.7	39
121	Volumetric properties of magnesium silicate glasses and supercooled liquid at high pressure by X-ray microtomography. Physics of the Earth and Planetary Interiors, 2009, 174, 292-301.	0.7	31
122	In situ measurement of interfacial tension of Fe-S and Fe-P liquids under high pressure using X-ray radiography and tomography techniques. Physics of the Earth and Planetary Interiors, 2009, 174, 220-226.	0.7	23
123	Advances in high-pressure mineral physics: From the deep mantle to the core. Physics of the Earth and Planetary Interiors, 2009, 174, 1-2.	0.7	3
124	Melting curve of silicon to 15 GPa determined by two-dimensional angle-dispersive diffraction using a Kawai-type apparatus with X-ray transparent sintered diamond anvils. Journal of Physics and Chemistry of Solids, 2008, 69, 2255-2260.	1.9	45
125	Development of the Multi-anvil Assembly 6-6 for DIA and D-DIA type high-pressure apparatuses. High Pressure Research, 2008, 28, 307-314.	0.4	73
126	Deformation and texture development in CaIrO ₃ post-perovskite phase up to 6 GPa and 1300 K. Earth and Planetary Science Letters, 2008, 268, 515-525.	1.8	57

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127	In situ investigation of high-pressure melting behavior in the Fe-S system using synchrotron X-ray radiography. High Pressure Research, 2008, 28, 315-326.	0.4	14
128	Interfacial tension measurement of Ni-S liquid using high-pressure X-ray micro-tomography. High Pressure Research, 2008, 28, 327-334.	0.4	8
129	A scanning angle energy-dispersive X-ray diffraction technique for high-pressure structure studies in diamond anvil cells. High Pressure Research, 2008, 28, 193-201.	0.4	5
130	Development of Experimental Techniques Using LVP (Large Volume Press) at GSECARS Beamlines, Advanced Photon Source. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2008, 18, 214-222.	0.1	2
131	X-ray microtomography under high pressure. , 2007, , .		1
132	High-Pressure Creep of Serpentine, Interseismic Deformation, and Initiation of Subduction. Science, 2007, 318, 1910-1913.	6.0	331
133	Rheology of Éâ€ron up to 19 GPa and 600 K in the Dâ€DIA. Geophysical Research Letters, 2007, 34, .	1.5	17
134	DETERMINATION OF PRESSURE-DEPENDENT PHASE DIAGRAMS. , 2007, , 412-441.		1
135	Recent developments in microtomography at GeoSoilEnviroCARS. , 2006, , .		18
136	High-pressure cells forin situmulti-anvil experiments. High Pressure Research, 2006, 26, 283-292.	0.4	21
137	In situ X-ray diffraction study of phase transitions of FeTiO ₃ at high pressures and temperatures using a large-volume press and synchrotron radiation. American Mineralogist, 2006, 91, 120-126.	0.9	43
138	Experimental constraints on the phase diagram of elemental zirconium. Journal of Physics and Chemistry of Solids, 2005, 66, 1213-1219.	1.9	77
139	Pressure-Induced Amorphization and Phase Transformations in Î ² -LiAlSiO ₄ .. ChemInform, 2005, 36, no.	0.1	0
140	Yield strength enhancement of MgO by nanocrystals. Journal of Materials Science, 2005, 40, 5763-5766.	1.7	22
141	Stress and strain measurements of polycrystalline materials under controlled deformation at high pressure using monochromatic synchrotron radiation. , 2005, , 137-165.		7
142	High-pressure x-ray tomography microscope: Synchrotron computed microtomography at high pressure and temperature. Review of Scientific Instruments, 2005, 76, 073709.	0.6	61
143	Pressure calibration to 20GPa by simultaneous use of ultrasonic and x-ray techniques. Journal of Applied Physics, 2005, 98, 013521.	1.1	33
144	Kinetics of SiC formation during high Pâ€T reaction between diamond and silicon. Diamond and Related Materials, 2005, 14, 1611-1615.	1.8	22

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145	Pressure-Induced Amorphization and Phase Transformations in $\hat{1}^2$ -LiAlSiO ₄ . Chemistry of Materials, 2005, 17, 2817-2824.	3.2	37
146	Texture development and deformation mechanisms in ringwoodite. Physics of the Earth and Planetary Interiors, 2005, 152, 191-199.	0.7	43
147	In-situ elasticity measurement for the unquenchable high-pressure clinopyroxene phase: Implication for the upper mantle. Geophysical Research Letters, 2005, 32, .	1.5	48
148	Pressure and strain dependence of the strength of sintered polycrystalline Mg ₂ SiO ₄ ringwoodite. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	27
149	Thermal equations of state of the $\hat{1}^{\pm}$, $\hat{1}^2$, and $\hat{1}^{\circ}$ phases of zirconium. Physical Review B, 2005, 71, .	1.1	113
150	Simultaneous equation of state, pressure calibration and sound velocity measurements to lower mantle pressures using multi-anvil apparatus. , 2005, , 49-66.		7
151	Simultaneous equation of state, pressure calibration and sound velocity measurements to lower mantle pressures using multi-anvil apparatus. , 2005, , 49-66.		3
152	High-pressure angle-dispersive powder diffraction using an energy-dispersive setup and white synchrotron radiation. , 2005, , 339-352.		4
153	A new technique for angle-dispersive powder diffraction using an energy-dispersive setup and synchrotron radiation. Journal of Applied Crystallography, 2004, 37, 947-956.	1.9	45
154	Yield strength and strain hardening of MgO up to 8 GPa measured in the deformation-DIA with monochromatic X-ray diffraction. Earth and Planetary Science Letters, 2004, 226, 117-126.	1.8	57
155	Thermal equation of state of akimotoite MgSiO ₃ and effects of the akimotoite $\hat{1}^{\pm}$ garnet transformation on seismic structure near the 660 km discontinuity. Physics of the Earth and Planetary Interiors, 2004, 143-144, 57-80.	0.7	24
156	In situ measurements of sound velocities and densities across the orthopyroxene $\hat{1}^{\pm}$ high-pressure clinopyroxene transition in MgSiO ₃ at high pressure. Physics of the Earth and Planetary Interiors, 2004, 147, 27-44.	0.7	106
157	Microtomography at GeoSoilEnviroCARS. , 2004, , .		7
158	High-pressure viscometry of polymerized silicate melts and limitations of the Eyring equation. American Mineralogist, 2004, 89, 1701-1708.	0.9	83
159	Flow-law for ringwoodite at subduction zone conditions. Physics of the Earth and Planetary Interiors, 2003, 136, 3-9.	0.7	15
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