

Thomas S Duffy

List of Publications by Year in descending order

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177
papers

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186
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186
docs citations

186
times ranked

6701
citing authors

#	ARTICLE	IF	CITATIONS
1	Seismic velocities in mantle minerals and the mineralogy of the upper mantle. <i>Journal of Geophysical Research</i> , 1989, 94, 1895-1912.	3.3	563
2	Quasi-hydrostatic compression of magnesium oxide to 52 GPa: Implications for the pressure-volume-temperature equation of state. <i>Journal of Geophysical Research</i> , 2001, 106, 515-528.	3.3	401
3	Melting and crystal structure of iron at high pressures and temperatures. <i>Geophysical Research Letters</i> , 1998, 25, 373-376.	4.0	381
4	Equation of State and Shear Strength at Multimegabar Pressures: Magnesium Oxide to 227 GPa. <i>Physical Review Letters</i> , 1995, 74, 1371-1374.	8.0	377
5	Acoustic velocities and refractive index of SiO ₂ glass to 57.5 GPa by Brillouin scattering. <i>Physical Review B</i> , 1994, 50, 13105-13112.	3.3	227
6	Raman spectroscopy of Fe ₂ O ₃ to 62 GPa. <i>American Mineralogist</i> , 2002, 87, 318-326.	2.4	216
7	Ramp compression of diamond to five terapascals. <i>Nature</i> , 2014, 511, 330-333.	36.2	199
8	Lattice strains in gold and rhenium under nonhydrostatic compression to 37 GPa. <i>Physical Review B</i> , 1999, 60, 15063-15073.	3.3	188
9	Equation of state of gold and its application to the phase boundaries near 660 km depth in Earth's mantle. <i>Earth and Planetary Science Letters</i> , 2002, 203, 729-739.	4.4	182
10	Experimental evidence for a phase transition in magnesium oxide at exoplanet pressures. <i>Nature Geoscience</i> , 2013, 6, 926-929.	11.9	174
11	Elasticity of forsterite to 16 GPa and the composition of the upper mantle. <i>Nature</i> , 1995, 378, 170-173.	36.2	165
12	Sound velocity and elasticity of single-crystal forsterite to 16 GPa. <i>Journal of Geophysical Research</i> , 1996, 101, 17535-17545.	3.3	165
13	The post-spinel transformation in Mg ₂ SiO ₄ and its relation to the 660-km seismic discontinuity. <i>Nature</i> , 2001, 411, 571-574.	36.2	153
14	Elasticity of enstatite and its relationship to crystal structure. <i>Journal of Geophysical Research</i> , 1988, 93, 383-391.	3.3	148
15	High-pressure phase transition in brucite, Mg(OH) ₂ . <i>American Mineralogist</i> , 1995, 80, 222-230.	2.4	143
16	Single-crystal elastic constants of fluorite (CaF ₂) to 9.3 GPa. <i>Physics and Chemistry of Minerals</i> , 2002, 29, 465-472.	0.8	137
17	Brillouin scattering and X-ray diffraction of San Carlos olivine: direct pressure determination to 32 GPa. <i>Earth and Planetary Science Letters</i> , 1998, 159, 25-33.	4.4	133
18	Elasticity, shear strength, and equation of state of molybdenum and gold from x-ray diffraction under nonhydrostatic compression to 24 GPa. <i>Journal of Applied Physics</i> , 1999, 86, 6729-6736.	2.3	130

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19	Raman spectroscopy of $\text{Co}(\text{OH})_2$ at high pressures: Implications for amorphization and hydrogen repulsion. <i>Physical Review B</i> , 2002, 66, .	3.3	130
20	Single-crystal elasticity of $\hat{\Gamma}^2\text{-Mg}_2\text{SiO}_4$ to the pressure of the 410 km seismic discontinuity in the Earth's mantle. <i>Earth and Planetary Science Letters</i> , 1997, 147, E9-E15.	4.4	117
21	The stability and P-V-T equation of state of CaSiO_3 perovskite in the Earth's lower mantle. <i>Journal of Geophysical Research</i> , 2000, 105, 25955-25968.	3.3	115
22	Raman spectroscopy and x-ray diffraction of phase transitions in Cr_2O_3 to 61 GPa. <i>Physical Review B</i> , 2004, 69, .	3.3	113
23	Strength and Elasticity of SiO_2 across the Stishovite \leftrightarrow CaCl_2 -type Structural Phase Boundary. <i>Physical Review Letters</i> , 2002, 89, 255507.	8.0	106
24	Stability and crystal structure of MgSiO_3 perovskite to the core-mantle boundary. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	4.0	104
25	Compressional sound velocity, equation of state, and constitutive response of shock-compressed magnesium oxide. <i>Journal of Geophysical Research</i> , 1995, 100, 529-542.	3.3	100
26	The equation of state of forsterite to 17.2 GPa and effects of pressure media. <i>American Mineralogist</i> , 1996, 81, 51-55.	2.4	97
27	Stability and Structure of MgSiO_3 Perovskite to 2300-Kilometer Depth in Earth's Mantle. <i>Science</i> , 2001, 293, 2437-2440.	20.9	97
28	Tetragonal structure of CaSiO_3 perovskite above 20 GPa. <i>Geophysical Research Letters</i> , 2002, 29, 19-1-19-4.	4.0	97
29	The equation of state of CaSiO_3 perovskite to 108 GPa at 300 K. <i>Physics of the Earth and Planetary Interiors</i> , 2000, 120, 327-338.	2.0	90
30	Thermal expansion of mantle and core materials at very high pressures. <i>Geophysical Research Letters</i> , 1993, 20, 1103-1106.	4.0	89
31	Sound velocities at high pressure and temperature and their geophysical implications. <i>Journal of Geophysical Research</i> , 1992, 97, 4503-4520.	3.3	88
32	Strength and equation of state of boron suboxide from radial x-ray diffraction in a diamond cell under nonhydrostatic compression. <i>Physical Review B</i> , 2004, 70, .	3.3	85
33	Equation of state of the postperovskite phase synthesized from a natural $(\text{Mg,Fe})\text{SiO}_3$ orthopyroxene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 3039-3043.	7.6	85
34	High-pressure phases in SnO_2 to 117 GPa. <i>Physical Review B</i> , 2006, 73, .	3.3	84
35	Effects of hydration on the elastic properties of olivine. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	81
36	Time-dependence of the alpha to epsilon phase transformation in iron. <i>Journal of Applied Physics</i> , 2013, 114, .	2.3	79

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37	Equation of state of iron under core conditions of large rocky exoplanets. <i>Nature Astronomy</i> , 2018, 2, 452-458.	7.8	79
38	Brillouin Scattering and its Application in Geosciences. <i>Reviews in Mineralogy and Geochemistry</i> , 2014, 78, 543-603.	5.0	75
39	Sound Velocity and Elasticity of Tetragonal Lysozyme Crystals by Brillouin Spectroscopy. <i>Biophysical Journal</i> , 2003, 85, 3202-3213.	0.5	74
40	Elasticity of hydrogen to 24 GPa from single-crystal Brillouin scattering and synchrotron x-ray diffraction. <i>Physical Review B</i> , 1993, 48, 9246-9255.	3.3	72
41	Elasticity of hydrous wadsleyite to 12 GPa: Implications for Earth's transition zone. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	72
42	Synchrotron facilities and the study of the Earth's deep interior. <i>Reports on Progress in Physics</i> , 2005, 68, 1811-1859.	20.3	71
43	Seismic attenuation beneath Europe and the North Atlantic: Implications for water in the mantle. <i>Earth and Planetary Science Letters</i> , 2013, 381, 1-11.	4.4	71
44	Strain relaxation of SiGe islands on compliant oxide. <i>Journal of Applied Physics</i> , 2002, 91, 9716.	2.3	70
45	X-ray diffraction study of the static strength of tungsten to 69 GPa. <i>Physical Review B</i> , 2006, 73, .	3.3	69
46	Sound velocities of hydrous ringwoodite to 16 GPa and 673 K. <i>Earth and Planetary Science Letters</i> , 2012, 331-332, 112-119.	4.4	69
47	<i>In Situ</i> X-Ray Diffraction of Shock-Compressed Fused Silica. <i>Physical Review Letters</i> , 2018, 120, 135702.	8.0	69
48	Ultra-High Pressure Dynamic Compression of Geological Materials. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	67
49	Phase stability and density of FeS at high pressures and temperatures: implications for the interior structure of Mars. <i>Earth and Planetary Science Letters</i> , 2001, 185, 25-33.	4.4	66
50	Single-crystal elastic constants of natural ettringite. <i>Cement and Concrete Research</i> , 2008, 38, 885-889.	11.1	65
51	Intercomparison of pressure standards (Au, Pt, Mo, MgO, NaCl and Ne) to 2.5 Mbar. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	65
52	Effects of Fe-enrichment on the equation of state and stability of (Mg,Fe)SiO ₃ perovskite. <i>Earth and Planetary Science Letters</i> , 2013, 361, 249-257.	4.4	65
53	Phase transitions and equations of state of alkaline earth fluorides CaF_2 and SrF_2 . <i>Physical Review B</i> , 2010, 81, .	3.3	64
54	Crystal structure and equation of state of Fe-Si alloys at super-Earth core conditions. <i>Science Advances</i> , 2018, 4, eaao5864.	10.9	64

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55	Single-crystal elasticity of fayalite to 12 GPa. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	62
56	Elasticity of single-crystal quartz to 10ÅGPa. <i>Physics and Chemistry of Minerals</i> , 2015, 42, 203-212.	0.8	60
57	Single-crystal elasticity of grossular- and almandine-rich garnets to 11 GPa by Brillouin scattering. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	59
58	Single-crystal elasticity of brucite, Mg(OH) ₂ , to 15 GPa by Brillouin scattering. <i>American Mineralogist</i> , 2006, 91, 1893-1900.	2.4	59
59	Deformation and texture development in CaIrO ₃ post-perovskite phase up to 6ÅGPa and 1300ÅK. <i>Earth and Planetary Science Letters</i> , 2008, 268, 515-525.	4.4	58
60	Strength and elasticity of ringwoodite at upper mantle pressures. <i>Geophysical Research Letters</i> , 2001, 28, 2691-2694.	4.0	55
61	Finite element simulations of the laser-heated diamond-anvil cell. <i>Journal of Applied Physics</i> , 2005, 97, 114902.	2.3	55
62	Ramp compression of iron to 273 GPa. <i>Journal of Applied Physics</i> , 2013, 114, .	2.3	55
63	The shock wave equation of state of brucite Mg(OH) ₂ . <i>Journal of Geophysical Research</i> , 1991, 96, 14319-14330.	3.3	54
64	Phase transitions and equation of state of forsterite to 90 GPa from single-crystal X-ray diffraction and molecular modeling. <i>American Mineralogist</i> , 2014, 99, 35-43.	2.4	54
65	Pressure–volume–temperature paths in the laser-heated diamond anvil cell. <i>Journal of Applied Physics</i> , 2001, 89, 1907.	2.3	53
66	Shock wave equation of state of serpentine to 150 GPa: Implications for the occurrence of water in the Earth's lower mantle. <i>Journal of Geophysical Research</i> , 1991, 96, 18011-18027.	3.3	52
67	Dynamic compression of an Fe–Cr–Ni alloy to 80 GPa. <i>Journal of Applied Physics</i> , 1997, 82, 4259-4269.	2.3	52
68	Elasticity of stishovite and acoustic mode softening under high pressure by Brillouin scattering. <i>Physics of the Earth and Planetary Interiors</i> , 2009, 172, 235-240.	2.0	52
69	Effect of hydration on the single-crystal elasticity of Fe-bearing wadsleyite to 12 GPa. <i>American Mineralogist</i> , 2011, 96, 1606-1612.	2.4	51
70	Single-crystal x-ray diffraction of brucite to 14 GPa. <i>Physics and Chemistry of Minerals</i> , 1995, 22, 277.	0.8	50
71	Constraints on the <i>P-V-T</i> equation of state of MgSiO ₃ perovskite. <i>American Mineralogist</i> , 2000, 85, 354-363.	2.4	48
72	Strength, elasticity, and equation of state of the nanocrystalline cubic silicon nitride β -Si ₃ N ₄ to 68 GPa. <i>Physical Review B</i> , 2005, 72, .	3.3	45

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73	Melting curve of silicon to 15GPa determined by two-dimensional angle-dispersive diffraction using a Kawai-type apparatus with X-ray transparent sintered diamond anvils. <i>Journal of Physics and Chemistry of Solids</i> , 2008, 69, 2255-2260.	4.1	45
74	Large-grain polycrystalline silicon films with low intragranular defect density by low-temperature solid-phase crystallization without underlying oxide. <i>Journal of Applied Physics</i> , 2002, 91, 2910-2915.	2.3	44
75	Dynamic response of molybdenum shock compressed at 1400â€‰%Â°C. <i>Journal of Applied Physics</i> , 1994, 76, 835-842.	2.3	43
76	Equation of state of MgGeO ₃ perovskite to 65ÂGPa: comparison with the post-perovskite phase. <i>Physics and Chemistry of Minerals</i> , 2006, 33, 699-709.	0.8	43
77	Elasticity and strength of calcium silicate perovskite at lower mantle pressures. <i>Physics of the Earth and Planetary Interiors</i> , 2004, 143-144, 93-105.	2.0	41
78	Deformation of lower-mantle ferropicicase (Mg,Fe)O across the electronic spin transition. <i>Physics and Chemistry of Minerals</i> , 2009, 36, 585-592.	0.8	41
79	X-ray diffraction of molybdenum under shock compression to 450 GPa. <i>Physical Review B</i> , 2015, 92, .	3.3	41
80	First-principles study of density, viscosity, and diffusion coefficients of liquid MgSiO ₃ at conditions of the Earth's deep mantle. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	40
81	Phase transitions in orthopyroxene (En ₉₀) to 49 GPa from single-crystal X-ray diffraction. <i>Physics of the Earth and Planetary Interiors</i> , 2015, 244, 78-86.	2.0	40
82	Elastic moduli and strength of nanocrystalline cubic $\sqrt{2} \times \sqrt{2} \times \sqrt{2}$ BC $\sqrt{2} \times \sqrt{2} \times \sqrt{2}$ x-ray diffraction under nonhydrostatic compression. <i>Physical Review B</i> , 2009, 79, .	3.3	39
83	High-pressure elasticity of calcium oxide: A comparison between Brillouin spectroscopy and radial X-ray diffraction. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	37
84	Elasticity and rheology of platinum under high pressure and nonhydrostatic stress. <i>Physical Review B</i> , 2003, 68, .	3.3	36
85	X-ray diffraction of molybdenum under ramp compression to 1 TPa. <i>Physical Review B</i> , 2016, 94, .	3.3	35
86	Single-crystal elasticity of zoisite Ca ₂ Al ₃ Si ₃ O ₁₂ (OH) by Brillouin scattering. <i>American Mineralogist</i> , 2007, 92, 570-576.	2.4	34
87	Raman spectra of bixbyite, Mn ₂ O ₃ , up to 40 GPa. <i>Physics and Chemistry of Minerals</i> , 2011, 38, 685-691.	0.8	34
88	Buckling suppression of SiGe islands on compliant substrates. <i>Journal of Applied Physics</i> , 2003, 94, 6875-6882.	2.3	32
89	Strain partition of Si/SiGe and SiO ₂ /SiGe on compliant substrates. <i>Applied Physics Letters</i> , 2003, 82, 3853-3855.	3.2	32
90	Stability and equation of state of the post-perovskite phase in MgGeO ₃ to 2 Mbar. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	32

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91	Rietveld structure refinement of MgGeO ₃ post-perovskite phase to 1 Mbar. <i>American Mineralogist</i> , 2008, 93, 965-976.	2.4	32
92	X-ray diffraction study of phase stability in SiO ₂ at deep mantle conditions. <i>Earth and Planetary Science Letters</i> , 2005, 235, 273-282.	4.4	31
93	Metastable high-pressure transformations of orthoferrosilite FeSiO ₃ . <i>Physics of the Earth and Planetary Interiors</i> , 2013, 221, 15-21.	2.0	31
94	Implications of the iron oxide phase transition on the interiors of rocky exoplanets. <i>Nature Geoscience</i> , 2021, 14, 121-126.	11.9	31
95	X ray diffraction with a double hot-plate laser-heated diamond cell. <i>Geophysical Monograph Series</i> , 1998, , 27-34.	0.0	30
96	Iron partitioning between perovskite and post-perovskite: A transmission electron microscope study. <i>American Mineralogist</i> , 2008, 93, 1678-1681.	2.4	30
97	X-ray absorption spectroscopy of GeO ₂ glass to 64 GPa. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 035104.	1.9	29
98	Compression of lithium fluoride to 92 GPa. <i>High Pressure Research</i> , 2014, 34, 39-48.	1.2	27
99	Single-crystal elasticity of andradite garnet to 11 GPa. <i>Journal of Physics Condensed Matter</i> , 2004, 16, S1041-S1052.	1.9	26
100	Single-crystal elastic properties of minerals and related materials with cubic symmetry. <i>American Mineralogist</i> , 2018, 103, 977-988.	2.4	26
101	Mineralogy at the extremes. <i>Nature</i> , 2008, 451, 269-270.	36.2	25
102	Structural response of β -quartz under plate-impact shock compression. <i>Science Advances</i> , 2020, 6, eabb3913.	10.9	24
103	Raman spectroscopy of perovskite and post-perovskite phases of MgGeO ₃ to 123 GPa. <i>Earth and Planetary Science Letters</i> , 2007, 260, 166-178.	4.4	22
104	High-pressure infrared spectroscopy of the dense hydrous magnesium silicates phase D and phase E. <i>Physics of the Earth and Planetary Interiors</i> , 2009, 175, 106-114.	2.0	22
105	Polyhedral units and network connectivity in GeO ₂ glass at high pressure: An X-ray total scattering investigation. <i>Applied Physics Letters</i> , 2014, 105, .	3.2	22
106	Single-crystal elastic properties of alunite, KAl ₃ (SO ₄) ₂ (OH) ₆ . <i>Physics and Chemistry of Minerals</i> , 2006, 33, 567-573.	0.8	20
107	Compressibility and strength of nanocrystalline tungsten boride under compression to 60 GPa. <i>Journal of Applied Physics</i> , 2012, 111, .	2.3	20
108	Tunable uniaxial vs biaxial in-plane strain using compliant substrates. <i>Applied Physics Letters</i> , 2005, 87, 061922.	3.2	19

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109	Stress state of diamond and gold under nonhydrostatic compression to 360 GPa. Journal of Applied Physics, 2010, 108, .	2.3	19
110	Single-crystal elasticity of the $\hat{\epsilon}$ and $\hat{\epsilon}^2$ of Mg ₂ SiO ₄ polymorphs at high pressure. Geophysical Monograph Series, 1998, , 9-16.	0.0	18
111	Correction to "Effects of hydration on the elastic properties of olivine". Geophysical Research Letters, 2009, 36, .	4.0	18
112	Equation of state of a high-pressure phase of Gd ₃ Ga ₅ Si ₃ O ₁₂ . Physical Review B, 2019, 99, .	3.3	18
113	Synthesis and equation of state of perovskites in the (Mg, Fe) ₃ Al ₂ Si ₃ O ₁₂ system to 177 GPa. Earth and Planetary Science Letters, 2012, 357-358, 194-202.	4.4	18
114	High-energy X-ray focusing and applications to pair distribution function investigation of Pt and Au nanoparticles at high pressures. Scientific Reports, 2016, 6, 21434.	3.4	18
115	observation of a phase transition in silicon carbide under shock compression using pulsed x-ray diffraction. Physical Review B, 2019, 99, .	3.3	18
116	Shock compression and isentropic release of granite. Geophysical Journal International, 1995, 120, 247-261.	2.4	17
117	Absolute x-ray energy calibration over a wide energy range using a diffraction-based iterative method. Review of Scientific Instruments, 2012, 83, 063901.	1.4	17
118	Phase transitions beyond post-perovskite in NaMgF ₃ to 160 GPa. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19324-19329.	7.6	16
119	Hugoniot states and optical response of soda lime glass shock compressed to 120 GPa. Journal of Applied Physics, 2020, 127, .	2.3	15
120	Pressure-induced stiffness of Au nanoparticles to 71 GPa under quasi-hydrostatic loading. Journal of Physics Condensed Matter, 2015, 27, 485303.	1.9	14
121	Crystal Structures of Minerals in the Lower Mantle. Geophysical Monograph Series, 2016, , 69-87.	0.0	14
122	Structure and density of silicon carbide to 1.5 TPa and implications for extrasolar planets. Nature Communications, 2022, 13, 2260.	13.2	14
123	Single-crystal elasticity of diaspore, AlOOH, to 12GPa by Brillouin scattering. Physics of the Earth and Planetary Interiors, 2008, 170, 221-228.	2.0	13
124	Crystal structure, thermal expansivity, and elasticity of OH-chondrodite: trends among dense hydrous magnesium silicates. Contributions To Mineralogy and Petrology, 2015, 169, 1.	3.1	13
125	Earth science: Crystallography's journey to the deep Earth. Nature, 2014, 506, 427-429.	36.2	13
126	Deeper understanding. Nature, 2004, 430, 409-410.	36.2	12

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127	Synthesis and equation of state of post-perovskites in the (Mg,Fe) ₃ Al ₂ Si ₃ O ₁₂ system. Earth and Planetary Science Letters, 2011, 312, 422-428.	4.4	12
128	Strength and texture of Pt compressed to 63 GPa. Journal of Applied Physics, 2015, 117, .	2.3	12
129	High-pressure phases of cordierite from single-crystal X-ray diffraction to 15 GPa. American Mineralogist, 2015, 100, 1821-1833.	2.4	12
130	Polymorphism of gold under laser-based ramp compression to 690 GPa. Physical Review B, 2021, 103, .	3.3	12
131	A new facility for high-pressure research at the advanced photon source. Geophysical Monograph Series, 1998, , 79-87.	0.0	11
132	Chapter 14. PRESSURE-VOLUME-TEMPERATURE EQUATIONS OF STATE. , 1998, , 425-458.		11
133	Some recent advances in understanding the mineralogy of Earth's deep mantle. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 4273-4293.	3.5	11
134	Strength and texture of sodium chloride to 56 GPa. Journal of Applied Physics, 2018, 123, .	2.3	11
135	Compressibility of synthetic Mg-Al tourmalines to 60 GPa. American Mineralogist, 2019, 104, 1005-1015.	2.4	11
136	Probing the core's light elements. Nature, 2011, 479, 480-481.	36.2	10
137	The strength of ruby from X-ray diffraction under non-hydrostatic compression to 68 GPa. Physics and Chemistry of Minerals, 2014, 41, 527-535.	0.8	10
138	High-pressure polymorphism of PbF_2 to 75 GPa. Physical Review B, 2016, 94, .	3.3	10
139	Femtosecond X-ray Diffraction of Laser-Shocked Forsterite (Mg ₂ SiO ₄) to 122 GPa. Journal of Geophysical Research: Solid Earth, 2021, 126, .	3.4	10
140	High-germanium-content SiGe islands formed on compliant oxide by SiGe oxidation. Applied Physics Letters, 2004, 84, 3624-3626.	3.2	9
141	Compositional dependence of the elastic wave velocities of mantle minerals: Implications for seismic properties of mantle rocks. Geophysical Monograph Series, 2005, , 301-320.	0.0	9
142	STRENGTH OF MATERIALS UNDER STATIC LOADING IN THE DIAMOND ANVIL CELL. AIP Conference Proceedings, 2008, , .	1.0	9
143	Thermal equation of state of CaIrO ₃ post-perovskite. Physics and Chemistry of Minerals, 2011, 38, 407-417.	0.8	9
144	Lateral Variations in Lower Mantle Seismic Velocity. Geophysical Monograph Series, 0, , 197-205.	0.0	9

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145	Single-crystal elastic constants of magnesium difluoride (MgF ₂) to 7.4GPa. Journal of Physics and Chemistry of Solids, 2014, 75, 136-141.	4.1	9
146	Electronic transitions of iron in almandine-composition glass to 91 GPa. American Mineralogist, 2016, 101, 1659-1667.	2.4	9
147	Sound velocities in shock-compressed soda lime glass: Melting and liquid-state response. Physical Review B, 2021, 104, .	3.3	9
148	The temperature sensitivity of elastic wave velocity at high pressure: New results for molybdenum. Geophysical Research Letters, 1994, 21, 473-476.	4.0	8
149	High-Pressure Study of Perovskites and Postperovskites in the (Mg,Fe)GeO ₃ System. Inorganic Chemistry, 2017, 56, 8026-8035.	4.2	8
150	Equation of state of the PbO_2 phases of PbO_2 . Physical Review B, 2018, 98, .	3.3	8
151	High-pressure phase transition in Y ₃ Fe ₅ O ₁₂ . Journal of Physics Condensed Matter, 2015, 27, 405401.	1.9	7
152	Sound Velocities in Shock-Synthesized Stishovite to 72ÅGPa. Geophysical Research Letters, 2019, 46, 13695-13703.	4.0	7
153	Shock compression and release of polycrystalline magnesium oxide. AIP Conference Proceedings, 1994, , .	1.0	6
154	Geophysical Laboratory and Center for High-Pressure Research, Carnegie Institution of Washington. Reviews of Geophysics, 1995, 33, 5.	23.3	6
155	Structure and bonding in hydrous minerals at high pressure: Raman spectroscopy of alkaline earth hydroxides. AIP Conference Proceedings, 1995, , .	1.0	6
156	Ultrahigh-Pressure Behavior of AO ₂ (A = Sn, Pb, Hf) Compounds. Journal of Physical Chemistry C, 2019, 123, 27735-27741.	3.3	6
157	Hugoniot Sound Velocities in Metals with Applications to the Earth's Inner Core. Geophysical Monograph Series, 0, , 353-361.	0.0	5
158	High-pressure X-ray absorption fine structure in the diamond anvil cell and its applications in geological materials. Journal of Physics: Conference Series, 2013, 430, 012120.	0.4	4
159	14. Brillouin Scattering and its Application in Geosciences. , 2014, , 543-604.		4
160	Ramp compression of magnesium oxide to 234 GPa. Journal of Physics: Conference Series, 2014, 500, 062002.	0.4	4
161	Phase stability of iron germanate, FeGeO ₃ , to 127ÅGPa. Physics and Chemistry of Minerals, 2018, 45, 367-379.	0.8	4
162	Ultrahigh-pressure disordered eight-coordinated phase of Mg ₂ GeO ₄ : Analogue for super-Earth mantles. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.6	4

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163	High-Pressure Research at the National Synchrotron Light Source. Synchrotron Radiation News, 2010, 23, 24-30.	1.0	3
164	Correction to "Intercomparison of pressure standards (Au, Pt, Mo, MgO, NaCl and Ne) to 2.5 Mbar". Journal of Geophysical Research, 2012, 117, .	3.3	3
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