

# Thomas Duffy

## List of Publications by Year in descending order

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183  
papers

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26567

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94  
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188  
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188  
docs citations

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times ranked

5891  
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	558
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	391
3	Melting and crystal structure of iron at high pressures and temperatures. <i>Geophysical Research Letters</i> , 1998, 25, 373-376.	1.5	380
4	Equation of State and Shear Strength at Multimegabar Pressures: Magnesium Oxide to 227 GPa. <i>Physical Review Letters</i> , 1995, 74, 1371-1374.	2.9	374
5	Acoustic velocities and refractive index of SiO <sub>2</sub> glass to 57.5 GPa by Brillouin scattering. <i>Physical Review B</i> , 1994, 50, 13105-13112.	1.1	224
6	Raman spectroscopy of Fe <sub>2</sub> O <sub>3</sub> to 62 GPa. <i>American Mineralogist</i> , 2002, 87, 318-326.	0.9	210
7	Ramp compression of diamond to five terapascals. <i>Nature</i> , 2014, 511, 330-333.	13.7	195
8	Lattice strains in gold and rhenium under nonhydrostatic compression to 37 GPa. <i>Physical Review B</i> , 1999, 60, 15063-15073.	1.1	186
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.	1.8	182
10	Experimental evidence for a phase transition in magnesium oxide at exoplanet pressures. <i>Nature Geoscience</i> , 2013, 6, 926-929.	5.4	170
11	Elasticity of forsterite to 16 GPa and the composition of the upper mantle. <i>Nature</i> , 1995, 378, 170-173.	13.7	164
12	Sound velocity and elasticity of single-crystal forsterite to 16 GPa. <i>Journal of Geophysical Research</i> , 1996, 101, 17535-17545.	3.3	161
13	The post-spinel transformation in Mg <sub>2</sub> SiO <sub>4</sub> and its relation to the 660-km seismic discontinuity. <i>Nature</i> , 2001, 411, 571-574.	13.7	151
14	Elasticity of enstatite and its relationship to crystal structure. <i>Journal of Geophysical Research</i> , 1988, 93, 383-391.	3.3	148
15	Plastic Deformation of MgGeO <sub>3</sub> Post-Perovskite at Lower Mantle Pressures. <i>Science</i> , 2006, 311, 644-646.	6.0	143
16	High-pressure phase transition in brucite, Mg(OH) <sub>2</sub> . <i>American Mineralogist</i> , 1995, 80, 222-230.	0.9	140
17	Deformation of (Mg,Fe)SiO <sub>3</sub> Post-Perovskite and D'' Anisotropy. <i>Science</i> , 2007, 316, 1729-1732.	6.0	139
18	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.	1.8	132

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19	Single-crystal elastic constants of fluorite (CaF <sub>2</sub> ) to 9.3 GPa. <i>Physics and Chemistry of Minerals</i> , 2002, 29, 465-472.	0.3	131
20	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.	1.1	129
21	Raman spectroscopy of Co(OH) <sub>2</sub> at high pressures: Implications for amorphization and hydrogen repulsion. <i>Physical Review B</i> , 2002, 66, .	1.1	126
22	Single-crystal elasticity of $\hat{\Gamma}^2$ -Mg <sub>2</sub> SiO <sub>4</sub> 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.	1.8	117
23	The stability and P-V-T equation of state of CaSiO <sub>3</sub> perovskite in the Earth's lower mantle. <i>Journal of Geophysical Research</i> , 2000, 105, 25955-25968.	3.3	113
24	Raman spectroscopy and x-ray diffraction of phase transitions in Cr <sub>2</sub> O <sub>3</sub> to 61 GPa. <i>Physical Review B</i> , 2004, 69, .	1.1	111
25	Strength and Elasticity of SiO <sub>2</sub> across the Stishovite $\leftrightarrow$ CaCl <sub>2</sub> -type Structural Phase Boundary. <i>Physical Review Letters</i> , 2002, 89, 255507.	2.9	106
26	Stability and crystal structure of MgSiO <sub>3</sub> perovskite to the core-mantle boundary. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	1.5	104
27	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	99
28	The equation of state of forsterite to 17.2 GPa and effects of pressure media. <i>American Mineralogist</i> , 1996, 81, 51-55.	0.9	96
29	Stability and Structure of MgSiO <sub>3</sub> Perovskite to 2300-Kilometer Depth in Earth's Mantle. <i>Science</i> , 2001, 293, 2437-2440.	6.0	96
30	Tetragonal structure of CaSiO <sub>3</sub> perovskite above 20 GPa. <i>Geophysical Research Letters</i> , 2002, 29, 19-1-19-4.	1.5	95
31	The equation of state of CaSiO <sub>3</sub> perovskite to 108 GPa at 300 K. <i>Physics of the Earth and Planetary Interiors</i> , 2000, 120, 327-338.	0.7	90
32	Thermal expansion of mantle and core materials at very high pressures. <i>Geophysical Research Letters</i> , 1993, 20, 1103-1106.	1.5	89
33	Sound velocities at high pressure and temperature and their geophysical implications. <i>Journal of Geophysical Research</i> , 1992, 97, 4503-4520.	3.3	85
34	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, .	1.1	84
35	Equation of state of the postperovskite phase synthesized from a natural (Mg,Fe)SiO <sub>3</sub> orthopyroxene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 3039-3043.	3.3	84
36	High-pressure phases in SnO <sub>2</sub> to 117 GPa. <i>Physical Review B</i> , 2006, 73, .	1.1	81

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37	Effects of hydration on the elastic properties of olivine. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	79
38	Time-dependence of the alpha to epsilon phase transformation in iron. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	75
39	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.	1.1	72
40	Sound Velocity and Elasticity of Tetragonal Lysozyme Crystals by Brillouin Spectroscopy. <i>Biophysical Journal</i> , 2003, 85, 3202-3213.	0.2	72
41	Elasticity of hydrous wadsleyite to 12 GPa: Implications for Earth's transition zone. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	72
42	Brillouin Scattering and its Application in Geosciences. <i>Reviews in Mineralogy and Geochemistry</i> , 2014, 78, 543-603.	2.2	72
43	Equation of state of iron under core conditions of large rocky exoplanets. <i>Nature Astronomy</i> , 2018, 2, 452-458.	4.2	71
44	Strain relaxation of SiGe islands on compliant oxide. <i>Journal of Applied Physics</i> , 2002, 91, 9716.	1.1	70
45	Sound Velocities in Dense Hydrogen and the Interior of Jupiter. <i>Science</i> , 1994, 263, 1590-1593.	6.0	69
46	Synchrotron facilities and the study of the Earth's deep interior. <i>Reports on Progress in Physics</i> , 2005, 68, 1811-1859.	8.1	69
47	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.	1.8	69
48	X-ray diffraction study of the static strength of tungsten to 69 GPa. <i>Physical Review B</i> , 2006, 73, .	1.1	67
49	Sound velocities of hydrous ringwoodite to 16 GPa and 673 K. <i>Earth and Planetary Science Letters</i> , 2012, 331-332, 112-119.	1.8	66
50	<i>In situ</i> X-Ray Diffraction of Shock-Compressed Fused Silica. <i>Physical Review Letters</i> , 2018, 120, 135702.	2.9	65
51	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.	1.8	64
52	Phase transitions and equations of state of alkaline earth fluorides $\text{CaF}_2$	1.1	62
53	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	61
54	Effects of Fe-enrichment on the equation of state and stability of (Mg,Fe)SiO <sub>3</sub> perovskite. <i>Earth and Planetary Science Letters</i> , 2013, 361, 249-257.	1.8	61

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55	Single-crystal elastic constants of natural ettringite. <i>Cement and Concrete Research</i> , 2008, 38, 885-889.	4.6	60
56	Single-crystal elasticity of fayalite to 12 GPa. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	59
57	Deformation and texture development in $\text{CaIrO}_3$ post-perovskite phase up to 6 GPa and 1300 K. <i>Earth and Planetary Science Letters</i> , 2008, 268, 515-525.	1.8	57
58	Elasticity of single-crystal quartz to 10 GPa. <i>Physics and Chemistry of Minerals</i> , 2015, 42, 203-212.	0.3	57
59	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	56
60	Single-crystal elasticity of brucite, $\text{Mg}(\text{OH})_2$ , to 15 GPa by Brillouin scattering. <i>American Mineralogist</i> , 2006, 91, 1893-1900.	0.9	56
61	Crystal structure and equation of state of Fe-Si alloys at super-Earth core conditions. <i>Science Advances</i> , 2018, 4, eaao5864.	4.7	56
62	Ultra-High Pressure Dynamic Compression of Geological Materials. <i>Frontiers in Earth Science</i> , 2019, 7, .	0.8	56
63	Strength and elasticity of ringwoodite at upper mantle pressures. <i>Geophysical Research Letters</i> , 2001, 28, 2691-2694.	1.5	55
64	Finite element simulations of the laser-heated diamond-anvil cell. <i>Journal of Applied Physics</i> , 2005, 97, 114902.	1.1	55
65	Pressure-volume-temperature paths in the laser-heated diamond anvil cell. <i>Journal of Applied Physics</i> , 2001, 89, 1907.	1.1	53
66	The shock wave equation of state of brucite $\text{Mg}(\text{OH})_2$ . <i>Journal of Geophysical Research</i> , 1991, 96, 14319-14330.	3.3	52
67	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
68	Effect of hydration on the single-crystal elasticity of Fe-bearing wadsleyite to 12 GPa. <i>American Mineralogist</i> , 2011, 96, 1606-1612.	0.9	51
69	Dynamic compression of an Fe-Cr-Ni alloy to 80 GPa. <i>Journal of Applied Physics</i> , 1997, 82, 4259-4269.	1.1	50
70	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.	0.9	50
71	Single-crystal x-ray diffraction of brucite to 14 GPa. <i>Physics and Chemistry of Minerals</i> , 1995, 22, 277.	0.3	49
72	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.	0.7	49

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73	Velocity crossover between hydrous and anhydrous forsterite at high pressures. Earth and Planetary Science Letters, 2010, 293, 250-258.	1.8	49
74	Ramp compression of iron to 273 GPa. Journal of Applied Physics, 2013, 114, .	1.1	49
75	Constraints on the $P$ - $V$ - $T$ equation of state of $MgSiO_3$ perovskite. American Mineralogist, 2000, 85, 354-363.	0.9	47
76	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
77	Strength, elasticity, and equation of state of the nanocrystalline cubic silicon nitride $\beta$ - $Si_3N_4$ to 68 GPa. Physical Review B, 2005, 72, .	1.1	43
78	Equation of state of $MgGeO_3$ perovskite to 65 GPa: comparison with the post-perovskite phase. Physics and Chemistry of Minerals, 2006, 33, 699-709.	0.3	43
79	Dynamic response of molybdenum shock compressed at 1400 $\pm$ 10 $^{\circ}$ C. Journal of Applied Physics, 1994, 76, 835-842.	1.1	42
80	Large-grain polycrystalline silicon films with low intragranular defect density by low-temperature solid-phase crystallization without underlying oxide. Journal of Applied Physics, 2002, 91, 2910-2915.	1.1	42
81	Elasticity and strength of calcium silicate perovskite at lower mantle pressures. Physics of the Earth and Planetary Interiors, 2004, 143-144, 93-105.	0.7	40
82	First-principles study of density, viscosity, and diffusion coefficients of liquid $MgSiO_3$ at conditions of the Earth's deep mantle. Journal of Geophysical Research, 2007, 112, .	3.3	40
83	Deformation of lower-mantle ferropericlase $(Mg,Fe)O$ across the electronic spin transition. Physics and Chemistry of Minerals, 2009, 36, 585-592.	0.3	39
84	Single-crystal elasticity of wadsleyites, $\beta$ - $Mg_2SiO_4$ , containing 0.37 $\pm$ 1.66 wt.% $H_2O$ . Earth and Planetary Science Letters, 2008, 266, 78-89.	1.8	38
85	Elastic moduli and strength of nanocrystalline cubic $BC_2$ x-ray diffraction under nonhydrostatic compression. Physical Review B, 2009, 79, .	1.1	38
86	X-ray diffraction of molybdenum under shock compression to 450 GPa. Physical Review B, 2015, 92, .	1.1	38
87	Phase transitions in orthopyroxene ( $En_{90}$ ) to 49 GPa from single-crystal X-ray diffraction. Physics of the Earth and Planetary Interiors, 2015, 244, 78-86.	0.7	38
88	High-pressure elasticity of calcium oxide: A comparison between Brillouin spectroscopy and radial X-ray diffraction. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	37
89	Elasticity and rheology of platinum under high pressure and nonhydrostatic stress. Physical Review B, 2003, 68, .	1.1	36
90	Single-crystal elasticity of zoisite $Ca_2Al_3Si_3O_{12}(OH)$ by Brillouin scattering. American Mineralogist, 2007, 92, 570-576.	0.9	33

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91	X-ray diffraction of molybdenum under ramp compression to 1 TPa. <i>Physical Review B</i> , 2016, 94, .	1.1	33
92	Buckling suppression of SiGe islands on compliant substrates. <i>Journal of Applied Physics</i> , 2003, 94, 6875-6882.	1.1	32
93	Strain partition of Si/SiGe and SiO <sub>2</sub> /SiGe on compliant substrates. <i>Applied Physics Letters</i> , 2003, 82, 3853-3855.	1.5	32
94	Stability and equation of state of the post-perovskite phase in MgGeO <sub>3</sub> to 2 Mbar. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	32
95	Rietveld structure refinement of MgGeO <sub>3</sub> post-perovskite phase to 1 Mbar. <i>American Mineralogist</i> , 2008, 93, 965-976.	0.9	32
96	Raman spectra of bixbyite, Mn <sub>2</sub> O <sub>3</sub> , up to 40 GPa. <i>Physics and Chemistry of Minerals</i> , 2011, 38, 685-691.	0.3	31
97	X ray diffraction with a double hot-plate laser-heated diamond cell. <i>Geophysical Monograph Series</i> , 1998, , 27-34.	0.1	30
98	X-ray diffraction study of phase stability in SiO at deep mantle conditions. <i>Earth and Planetary Science Letters</i> , 2005, 235, 273-282.	1.8	30
99	Iron partitioning between perovskite and post-perovskite: A transmission electron microscope study. <i>American Mineralogist</i> , 2008, 93, 1678-1681.	0.9	30
100	Measuring the elastic properties of protein crystals by brillouin scattering. <i>Journal of Crystal Growth</i> , 2001, 232, 498-501.	0.7	29
101	Metastable high-pressure transformations of orthoferrosilite FeSi <sub>2</sub> . <i>Physics of the Earth and Planetary Interiors</i> , 2013, 221, 15-21.	0.7	29
102	X-ray absorption spectroscopy of GeO <sub>2</sub> glass to 64 GPa. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 035104.	0.7	28
103	Implications of the iron oxide phase transition on the interiors of rocky exoplanets. <i>Nature Geoscience</i> , 2021, 14, 121-126.	5.4	28
104	Compression of lithium fluoride to 92 GPa. <i>High Pressure Research</i> , 2014, 34, 39-48.	0.4	26
105	Single-crystal elasticity of andradite garnet to 11 GPa. <i>Journal of Physics Condensed Matter</i> , 2004, 16, S1041-S1052.	0.7	25
106	Effect of Fe-enrichment on seismic properties of perovskite and post-perovskite in the deep lower mantle. <i>Geophysical Journal International</i> , 2014, 197, 910-919.	1.0	25
107	Mineralogy at the extremes. <i>Nature</i> , 2008, 451, 269-270.	13.7	24
108	Single-crystal elastic properties of minerals and related materials with cubic symmetry. <i>American Mineralogist</i> , 2018, 103, 977-988.	0.9	23

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109	Raman spectroscopy of perovskite and post-perovskite phases of MgGeO <sub>3</sub> to 123 GPa. Earth and Planetary Science Letters, 2007, 260, 166-178.	1.8	22
110	High-pressure infrared spectroscopy of the dense hydrous magnesium silicates phase D and phase E. Physics of the Earth and Planetary Interiors, 2009, 175, 106-114.	0.7	22
111	Polyhedral units and network connectivity in GeO <sub>2</sub> glass at high pressure: An X-ray total scattering investigation. Applied Physics Letters, 2014, 105, .	1.5	21
112	Single-crystal elastic properties of alunite, KAl <sub>3</sub> (SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub> . Physics and Chemistry of Minerals, 2006, 33, 567-573.	0.3	20
113	Raman spectroscopy of carbon dust samples from NSTX. Journal of Nuclear Materials, 2008, 375, 365-369.	1.3	20
114	Compressibility and strength of nanocrystalline tungsten boride under compression to 60 GPa. Journal of Applied Physics, 2012, 111, .	1.1	20
115	Tunable uniaxial vs biaxial in-plane strain using compliant substrates. Applied Physics Letters, 2005, 87, 061922.	1.5	19
116	Correction to "Effects of hydration on the elastic properties of olivine". Geophysical Research Letters, 2009, 36, .	1.5	18
117	Stress state of diamond and gold under nonhydrostatic compression to 360 GPa. Journal of Applied Physics, 2010, 108, 063521.	1.1	18
118	Equation of state of a high-pressure phase of Gd <sub>3</sub> Ga <sub>5</sub> . $\text{Gd}_3\text{Ga}_5$	1.1	18
119	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.	1.6	18
120	Structural response of $\hat{1}\bar{1}$ -quartz under plate-impact shock compression. Science Advances, 2020, 6, eabb3913.	4.7	18
121	Absolute x-ray energy calibration over a wide energy range using a diffraction-based iterative method. Review of Scientific Instruments, 2012, 83, 063901.	0.6	17
122	Synthesis and equation of state of perovskites in the (Mg, Fe) <sub>3</sub> Al <sub>2</sub> Si <sub>3</sub> O <sub>12</sub> system to 177 GPa. Earth and Planetary Science Letters, 2012, 357-358, 194-202.	1.8	17
123	Shock compression and isentropic release of granite. Geophysical Journal International, 1995, 120, 247-261.	1.0	16
124	Single-crystal elasticity of the $\hat{1}\bar{1}$ and $\hat{1}^2$ of Mg <sub>2</sub> SiO <sub>4</sub> polymorphs at high pressure. Geophysical Monograph Series, 1998, , 9-16.	0.1	16
125	Phase transitions beyond post-perovskite in NaMgF <sub>3</sub> to 160 GPa. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19324-19329.	3.3	16
126	observation of a phase transition in silicon carbide under shock compression using pulsed x-ray diffraction. Physical Review B, 2019, 99, . $I_n$	1.1	16



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127	Pressure-induced stiffness of Au nanoparticles to 71â€‰GPa under quasi-hydrostatic loading. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 485303.	0.7	14
128	Single-crystal elasticity of diaspore, AlOOH, to 12GPa by Brillouin scattering. <i>Physics of the Earth and Planetary Interiors</i> , 2008, 170, 221-228.	0.7	13
129	Hugoniot states and optical response of soda lime glass shock compressed to 120â€‰GPa. <i>Journal of Applied Physics</i> , 2020, 127, .	1.1	13
130	Earth science: Crystallography's journey to the deep Earth. <i>Nature</i> , 2014, 506, 427-429.	13.7	13
131	Deeper understanding. <i>Nature</i> , 2004, 430, 409-410.	13.7	12
132	Synthesis and equation of state of post-perovskites in the (Mg,Fe) <sub>3</sub> Al <sub>2</sub> Si <sub>3</sub> O <sub>12</sub> system. <i>Earth and Planetary Science Letters</i> , 2011, 312, 422-428.	1.8	12
133	Crystal structure, thermal expansivity, and elasticity of OH-chondrodite: trends among dense hydrous magnesium silicates. <i>Contributions To Mineralogy and Petrology</i> , 2015, 169, 1.	1.2	12
134	Strength and texture of Pt compressed to 63â€‰GPa. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	12
135	High-pressure phases of cordierite from single-crystal X-ray diffraction to 15 GPa. <i>American Mineralogist</i> , 2015, 100, 1821-1833.	0.9	12
136	A new facility for high-pressure research at the advanced photon source. <i>Geophysical Monograph Series</i> , 1998, , 79-87.	0.1	11
137	Chapter 14. PRESSURE-VOLUME-TEMPERATURE EQUATIONS OF STATE. , 1998, , 425-458.		11
138	Some recent advances in understanding the mineralogy of Earth's deep mantle. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 4273-4293.	1.6	11
139	Compressibility of synthetic Mg-Al tourmalines to 60 GPa. <i>American Mineralogist</i> , 2019, 104, 1005-1015.	0.9	11
140	Polymorphism of gold under laser-based ramp compression to 690 GPa. <i>Physical Review B</i> , 2021, 103, .	1.1	11
141	Structure and density of silicon carbide to 1.5 TPa and implications for extrasolar planets. <i>Nature Communications</i> , 2022, 13, 2260.	5.8	11
142	The strength of ruby from X-ray diffraction under non-hydrostatic compression to 68ÂˆGPa. <i>Physics and Chemistry of Minerals</i> , 2014, 41, 527-535.	0.3	10
143	Strength and texture of sodium chloride to 56â€‰GPa. <i>Journal of Applied Physics</i> , 2018, 123, 135901.	1.1	10
144	High-germanium-content SiGe islands formed on compliant oxide by SiGe oxidation. <i>Applied Physics Letters</i> , 2004, 84, 3624-3626.	1.5	9

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145	STRENGTH OF MATERIALS UNDER STATIC LOADING IN THE DIAMOND ANVIL CELL. , 2008, , .		9
146	Thermal equation of state of CaIrO <sub>3</sub> post-perovskite. Physics and Chemistry of Minerals, 2011, 38, 407-417.	0.3	9
147	Lateral Variations in Lower Mantle Seismic Velocity. Geophysical Monograph Series, 0, , 197-205.	0.1	9
148	Electronic transitions of iron in almandine-composition glass to 91 GPa. American Mineralogist, 2016, 101, 1659-1667.	0.9	9
149	High-pressure polymorphism of $PbF_2$ to 75 GPa. Physical Review B, 2016, 94, .	1.1	9
150	The temperature sensitivity of elastic wave velocity at high pressure: New results for molybdenum. Geophysical Research Letters, 1994, 21, 473-476.	1.5	8
151	Compositional dependence of the elastic wave velocities of mantle minerals: Implications for seismic properties of mantle rocks. Geophysical Monograph Series, 2005, , 301-320.	0.1	8
152	Probing the core's light elements. Nature, 2011, 479, 480-481.	13.7	8
153	High-Pressure Study of Perovskites and Postperovskites in the (Mg,Fe)GeO <sub>3</sub> System. Inorganic Chemistry, 2017, 56, 8026-8035.	1.9	8
154	Sound velocities in shock-compressed soda lime glass: Melting and liquid-state response. Physical Review B, 2021, 104, .	1.1	8
155	Single-crystal elastic constants of magnesium difluoride (MgF <sub>2</sub> ) to 7.4GPa. Journal of Physics and Chemistry of Solids, 2014, 75, 136-141.	1.9	7
156	High-pressure phase transition in Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> . Journal of Physics Condensed Matter, 2015, 27, 405401.	0.7	7
157	Equation of state of the $PbO_2$ and phases of $PbO_2$ synthesized Stishovite to 72 GPa. Physical Review B, 2018, 98, .	1.1	7
158	Sound Velocities in Shock-Synthesized Stishovite to 72 GPa. Geophysical Research Letters, 2019, 46, 13695-13703.	1.5	7
159	Femtosecond X-Ray Diffraction of Laser-Shocked Forsterite (Mg <sub>2</sub> SiO <sub>4</sub> ) to 122 GPa. Journal of Geophysical Research: Solid Earth, 2021, 126, .	1.4	7
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