

Thomas Duffy

List of Publications by Year in descending order

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183
papers

10,083
citations

26567

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188
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188
times ranked

5891
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultra-high-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, .	3.3	4
2	Structure and density of silicon carbide to 1.5 TPa and implications for extrasolar planets. Nature Communications, 2022, 13, 2260.	5.8	11
3	Development of slurry targets for high repetition-rate x-ray free electron laser experiments. Journal of Applied Physics, 2022, 131, .	1.1	3
4	Femtosecond X-ray Diffraction of Laser-Shocked Forsterite (Mg ₂ SiO ₄) to 122 ÅGPa. Journal of Geophysical Research: Solid Earth, 2021, 126, .	1.4	7
5	Implications of the iron oxide phase transition on the interiors of rocky exoplanets. Nature Geoscience, 2021, 14, 121-126.	5.4	28
6	Polymorphism of gold under laser-based ramp compression to 690 GPa. Physical Review B, 2021, 103, .	1.1	11
7	Sound velocities in shock-compressed soda lime glass: Melting and liquid-state response. Physical Review B, 2021, 104, .	1.1	8
8	Structural response of β -quartz under plate-impact shock compression. Science Advances, 2020, 6, eabb3913.	4.7	18
9	Structure of boron carbide under laser-based shock-compression at 51 GPa. AIP Conference Proceedings, 2020, , .	0.3	1
10	Hugoniot states and optical response of soda lime glass shock compressed to 120 ÅGPa. Journal of Applied Physics, 2020, 127, .	1.1	13
11	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.	3.3	16
12	Ultra-high-Pressure Behavior of AO ₂ (A = Sn, Pb, Hf) Compounds. Journal of Physical Chemistry C, 2019, 123, 27735-27741.	1.5	6
13	observation of a phase transition in silicon carbide under shock compression using pulsed x-ray diffraction. Physical Review B, 2019, 99, .	1.1	16
14	Ultra-High Pressure Dynamic Compression of Geological Materials. Frontiers in Earth Science, 2019, 7, .	0.8	56
15	Compressibility of synthetic Mg-Al tourmalines to 60 GPa. American Mineralogist, 2019, 104, 1005-1015.	0.9	11
16	Sound Velocities in Shock-Synthesized Stishovite to 72 ÅGPa. Geophysical Research Letters, 2019, 46, 13695-13703.	1.5	7
17	Crystal structure and equation of state of Fe-Si alloys at super-Earth core conditions. Science Advances, 2018, 4, eaao5864.	4.7	56
18	Equation of state of iron under core conditions of large rocky exoplanets. Nature Astronomy, 2018, 2, 452-458.	4.2	71

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19	Strength and texture of sodium chloride to 56â€‰GPa. Journal of Applied Physics, 2018, 123, 135901.	1.1	10
20	<i>In</i> X-Ray Diffraction of Shock-Compressed Fused Silica. Physical Review Letters, 2018, 120, 135702.	2.9	65
21	Phase stability of iron germanate, FeGeO ₃ , to 127â€‰GPa. Physics and Chemistry of Minerals, 2018, 45, 367-379.	0.3	3
22	Equation of state of the PbO and PbO_2 phases of PbO . Physical Review B, 2018, 98, .	0.7	7
23	Single-crystal elastic properties of minerals and related materials with cubic symmetry. American Mineralogist, 2018, 103, 977-988.	0.9	23
24	High-Pressure Study of Perovskites and Postperovskites in the (Mg,Fe)GeO ₃ System. Inorganic Chemistry, 2017, 56, 8026-8035.	1.9	8
25	High-pressure pair distribution function (PDF) measurement using high-energy focused x-ray beam. AIP Conference Proceedings, 2016, .	0.3	0
26	Absolute x-ray energy calibration and monitoring using a diffraction-based method. AIP Conference Proceedings, 2016, .	0.3	0
27	High-energy X-ray focusing and high-pressure pair distribution function measurement. AIP Conference Proceedings, 2016, .	0.3	0
28	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
29	X-ray diffraction of molybdenum under ramp compression to 1 TPa. Physical Review B, 2016, 94, .	1.1	33
30	Electronic transitions of iron in almandine-composition glass to 91 GPa. American Mineralogist, 2016, 101, 1659-1667.	0.9	9
31	High-pressure polymorphism of PbF_2 to 75 GPa. Physical Review B, 2016, 94, .	1.1	9
32	X-ray diffraction of molybdenum under shock compression to 450 GPa. Physical Review B, 2015, 92, .	1.1	38
33	High-pressure phase transition in Y ₃ Fe ₅ O ₁₂ . Journal of Physics Condensed Matter, 2015, 27, 405401.	0.7	7
34	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
35	Crystal structure, thermal expansivity, and elasticity of OH-chondrodite: trends among dense hydrous magnesium silicates. Contributions To Mineralogy and Petrology, 2015, 169, 1.	1.2	12
36	Strength and texture of Pt compressed to 63â€‰GPa. Journal of Applied Physics, 2015, 117, .	1.1	12

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37	High-pressure phases of cordierite from single-crystal X-ray diffraction to 15 GPa. American Mineralogist, 2015, 100, 1821-1833.	0.9	12
38	Pressure-induced stiffness of Au nanoparticles to 71%GPa under quasi-hydrostatic loading. Journal of Physics Condensed Matter, 2015, 27, 485303.	0.7	14
39	Elasticity of single-crystal quartz to 10ÅGPa. Physics and Chemistry of Minerals, 2015, 42, 203-212.	0.3	57
40	14. Brillouin Scattering and its Application in Geosciences. , 2014, , 543-604.		4
41	The strength of ruby from X-ray diffraction under non-hydrostatic compression to 68ÅGPa. Physics and Chemistry of Minerals, 2014, 41, 527-535.	0.3	10
42	Brillouin Scattering and its Application in Geosciences. Reviews in Mineralogy and Geochemistry, 2014, 78, 543-603.	2.2	72
43	X-ray absorption spectroscopy of GeO ₂ glass to 64 GPa. Journal of Physics Condensed Matter, 2014, 26, 035104.	0.7	28
44	Polyhedral units and network connectivity in GeO ₂ glass at high pressure: An X-ray total scattering investigation. Applied Physics Letters, 2014, 105, .	1.5	21
45	Phase transitions and equation of state of forsterite to 90 GPa from single-crystal X-ray diffraction and molecular modeling. American Mineralogist, 2014, 99, 35-43.	0.9	50
46	Compression of lithium fluoride to 92ÅGPa. High Pressure Research, 2014, 34, 39-48.	0.4	26
47	Ramp compression of diamond to five terapascals. Nature, 2014, 511, 330-333.	13.7	195
48	Effect of Fe-enrichment on seismic properties of perovskite and post-perovskite in the deep lower mantle. Geophysical Journal International, 2014, 197, 910-919.	1.0	25
49	Single-crystal elastic constants of magnesium difluoride (MgF ₂) to 7.4GPa. Journal of Physics and Chemistry of Solids, 2014, 75, 136-141.	1.9	7
50	Ramp compression of magnesium oxide to 234 GPa. Journal of Physics: Conference Series, 2014, 500, 062002.	0.3	4
51	Earth science: Crystallography's journey to the deep Earth. Nature, 2014, 506, 427-429.	13.7	13
52	Ramp compression of iron to 273 GPa. Journal of Applied Physics, 2013, 114, .	1.1	49
53	Seismic attenuation beneath Europe and the North Atlantic: Implications for water in the mantle. Earth and Planetary Science Letters, 2013, 381, 1-11.	1.8	69
54	Effects of Fe-enrichment on the equation of state and stability of (Mg,Fe)SiO ₃ perovskite. Earth and Planetary Science Letters, 2013, 361, 249-257.	1.8	61

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55	Metastable high-pressure transformations of orthoferrosilite Fs_{82} . <i>Physics of the Earth and Planetary Interiors</i> , 2013, 221, 15-21.	0.7	29
56	Experimental evidence for a phase transition in magnesium oxide at exoplanet pressures. <i>Nature Geoscience</i> , 2013, 6, 926-929.	5.4	170
57	Time-dependence of the alpha to epsilon phase transformation in iron. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	75
58	High-pressure X-ray absorption fine structure in the diamond anvil cell and its applications in geological materials. <i>Journal of Physics: Conference Series</i> , 2013, 430, 012120.	0.3	4
59	Absolute x-ray energy calibration over a wide energy range using a diffraction-based iterative method. <i>Review of Scientific Instruments</i> , 2012, 83, 063901.	0.6	17
60	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
61	Sound velocities of hydrous ringwoodite to 16GPa and 673K. <i>Earth and Planetary Science Letters</i> , 2012, 331-332, 112-119.	1.8	66
62	Correction to "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	3
63	Synthesis and equation of state of perovskites in the (Mg, Fe) $_{3}\text{Al}_{2}\text{Si}_{3}\text{O}_{12}$ system to 177 GPa. <i>Earth and Planetary Science Letters</i> , 2012, 357-358, 194-202.	1.8	17
64	Compressibility and strength of nanocrystalline tungsten boride under compression to 60 GPa. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	20
65	Probing the core's light elements. <i>Nature</i> , 2011, 479, 480-481.	13.7	8
66	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
67	Synthesis and equation of state of post-perovskites in the (Mg,Fe) $_{3}\text{Al}_{2}\text{Si}_{3}\text{O}_{12}$ system. <i>Earth and Planetary Science Letters</i> , 2011, 312, 422-428.	1.8	12
68	Thermal equation of state of CaIrO_3 post-perovskite. <i>Physics and Chemistry of Minerals</i> , 2011, 38, 407-417.	0.3	9
69	Raman spectra of bixbyite, Mn_2O_3 , up to 40 GPa. <i>Physics and Chemistry of Minerals</i> , 2011, 38, 685-691.	0.3	31
70	Equation of state of a high-pressure phase of Gd $_{3}\text{Ga}_5$. <i>Journal of Applied Physics</i> , 2010, 108, 063521.	1.1	18
71	Stress state of diamond and gold under nonhydrostatic compression to 360 GPa. <i>Journal of Applied Physics</i> , 2010, 108, 063521.	1.1	18
72	Phase transitions and equations of state of alkaline earth fluorides CaF_2 and SrF_2 . <i>Physical Review B</i> , 2010, 81, .	1.1	62

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73	Velocity crossover between hydrous and anhydrous forsterite at high pressures. <i>Earth and Planetary Science Letters</i> , 2010, 293, 250-258.	1.8	49
74	High-Pressure Research at the National Synchrotron Light Source. <i>Synchrotron Radiation News</i> , 2010, 23, 24-30.	0.2	3
75	Elastic moduli and strength of nanocrystalline cubic BC x-ray diffraction under nonhydrostatic compression. <i>Physical Review B</i> , 2009, 79, .	1.1	38
76	Deformation of lower-mantle ferropericlae (Mg,Fe)O across the electronic spin transition. <i>Physics and Chemistry of Minerals</i> , 2009, 36, 585-592.	0.3	39
77	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
78	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.	0.7	22
79	Correction to "Effects of hydration on the elastic properties of olivine". <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	18
80	Raman spectroscopy of carbon dust samples from NSTX. <i>Journal of Nuclear Materials</i> , 2008, 375, 365-369.	1.3	20
81	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.	1.9	45
82	Single-crystal elastic constants of natural ettringite. <i>Cement and Concrete Research</i> , 2008, 38, 885-889.	4.6	60
83	Mineralogy at the extremes. <i>Nature</i> , 2008, 451, 269-270.	13.7	24
84	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
85	Effects of hydration on the elastic properties of olivine. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	79
86	Single-crystal elasticity of wadsleyites, $\hat{1}^2\text{-Mg}_2\text{SiO}_4$, containing 0.37 $\hat{1}^6$ 1.66 $\hat{1}$ wt.% H ₂ O. <i>Earth and Planetary Science Letters</i> , 2008, 266, 78-89.	1.8	38
87	Deformation and texture development in CaIrO_3 post-perovskite phase up to 6 $\hat{1}$ GPa and 1300 $\hat{1}$ K. <i>Earth and Planetary Science Letters</i> , 2008, 268, 515-525.	1.8	57
88	Elasticity of hydrous wadsleyite to 12 GPa: Implications for Earth's transition zone. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	72
89	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
90	Iron partitioning between perovskite and post-perovskite: A transmission electron microscope study. <i>American Mineralogist</i> , 2008, 93, 1678-1681.	0.9	30

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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.	0.9	32
92	STRENGTH OF MATERIALS UNDER STATIC LOADING IN THE DIAMOND ANVIL CELL. , 2008, , .		9
93	Deformation of (Mg,Fe)SiO ₃ Post-Perovskite and D'' Anisotropy. <i>Science</i> , 2007, 316, 1729-1732.	6.0	139
94	Raman spectroscopy of perovskite and post-perovskite phases of MgGeO ₃ to 123 ÅGPa. <i>Earth and Planetary Science Letters</i> , 2007, 260, 166-178.	1.8	22
95	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
96	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.	0.9	33
97	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
98	Stability and equation of state of the post-perovskite phase in MgGeO ₃ to 2 Mbar. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	32
99	Single-crystal elastic properties of alunite, KAl ₃ (SO ₄) ₂ (OH) ₆ . <i>Physics and Chemistry of Minerals</i> , 2006, 33, 567-573.	0.3	20
100	Equation of state of MgGeO ₃ perovskite to 65 ÅGPa: comparison with the post-perovskite phase. <i>Physics and Chemistry of Minerals</i> , 2006, 33, 699-709.	0.3	43
101	Single-crystal elasticity of brucite, Mg(OH) ₂ , to 15 GPa by Brillouin scattering. <i>American Mineralogist</i> , 2006, 91, 1893-1900.	0.9	56
102	Equation of state of the postperovskite phase synthesized from a natural (Mg,Fe)SiO ₃ orthopyroxene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 3039-3043.	3.3	84
103	Plastic Deformation of MgGeO ₃ Post-Perovskite at Lower Mantle Pressures. <i>Science</i> , 2006, 311, 644-646.	6.0	143
104	High-pressure phases in SnO ₂ to 117 GPa. <i>Physical Review B</i> , 2006, 73, .	1.1	81
105	X-ray diffraction study of the static strength of tungsten to 69 GPa. <i>Physical Review B</i> , 2006, 73, .	1.1	67
106	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
107	Tunable uniaxial vs biaxial in-plane strain using compliant substrates. <i>Applied Physics Letters</i> , 2005, 87, 061922.	1.5	19
108	Finite element simulations of the laser-heated diamond-anvil cell. <i>Journal of Applied Physics</i> , 2005, 97, 114902.	1.1	55

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109	Strength, elasticity, and equation of state of the nanocrystalline cubic silicon nitride β -Si ₃ N ₄ to 68 GPa. Physical Review B, 2005, 72, .	1.1	43
110	X-ray diffraction study of phase stability in SiO at deep mantle conditions. Earth and Planetary Science Letters, 2005, 235, 273-282.	1.8	30
111	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
112	Compressibility and structural evolution of post-perovskite phase under pressure. Acta Crystallographica Section A: Foundations and Advances, 2005, 61, c70-c71.	0.3	0
113	High-germanium-content SiGe islands formed on compliant oxide by SiGe oxidation. Applied Physics Letters, 2004, 84, 3624-3626.	1.5	9
114	Raman spectroscopy and x-ray diffraction of phase transitions in Cr ₂ O ₃ to 61 GPa. Physical Review B, 2004, 69, .	1.1	111
115	Single-crystal elasticity of andradite garnet to 11 GPa. Journal of Physics Condensed Matter, 2004, 16, S1041-S1052.	0.7	25
116	Deeper understanding. Nature, 2004, 430, 409-410.	13.7	12
117	Stability and crystal structure of MgSiO ₃ perovskite to the core-mantle boundary. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	104
118	Single-crystal elasticity of grossular- and almandine-rich garnets to 11 GPa by Brillouin scattering. Journal of Geophysical Research, 2004, 109, .	3.3	56
119	Single-crystal elasticity of fayalite to 12 GPa. Journal of Geophysical Research, 2004, 109, .	3.3	59
120	Strength and equation of state of boron suboxide from radial x-ray diffraction in a diamond cell under nonhydrostatic compression. Physical Review B, 2004, 70, .	1.1	84
121	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
122	Elasticity and rheology of platinum under high pressure and nonhydrostatic stress. Physical Review B, 2003, 68, .	1.1	36
123	Sound Velocity and Elasticity of Tetragonal Lysozyme Crystals by Brillouin Spectroscopy. Biophysical Journal, 2003, 85, 3202-3213.	0.2	72
124	Buckling suppression of SiGe islands on compliant substrates. Journal of Applied Physics, 2003, 94, 6875-6882.	1.1	32
125	Strain partition of Si/SiGe and SiO ₂ /SiGe on compliant substrates. Applied Physics Letters, 2003, 82, 3853-3855.	1.5	32
126	Relaxed SiGe Layers with High Ge Content by Compliant Substrates. Materials Research Society Symposia Proceedings, 2003, 768, 171.	0.1	1

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127	Relaxed SiGe Layers with High Ge Content by Compliant Substrates. Materials Research Society Symposia Proceedings, 2003, 765, 1.	0.1	1
128	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
129	Strength and Elasticity of SiO ₂ across the Stishovite-CaCl ₂ -type Structural Phase Boundary. Physical Review Letters, 2002, 89, 255507.	2.9	106
130	Raman spectroscopy of Fe ₂ O ₃ to 62 GPa. American Mineralogist, 2002, 87, 318-326.	0.9	210
131	Raman spectroscopy of Co(OH) ₂ at high pressures: Implications for amorphization and hydrogen repulsion. Physical Review B, 2002, 66, .	1.1	126
132	Tetragonal structure of CaSiO ₃ perovskite above 20 GPa. Geophysical Research Letters, 2002, 29, 19-1-19-4.	1.5	95
133	Strain relaxation of SiGe islands on compliant oxide. Journal of Applied Physics, 2002, 91, 9716.	1.1	70
134	Equation of state of gold and its application to the phase boundaries near 660 km depth in Earth's mantle. Earth and Planetary Science Letters, 2002, 203, 729-739.	1.8	182
135	Single-crystal elastic constants of fluorite (CaF ₂) to 9.3 GPa. Physics and Chemistry of Minerals, 2002, 29, 465-472.	0.3	131
136	Elasticity and strength of six-coordinated silicates at pressures of the earth's lower mantle: stishovite, calcium silicate perovskite, and phase D. Acta Crystallographica Section A: Foundations and Advances, 2002, 58, c38-c38.	0.3	0
137	Elasticity of lysozyme crystals by Brillouin scattering. Acta Crystallographica Section A: Foundations and Advances, 2002, 58, c90-c90.	0.3	0
138	Strength and elasticity of ringwoodite at upper mantle pressures. Geophysical Research Letters, 2001, 28, 2691-2694.	1.5	55
139	Quasi-hydrostatic compression of magnesium oxide to 52 GPa: Implications for the pressure-volume-temperature equation of state. Journal of Geophysical Research, 2001, 106, 515-528.	3.3	391
140	Phase stability and density of FeS at high pressures and temperatures: implications for the interior structure of Mars. Earth and Planetary Science Letters, 2001, 185, 25-33.	1.8	64
141	Measuring the elastic properties of protein crystals by Brillouin scattering. Journal of Crystal Growth, 2001, 232, 498-501.	0.7	29
142	The post-spinel transformation in Mg ₂ SiO ₄ and its relation to the 660-km seismic discontinuity. Nature, 2001, 411, 571-574.	13.7	151
143	Stability and Structure of MgSiO ₃ Perovskite to 2300-Kilometer Depth in Earth's Mantle. Science, 2001, 293, 2437-2440.	6.0	96
144	Pressure-volume-temperature paths in the laser-heated diamond anvil cell. Journal of Applied Physics, 2001, 89, 1907.	1.1	53

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145	Constraints on the P-V-T equation of state of MgSiO ₃ perovskite. American Mineralogist, 2000, 85, 354-363.	0.9	47
146	The equation of state of CaSiO ₃ perovskite to 108 GPa at 300 K. Physics of the Earth and Planetary Interiors, 2000, 120, 327-338.	0.7	90
147	The stability and P-V-T equation of state of CaSiO ₃ perovskite in the Earth's lower mantle. Journal of Geophysical Research, 2000, 105, 25955-25968.	3.3	113
148	Lattice strains in gold and rhenium under nonhydrostatic compression to 37 GPa. Physical Review B, 1999, 60, 15063-15073.	1.1	186
149	Elasticity, shear strength, and equation of state of molybdenum and gold from x-ray diffraction under nonhydrostatic compression to 24 GPa. Journal of Applied Physics, 1999, 86, 6729-6736.	1.1	129
150	Brillouin scattering and X-ray diffraction of San Carlos olivine: direct pressure determination to 32 GPa. Earth and Planetary Science Letters, 1998, 159, 25-33.	1.8	132
151	Melting and crystal structure of iron at high pressures and temperatures. Geophysical Research Letters, 1998, 25, 373-376.	1.5	380
152	Single-crystal elasticity of the $\hat{1}\pm$ and $\hat{1}^2$ of Mg ₂ SiO ₄ polymorphs at high pressure. Geophysical Monograph Series, 1998, , 9-16.	0.1	16
153	A new facility for high-pressure research at the advanced photon source. Geophysical Monograph Series, 1998, , 79-87.	0.1	11
154	X ray diffraction with a double hot-plate laser-heated diamond cell. Geophysical Monograph Series, 1998, , 27-34.	0.1	30
155	Chapter 14. PRESSURE-VOLUME-TEMPERATURE EQUATIONS OF STATE. , 1998, , 425-458.		11
156	Dynamic compression of an Fe-Cr-Ni alloy to 80 GPa. Journal of Applied Physics, 1997, 82, 4259-4269.	1.1	50
157	Lattice Strains in Gold and Rhenium Under Non-Hydrostatic Compression. Materials Research Society Symposia Proceedings, 1997, 499, 145.	0.1	0
158	Single-crystal elasticity of $\hat{1}^2$ -Mg ₂ SiO ₄ to the pressure of the 410 km seismic discontinuity in the Earth's mantle. Earth and Planetary Science Letters, 1997, 147, E9-E15.	1.8	117
159	Sound velocity and elasticity of single-crystal forsterite to 16 GPa. Journal of Geophysical Research, 1996, 101, 17535-17545.	3.3	161
160	The equation of state of forsterite to 17.2 GPa and effects of pressure media. American Mineralogist, 1996, 81, 51-55.	0.9	96
161	Geophysical Laboratory and Center for High-Pressure Research, Carnegie Institution of Washington. Reviews of Geophysics, 1995, 33, 5.	9.0	6
162	Structure and bonding in hydrous minerals at high pressure: Raman spectroscopy of alkaline earth hydroxides. AIP Conference Proceedings, 1995, , .	0.3	6

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163	Single-crystal x-ray diffraction of brucite to 14 GPa. <i>Physics and Chemistry of Minerals</i> , 1995, 22, 277.	0.3	49
164	Shock compression and isentropic release of granite. <i>Geophysical Journal International</i> , 1995, 120, 247-261.	1.0	16
165	Elasticity of forsterite to 16 GPa and the composition of the upper mantle. <i>Nature</i> , 1995, 378, 170-173.	13.7	164
166	High-pressure phase transition in brucite, Mg(OH) ₂ . <i>American Mineralogist</i> , 1995, 80, 222-230.	0.9	140
167	Dense hydrogen in the outer solar system: Implications from recent high-pressure experiments. <i>AIP Conference Proceedings</i> , 1995, , .	0.3	0
168	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
169	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
170	Shock compression and release of polycrystalline magnesium oxide. <i>AIP Conference Proceedings</i> , 1994, , .	0.3	5
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