J H Eggert

List of Publications by Year
in descending order

214 papers	9,906 citations	25034 57 h-index	42399 92 g-index
223 all docs	223 docs citations	223 times ranked	4998 citing authors

#	Article	IF	Citations
1	Superconductivity up to 164 K inHgBa2Camâ^'1CumO2m+2+Î´(m=1, 2, and 3) under quasihydrostatic pressures. Physical Review B, 1994, 50, 4260-4263.	3.2	621
2	Direct Observation of theÎ±â^'ÎµTransition in Shock-Compressed Iron via Nanosecond X-Ray Diffraction. Physical Review Letters, 2005, 95, 075502.	7.8	270
3	Nanosecond X-ray diffraction of shock-compressed superionic water ice. Nature, 2019, 569, 251-255.	27.8	215
4	Melting temperature of diamond at ultrahighÂpressure. Nature Physics, 2010, 6, 40-43.	16.7	210
5	Ramp compression of diamond to five terapascals. Nature, 2014, 511, 330-333.	27.8	195
6	Experimental evidence for a phase transition in magnesium oxide at exoplanet pressures. Nature Geoscience, 2013, 6, 926-929.	12.9	170
7	Experimental evidence for superionic water ice using shock compression. Nature Physics, 2018, 14, 297-302.	16.7	165
8	Optical Evidence for the Metallization of Xenon at 132(5) GPa. Physical Review Letters, 1989, 62, 665-668.	7.8	164
9	Dissociation of Liquid Silica at High Pressures and Temperatures. Physical Review Letters, 2006, 97, 025502.	7.8	158
10	Phase Transformations and Metallization of Magnesium Oxide at High Pressure and Temperature. Science, 2012, 338, 1330-1333.	12.6	156
11	Diamond at 800ÂGPa. Physical Review Letters, 2009, 102, 075503.	7.8	155
12	Streaked optical pyrometer system for laser-driven shock-wave experiments on OMEGA. Review of Scientific Instruments, 2007, 78, 034903.	1.3	143
13	Toward an international practical pressure scale: A proposal for an IPPS ruby gauge (IPPS-Ruby2020). High Pressure Research, 2020, 40, 299-314.	1.2	143
14	Laser-driven single shock compression of fluid deuterium from 45 to 220 GPa. Physical Review B, 2009, 79, .	3.2	138
15	Solid Iron Compressed Up to 560 GPa. Physical Review Letters, 2013, 111, 065501.	7.8	137
16	MASS-RADIUS RELATIONSHIPS FOR EXOPLANETS. Astrophysical Journal, 2012, 744, 59.	4.5	134
17	Implosion dynamics measurements at the National Ignition Facility. Physics of Plasmas, 2012, 19, .	1.9	125
18	Quantitative structure factor and density measurements of high-pressure fluids in diamond anvil cells by x-ray diffraction:â€ƒArgon and water. Physical Review B, 2002, 65, .	3.2	123

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19	Shock compression of stishovite and melting of silica at planetary interior conditions. Science, 2015, 347, 418-420.	12.6	123
20	Ruby at high pressure. I. Optical line shifts to 156 GPa. Physical Review B, 1989, 40, 5724-5732.	3.2	120
21	High-precision measurements of the equation of state of hydrocarbons at 1â€“10 Mbar using laser-driven shock waves. Physics of Plasmas, 2010, 17, .	1.9	119
22	Shock timing experiments on the National Ignition Facility: Initial results and comparison with simulation. Physics of Plasmas, 2012, 19, .	1.9	115
23	High strain-rate plastic flow in Al and Fe. Journal of Applied Physics, 2011, 110, .	2.5	110
24	Analysis of the x-ray diffraction signal for theÎ±â˜Ïµtransition in shock-compressed iron: Simulation and experiment. Physical Review B, 2006, 74, .	3.2	109
25	Insulator-metal transition in dense fluid deuterium. Science, 2018, 361, 677-682.	12.6	108
26	EXAFS Measurement of Iron bcc-to-hcp Phase Transformation in Nanosecond-Laser Shocks. Physical Review Letters, 2005, 95, 075501.	7.8	106
27	Ultrafast visualization of crystallization and grain growth in shock-compressed SiO2. Nature Communications, 2015, 6, 8191.	12.8	106
28	Achieving high-density states through shock-wave loading of precompressed samples. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 9172-9177.	7.1	103
29	Hugoniot Data for Helium in the Ionization Regime. Physical Review Letters, 2008, 100, 124503.	7.8	103
30	Measurement of refractive index and equation of state in dense He,H2,H2O,and Ne under high pressure in a diamond anvil cell. Physical Review B, 2003, 67, .	3.2	102
31	Laser-shock compression of diamond and evidence of a negative-slope melting curve. Nature Materials, 2007, 6, 274-277.	27.5	98
32	Shock-Induced Transformation ofAl2O3and LiF into Semiconducting Liquids. Physical Review Letters, 2003, 91, 035502.	7.8	97
33	Electronic conduction in shock-compressed water. Physics of Plasmas, 2004, 11, L41-L44.	1.9	96
34	Coupling static and dynamic compressions: first measurements in dense hydrogen. High Pressure Research, 2004, 24, 25-31.	1.2	96
35	Extended data set for the equation of state of warm dense hydrogen isotopes. Physical Review B, 2012, 86, .	3.2	95
36	Diamond spheres for inertial confinement fusion. Nuclear Fusion, 2009, 49, 112001.	3.5	94

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37	Insulator-to-Conducting Transition in Dense Fluid Helium. Physical Review Letters, 2010, 104, 184503.	7.8	93
38	Shock vaporization of silica and the thermodynamics of planetary impact events. Journal of Geophysical Research, 2012, 117, .	3.3	91
39	Shock compression of quartz in the high-pressure fluid regime. Physics of Plasmas, 2005, 12, 082702.	1.9	89
40	Stiff Response of Aluminum under Ultrafast Shockless Compression to 110ÂGPA. Physical Review Letters, 2007, 98, 065701.	7.8	87
41	Strength effects in diamond under shock compression from 0.1 to 1 TPa. Physical Review B, 2010, 81, .	3.2	87
42	Powder diffraction from solids in the terapascal regime. Review of Scientific Instruments, 2012, 83, 113904.	1.3	84
43	Precision Shock Tuning on the National Ignition Facility. Physical Review Letters, 2012, 108, 215004.	7.8	83
44	High-precision measurements of the diamond Hugoniot in and above the melt region. Physical Review B, 2008, 78, .	3.2	82
45	Shock Compressing Diamond to a Conducting Fluid. Physical Review Letters, 2004, 93, 195506.	7.8	81
46	Metastability of diamond ramp-compressed to 2 terapascals. Nature, 2021, 589, 532-535.	27.8	79
47	Laser-driven shock experiments on precompressed water: Implications for â€œicyâ€•giant planets. Journal of Chemical Physics, 2006, 125, 014701.	3.0	77
48	Systematic uncertainties in shock-wave impedance-match analysis and the high-pressure equation of state of Al. Journal of Applied Physics, 2005, 98, 113529.	2.5	75
49	Time-dependence of the alpha to epsilon phase transformation in iron. Journal of Applied Physics, 2013, 114, .	2.5	75
50	Absorption and reflectance in hydrogen up to 230 GPa: Implications for metallization. Physical Review Letters, 1991, 66, 193-196.	7.8	71
51	Equation of state of iron under core conditions of large rocky exoplanets. Nature Astronomy, 2018, 2, 452-458.	10.1	71
52	Analysis of laser shock experiments on precompressed samples using a quartz reference and application to warm dense hydrogen and helium. Journal of Applied Physics, 2015, 118, .	2.5	69
53	Measurement of Body-Centered Cubic Gold and Melting under Shock Compression. Physical Review Letters, 2019, 123, 045701.	7.8	67
54	Nuclear imaging of the fuel assembly in ignition experiments. Physics of Plasmas, 2013, 20, 056320.	1.9	65

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55	Direct Observation of Melting in Shock-Compressed Bismuth With Femtosecond X-ray Diffraction. Physical Review Letters, 2015, 115, 095701.	7.8	64
56	Evidence for a Phase Transition in Silicate Melt at Extreme Pressure and Temperature Conditions. Physical Review Letters, 2012, 108, 065701.	7.8	61
57	High pressure refractive index measurements of 4:1 methanol:ethanol. Journal of Applied Physics, 1992, 72, 2453-2461.	2.5	59
58	Properties of fluid deuterium under double-shock compression to several Mbar. Physics of Plasmas, 2004, 11, L49-L52.	1.9	58
59	Refractive index of lithium fluoride ramp compressed to 800 GPa. Journal of Applied Physics, 2011, 109, .	2.5	58
60	Ultrafast Dynamic Compression Technique to Study the Kinetics of Phase Transformations in Bismuth. Physical Review Letters, 2008, 101, 065701.	7.8	57
61	Assembly of High-Areal-Density Deuterium-Tritium Fuel from Indirectly Driven Cryogenic Implosions. Physical Review Letters, 2012, 108, 215005.	7.8	57
62	Equation of state of CH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1.36</mml:mn></mml:mrow></mml:msub></mml:math>: First-principles molecular dynamics simulations and shock-and-release wave speed measurements. Physical Review B, 2012, 86, .	3.2	57
63	Crystal structure and equation of state of Fe-Si alloys at super-Earth core conditions. Science Advances, 2018, 4, eaao5864.	10.3	56
64	Ruby at high pressure. II. Fluorescence lifetime of theRline to 130 GPa. Physical Review B, 1989, 40, 5733-5738.	3.2	54
65	Invariant Points and Phase Transitions in Deuterium at Megabar Pressures. Physical Review Letters, 1995, 75, 2514-2517.	7.8	53
66	Establishing gold and platinum standards to 1 terapascal using shockless compression. Science, 2021, 372, 1063-1068.	12.6	53
67	X-Ray Diffraction of Solid Tin to 1.2ÂTPa. Physical Review Letters, 2015, 115, 075502.	7.8	52
68	Dynamic compression of copper to over 450 GPa: A high-pressure standard. Physical Review B, 2016, 93, .	3.2	50
69	Ultrafast X-Ray Diffraction Studies of the Phase Transitions and Equation of State of Scandium Shock Compressed to 82ÂGPa. Physical Review Letters, 2017, 118, 025501.	7.8	50
70	Phase diagrams and isotopic effects of normal and deuterated water studied via x-ray diffraction up to 4.5 GPa and 500 K. Physical Review B, 2009, 80, .	3.2	49
71	Ramp compression of iron to 273 GPa. Journal of Applied Physics, 2013, 114, .	2.5	49
72	Raman excitations and orientational ordering in deuterium at high pressure. Physical Review B, 1996, 54, R15590-R15593.	3.2	48

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73	The direct measurement of ablation pressure driven by 351-nm laser radiation. Journal of Applied Physics, 2011, 110, .	2.5	43
74	Probing the Solid Phase of Noble Metal Copper at Terapascal Conditions. Physical Review Letters, 2020, 124, 015701.	7.8	43
75	X-ray diffraction at the National Ignition Facility. Review of Scientific Instruments, 2020, 91, 043902.	1.3	42
76	Evidence of hydrogenâ˜helium immiscibility at Jupiter-interior conditions. Nature, 2021, 593, 517-521.	27.8	41
77	Precision equation-of-state measurements on National Ignition Facility ablator materials from 1 to 12 Mbar using laser-driven shock waves. Journal of Applied Physics, 2012, 111, .	2.5	40
78	Large elastic wave amplitude and attenuation in shocked pure aluminum. Journal of Applied Physics, 2009, 105, .	2.5	39
79	Measuring the melting curve of iron at super-Earth core conditions. Science, 2022, 375, 202-205.	12.6	39
80	High-Pressure Dielectric Catastrophe and the Possibility That the Hydrogen-A Phase Is Metallic. Europhysics Letters, 1990, 11, 775-781.	2.0	38
81	Ruby at high pressure. III. A pumping scheme for the R lines up to 230 GPa. Physical Review B, 1991, 44, 7202-7208.	3.2	38
82	Progress in the indirect-drive National Ignition Campaign. Plasma Physics and Controlled Fusion, 2012, 54, 124026.	2.1	38
83	X-ray diffraction of molybdenum under shock compression to 450 GPa. Physical Review B, 2015, 92, .	3.2	38
84	Measurement of Body-Centered-Cubic Aluminum at 475ÂGPa. Physical Review Letters, 2017, 119, 175702.	7.8	37
85	Identification of Phase Transitions and Metastability in Dynamically Compressed Antimony Using Ultrafast X-Ray Diffraction. Physical Review Letters, 2019, 122, 255704.	7.8	36
86	Absolute calibration of the OMEGA streaked optical pyrometer for temperature measurements of compressed materials. Review of Scientific Instruments, 2016, 87, 114903.	1.3	34
87	X-ray diffraction of molybdenum under ramp compression to 1 TPa. Physical Review B, 2016, 94, .	3.2	33
88	Femtosecond diffraction studies of solid and liquid phase changes in shock-compressed bismuth. Scientific Reports, 2018, 8, 16927.	3.3	33
89	Hugoniot and release measurements in diamond shocked up to 26 Mbar. Physical Review B, 2017, 95, .	3.2	32
90	Observation of a two-vibron bound-to-unbound transition in solid deuterium at high pressure. Physical Review Letters, 1993, 70, 2301-2304.	7.8	31

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91	A novel approach to Hugoniot measurements utilizing transparent crystals. Journal of Applied Physics, 2013, 114, .	2.5	31
92	Compressibility of theHgBa2Canâ^'1CunO2n+2+Î´(n=1,2,3) high-temperature superconductors. Physical Review B, 1994, 49, 15299-15304.	3.2	30
93	High pressures generated by laser driven shocks: applications to planetary physics. Nuclear Fusion, 2004, 44, S208-S214.	3.5	30
94	X-ray preheating of window materials in direct-drive shock-wave timing experiments. Physics of Plasmas, 2006, 13, 122702.	1.9	29
95	Orientation and rate dependence in high strain-rate compression of single-crystal silicon. Physical Review B, 2012, 86, .	3.2	28
96	Thermodynamic properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>MgSiO</mml:mi><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math> at super-Earth mantle conditions. Physical Review B, 2018, 97, .	3.2	28
97	Implications of the iron oxide phase transition on the interiors of rocky exoplanets. Nature Geoscience, 2021, 14, 121-126.	12.9	28
98	Low-frequency Raman spectroscopy of deuterium to megabar pressures at 77-295 K. Physical Review B, 1993, 48, 5779-5788.	3.2	27
99	High planarity x-ray drive for ultrafast shockless-compression experiments. Physics of Plasmas, 2007, 14, 057105.	1.9	27
100	Shock Compression of Liquid Deuterium up to 1ÂTPa. Physical Review Letters, 2019, 122, 255702.	7.8	26
101	Elimination of pressureâ€induced fluorescence in diamond anvils. Applied Physics Letters, 1988, 53, 2489-2491.	3.3	25
102	A platform for x-ray absorption fine structure study of dynamically compressed materials above 1 Mbar. Review of Scientific Instruments, 2013, 84, 123105.	1.3	25
103	Ramp compression of tantalum to 330â€‰GPa. High Pressure Research, 2015, 35, 339-354.	1.2	25
104	Optimized x-ray sources for x-ray diffraction measurements at the Omega Laser Facility. Review of Scientific Instruments, 2019, 90, 125113.	1.3	25
105	Pressure-enhanced ortho-para conversion in solid hydrogen up to 58 GPa. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 12269-12272.	7.1	24
106	Inelastic response of silicon to shock compression. Scientific Reports, 2016, 6, 24211.	3.3	24
107	Refractive index of lithium fluoride to 900 gigapascal and implications for dynamic equation of state measurements. Journal of Applied Physics, 2019, 125, .	2.5	24
108	Heterogeneous flow and brittle failure in shock-compressed silicon. Journal of Applied Physics, 2013, 114, .	2.5	23

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109	Progress toward ignition at the National Ignition Facility. Plasma Physics and Controlled Fusion, 2013, 55, 124015.	2.1	23
110	In situ visualization of long-range defect interactions at the edge of melting. Science Advances, 2021, 7, .	10.3	23
111	X-ray area backlighter development at the National Ignition Facility (invited). Review of Scientific Instruments, 2014, 85, 11D502.	1.3	22
112	X-ray source development for EXAFS measurements on the National Ignition Facility. Review of Scientific Instruments, 2017, 88, 083907.	1.3	22
113	Coordination changes in liquid tin under shock compression determined using in situ femtosecond x-ray diffraction. Applied Physics Letters, 2019, 115, .	3.3	22
114	Spectroscopic Studies of p-H2 to Above 200 GPa. Journal of Low Temperature Physics, 1998, 110, 75-88.	1.4	21
115	Measuring the shock impedance mismatch between high-density carbon and deuterium at the National Ignition Facility. Physical Review B, 2018, 97, .	3.2	21
116	An approach for the measurement of the bulk temperature of single crystal diamond using an X-ray free electron laser. Scientific Reports, 2020, 10, 14564.	3.3	21
117	Novel experimental setup for megahertz X-ray diffraction in a diamond anvil cell at the High Energy Density (HED) instrument of the European X-ray Free-Electron Laser (EuXFEL). Journal of Synchrotron Radiation, 2021, 28, 688-706.	2.4	21
118	Developing a high-flux, high-energy continuum backlighter for extended x-ray absorption fine structure measurements at the National Ignition Facility. Review of Scientific Instruments, 2018, 89, 10F114.	1.3	20
119	Recreating Giants Impacts in the Laboratory: Shock Compression of Bridgmanite to 14 Mbar. Geophysical Research Letters, 2020, 47, e2019GL085476.	4.0	19
120	Universal enhancement of Tc under high pressure in HgBa2Camâ^'1CumO2m+2+Î´. Physica C: Superconductivity and Its Applications, 1994, 235-240, 1493-1494.	1.2	18
121	Melting line and fluid structure factor of oxygen up to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>24</mml:mn><mml:mspace width="0.3em" /><mml:mi>GPa</mml:mi></mml:mrow></mml:math>. Physical Review B, 2007, 76, .	3.2	18
122	Structure of liquid water at high pressures and temperatures. Journal of Physics Condensed Matter, 2002, 14, 11385-11394.	1.8	17
123	X-ray diffraction of ramp-compressed aluminum to 475â€‰GPa. Physics of Plasmas, 2018, 25, .	1.9	17
124	Shock Hugoniot measurements of single-crystal 1,3,5-triamino-2,4,6-trinitrobenzene (TATB) compressed to 83â€‰GPa. Journal of Applied Physics, 2020, 127, .	2.5	17
125	Dielectric properties of solid molecular hydrogen at high pressure. Physical Review B, 1992, 45, 9709-9715.	3.2	16
126	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>I</mml:mi><mml:mi>n</mml:mi></mml:mrow><mml:mo observation of a phase transition in silicon carbide under shock compression using pulsed x-ray diffraction. Physical Review B, 2019, 99, .	3.2	16

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127	Equation of State of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CO</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Shock Compressed to 1ÂTPa. Physical Review Letters, 2020, 125, 165701.	7.8	15
128	Vibron Excitations in Solid Hydrogen: A Generalized Binary Random Alloy Problem. Physical Review Letters, 1995, 74, 1379-1382.	7.8	15
129	Developing quartz and molybdenum as impedance-matching standards in the 100-Mbar regime. Physical Review B, 2019, 99, .	3.2	15
130	High-resolution inelastic x-ray scattering at the high energy density scientific instrument at the European X-Ray Free-Electron Laser. Review of Scientific Instruments, 2021, 92, 013101.	1.3	15
131	High-Pressure Dielectric Catastrophe and the Possibility that the Hydrogen-A Phase is Metallic. Europhysics Letters, 1990, 12, 381-382.	2.0	14
132	Imaging VISAR diagnostic for the National Ignition Facility (NIF). , 2005, , .		14
133	Recovery of a high-pressure phase formed under laser-driven compression. Physical Review B, 2020, 102, .	3.2	14
134	X-ray Free Electron Laser-Induced Synthesis of Îµ-Iron Nitride at High Pressures. Journal of Physical Chemistry Letters, 2021, 12, 3246-3252.	4.6	14
135	Structural complexity in ramp-compressed sodium to 480â€‰GPa. Nature Communications, 2022, 13, 2534.	12.8	14
136	The effect of nearly steady shock waves in ramp compression experiments. Journal of Applied Physics, 2015, 117, 245903.	2.5	13
137	An iterative forward analysis technique to determine the equation of state of dynamically compressed materials. Journal of Applied Physics, 2017, 121, .	2.5	13
138	Shock-compressed silicon: Hugoniot and sound speed up to 2100 GPa. Physical Review B, 2021, 103, .	3.2	13
139	Charge transfer and electron-vibron coupling in dense solid hydrogen. Chemical Physics, 1995, 200, 23-39.	1.9	12
140	Index of refraction of shock-released materials. Journal of Applied Physics, 2011, 110, 083509.	2.5	12
141	Plasma-accelerated flyer-plates for equation of state studies. Review of Scientific Instruments, 2012, 83, 073504.	1.3	12
142	Recovery of metastable dense Bi synthesized by shock compression. Applied Physics Letters, 2019, 114, 120601.	3.3	12
143	Optimized continuum x-ray emission from laser-generated plasma. Applied Physics Letters, 2020, 117, .	3.3	12
144	<title>Gadolinium enrichment technology at Lawrence Livermore National Laboratory</title>. , 1993, , .		11

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145	The first target experiments on the National Ignition Facility. European Physical Journal D, 2007, 44, 273-281.	1.3	11
146	Quasi-isentropic material property studies at extreme pressures: from omega to NIF. Journal of Physics: Conference Series, 2008, 112, 042024.	0.4	11
147	Single photon energy dispersive x-ray diffraction. Review of Scientific Instruments, 2014, 85, 033906.	1.3	11
148	Shock equation of state of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>LiH</mml:mi><mml:mprescripts /><mml:none /><mml:mn>6</mml:mn></mml:mmultiscripts></mml:math> to 1.1 TPa. Physical Review B, 2017, 96, .	3.2	11
149	Nonisentropic Release of a Shocked Solid. Physical Review Letters, 2019, 123, 245501.	7.8	11
150	Polymorphism of gold under laser-based ramp compression to 690 GPa. Physical Review B, 2021, 103, .	3.2	11
151	Melting of Tantalum at Multimegabar Pressures on the Nanosecond Timescale. Physical Review Letters, 2021, 126, 255701.	7.8	11
152	Structure and density of silicon carbide to 1.5 TPa and implications for extrasolar planets. Nature Communications, 2022, 13, 2260.	12.8	11
153	Ortho-para conversion of hydrogen at high pressures. Physical Review B, 2002, 66, .	3.2	10
154	Extended x-ray absorption fine structure measurement of phase transformation in iron shocked by nanosecond laser. Physics of Plasmas, 2005, 12, 092703.	1.9	10
155	In situ diffraction measurements of lattice response due to shock loading, including direct observation of the Î±â€“Îµ phase transition in iron. International Journal of Impact Engineering, 2006, 33, 343-352.	5.0	10
156	Modeling Planetary Interiors in Laser Based Experiments Using Shockless Compression. Astrophysics and Space Science, 2007, 307, 285-289.	1.4	10
157	Heat-release equation of state and thermal conductivity of warm dense carbon by proton differential heating. Physical Review E, 2019, 100, 043204.	2.1	10
158	Measurement of the sound speed in dense fluid deuterium along the cryogenic liquid Hugoniot. Physics of Plasmas, 2019, 26, .	1.9	10
159	RAMP WAVE STRESS-DENSITY MEASUREMENTS OF TA AND W. AIP Conference Proceedings, 2008, , .	0.4	9
160	Interferometric measurements of refractive index and dispersion at high pressure. Scientific Reports, 2021, 11, 5610.	3.3	9
161	Experimental Observations of Laser-Driven Tin Ejecta Microjet Interactions. Physical Review Letters, 2021, 127, 155002.	7.8	9
162	Influence of order-disorder on the vibron excitations of H2 and D2 in ortho-para mixed crystals. Journal of Low Temperature Physics, 1999, 115, 181-216.	1.4	8

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163	Hydrodynamic computations of high-power laser drives generating metal ejecta jets from surface grooves. Journal of Applied Physics, 2020, 128, .	2.5	8
164	One-dimensional lattice dynamics with periodic boundary conditions: An analog demonstration. American Journal of Physics, 1997, 65, 108-116.	0.7	7
165	Ghost fringe removal techniques using Lissajous data presentation. Review of Scientific Instruments, 2016, 87, 033106.	1.3	7
166	High-precision shock equation of state measurements for metallic fluid carbon between 15 and 20 Mbar. Physics of Plasmas, 2020, 27, .	1.9	7
167	Development of high power laser platforms to study metal ejecta interactions. AIP Conference Proceedings, 2020, , .	0.4	7
168	Measurements of pressure-induced <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>K</mml:mi><mml:mi>Î²</mml:mi></mml:mrow></mml:m line shifts in ramp compressed cobalt up to 8 Mbar. Physical Review E, 2020, 101, 023204.	2.4	7
169	Femtosecond Xâ€Ray Diffraction of Laserâ€Shocked Forsterite (Mg₂SiO₄) to 122ÂGPa. Journal of Geophysical Research: Solid Earth, 2021, 126, .	3.4	7
170	Metastability of Liquid Water Freezing into Ice VII under Dynamic Compression. Physical Review Letters, 2021, 127, 135701.	7.8	7
171	Evidence for Dissociation and Ionization in Shock Compressed Nitrogen to 800ÂGPa. Physical Review Letters, 2022, 129, .	7.8	7
172	Imaging at an x-ray absorption edge using free electron laser pulses for interface dynamics in high energy density systems. Review of Scientific Instruments, 2017, 88, 053501.	1.3	6
173	Quantitative measurements of density in shock-compressed silver up to 330 GPa using x-ray diffraction. Journal of Applied Physics, 2022, 131, .	2.5	6
174	Diamond formation in double-shocked epoxy to 150â€‰GPa. Journal of Applied Physics, 2022, 131, .	2.5	6
175	Reply to â€˜â€˜Comment on â€˜Ruby at high pressure. I. Optical line shifts to 156 GPaâ€™ â€™â€™. Physical Review B, 1990, 42, 9191-9192.	3.2	5
176	EQUATION-OF-STATE MEASUREMENTS IN Ta[sub 2]O[sub 5] AEROGEL. AIP Conference Proceedings, 2008, , .	0.4	5
177	Shock Experiments on Pre-Compressed Fluid Helium. , 2009, , .		5
178	Response to Comment on â€œInsulator-metal transition in dense fluid deuteriumâ€• Science, 2019, 363, .	12.6	5
179	Equation-of-state, sound speed, and reshock of shock-compressed fluid carbon dioxide. Physics of Plasmas, 2021, 28, .	1.9	5
180	Picosecond X-Ray Diffraction from Laser-Shocked Copper and Iron. AIP Conference Proceedings, 2006, , .	0.4	4

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181	MEASUREMENTS OF THE RELEASE OF ALPHA QUARTZ: A NEW STANDARD FOR IMPEDANCE-MATCHING EXPERIMENTS. AIP Conference Proceedings, 2008, , .	0.4	4
182	Internal target reflections and line-imaging velocimetry. High Energy Density Physics, 2014, 11, 26-29.	1.5	4
183	Ramp compression of magnesium oxide to 234 GPa. Journal of Physics: Conference Series, 2014, 500, 062002.	0.4	4
184	Conceptual design for time-resolved x-ray diffraction in a single laser-driven compression experiment. AIP Conference Proceedings, 2018, , .	0.4	4
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