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	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
2	Measuring the melting curve of iron at super-Earth core conditions. Science, 2022, 375, 202-205.	12.6	39
3	Diamond formation in double-shocked epoxy to 150â€‰GPa. Journal of Applied Physics, 2022, 131, .	2.5	6
4	Structure and density of silicon carbide to 1.5 TPa and implications for extrasolar planets. Nature Communications, 2022, 13, 2260.	12.8	11
5	Structural complexity in ramp-compressed sodium to 480â€‰GPa. Nature Communications, 2022, 13, 2534.	12.8	14
6	Evidence for Dissociation and Ionization in Shock Compressed Nitrogen to 800ÂGPa. Physical Review Letters, 2022, 129, .	7.8	7
7	Development of slurry targets for high repetition-rate x-ray free electron laser experiments. Journal of Applied Physics, 2022, 131, .	2.5	3
8	Femtosecond Xâ€Ray Diffraction of Laserâ€Shocked Forsterite (Mg₂SiO₄) to 122ÂGPa. Journal of Geophysical Research: Solid Earth, 2021, 126, .	3.4	7
9	Metastability of diamond ramp-compressed to 2 terapascals. Nature, 2021, 589, 532-535.	27.8	79
10	Implications of the iron oxide phase transition on the interiors of rocky exoplanets. Nature Geoscience, 2021, 14, 121-126.	12.9	28
11	Equation-of-state, sound speed, and reshock of shock-compressed fluid carbon dioxide. Physics of Plasmas, 2021, 28, .	1.9	5
12	Shock-compressed silicon: Hugoniot and sound speed up to 2100 GPa. Physical Review B, 2021, 103, .	3.2	13
13	Interferometric measurements of refractive index and dispersion at high pressure. Scientific Reports, 2021, 11, 5610.	3.3	9
14	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
15	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
16	Evidence of hydrogenâ^'helium immiscibility at Jupiter-interior conditions. Nature, 2021, 593, 517-521.	27.8	41
17	Radiographic areal density measurements on the OMEGA EP laser system. Review of Scientific Instruments, 2021, 92, 053901.	1.3	4
18	Shock-ramp analysis test problem. Journal of Applied Physics, 2021, 129, .	2.5	2

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19	Polymorphism of gold under laser-based ramp compression to 690 GPa. Physical Review B, 2021, 103, .	3.2	11
20	Long duration x-ray source development for x-ray diffraction at the National Ignition Facility. Review of Scientific Instruments, 2021, 92, 053904.	1.3	3
21	Melting of Tantalum at Multimegabar Pressures on the Nanosecond Timescale. Physical Review Letters, 2021, 126, 255701.	7.8	11
22	Establishing gold and platinum standards to 1 terapascal using shockless compression. Science, 2021, 372, 1063-1068.	12.6	53
23	Techniques for studying materials under extreme states of high energy density compression. Physics of Plasmas, 2021, 28, 060901.	1.9	3
24	In situ visualization of long-range defect interactions at the edge of melting. Science Advances, 2021, 7, .	10.3	23
25	A theoretical approach for transient shock strengthening in high-energy-density laser compression experiments. Physics of Plasmas, 2021, 28, 082708.	1.9	1
26	Metastability of Liquid Water Freezing into Ice VII under Dynamic Compression. Physical Review Letters, 2021, 127, 135701.	7.8	7
27	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
28	Experimental Observations of Laser-Driven Tin Ejecta Microjet Interactions. Physical Review Letters, 2021, 127, 155002.	7.8	9
29	Toward a 3D Velocity Interferometer Testbed: Early Results. , 2021, , .		0
30	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	16
31	High-precision shock equation of state measurements for metallic fluid carbon between 15 and 20 Mbar. Physics of Plasmas, 2020, 27, .	1.9	7
32	Recovery of a high-pressure phase formed under laser-driven compression. Physical Review B, 2020, 102, .	3.2	14
33	Development of high power laser platforms to study metal ejecta interactions. AIP Conference Proceedings, 2020, , .	0.4	7
34	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
35	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
36	Structure of boron carbide under laser-based shock-compression at 51 GPa. AIP Conference Proceedings, 2020, , .	0.4	1

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37	Hydrodynamic computations of high-power laser drives generating metal ejecta jets from surface grooves. Journal of Applied Physics, 2020, 128, .	2.5	8
38	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
39	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 line shifts in ramp compressed cobalt up to 8 Mbar. Physical Review E, 2020, 101, 023204.	2.1	7
40	Probing the Solid Phase of Noble Metal Copper at Terapascal Conditions. Physical Review Letters, 2020, 124, 015701.	7.8	43
41	Recreating Giants Impacts in the Laboratory: Shock Compression of Bridgmanite to 14 Mbar. Geophysical Research Letters, 2020, 47, e2019GL085476.	4.0	19
42	X-ray diffraction at the National Ignition Facility. Review of Scientific Instruments, 2020, 91, 043902.	1.3	42
43	Optimized continuum x-ray emission from laser-generated plasma. Applied Physics Letters, 2020, 117, .	3.3	12
44	Shock-wave study of the metallization of alkali halides up to 400â€…GPa. AIP Conference Proceedings, 2020, , .	0.4	0
45	Hydrodynamic and atomistic studies in support of high power laser experiments for metal ejecta recollection and interactions. AIP Conference Proceedings, 2020, , .	0.4	0
46	Measurement of Body-Centered Cubic Gold and Melting under Shock Compression. Physical Review Letters, 2019, 123, 045701.	7.8	67
47	Identification of Phase Transitions and Metastability in Dynamically Compressed Antimony Using Ultrafast X-Ray Diffraction. Physical Review Letters, 2019, 122, 255704.	7.8	36
48	Shock Compression of Liquid Deuterium up to 1ÂTPa. Physical Review Letters, 2019, 122, 255702.	7.8	26
49	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
50	Measurement of the sound speed in dense fluid deuterium along the cryogenic liquid Hugoniot. Physics of Plasmas, 2019, 26, .	1.9	10
51	<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:m observation of a phase transition in silicon carbide under shock compression using pulsed x-ray diffraction. Physical Review B, 2019, 99, .	3.2	16
52	Nanosecond X-ray diffraction of shock-compressed superionic water ice. Nature, 2019, 569, 251-255.	27.8	215
53	Developing quartz and molybdenum as impedance-matching standards in the 100-Mbar regime. Physical Review B, 2019, 99, .	3.2	15
54	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

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55	Response to Comment on â€œInsulator-metal transition in dense fluid deuteriumâ€. Science, 2019, 363, .	12.6	5
56	Recovery of metastable dense Bi synthesized by shock compression. Applied Physics Letters, 2019, 114, 120601.	3.3	12
57	Optimized x-ray sources for x-ray diffraction measurements at the Omega Laser Facility. Review of Scientific Instruments, 2019, 90, 125113.	1.3	25
58	Coordination changes in liquid tin under shock compression determined using in situ femtosecond x-ray diffraction. Applied Physics Letters, 2019, 115, .	3.3	22
59	Nonisentropic Release of a Shocked Solid. Physical Review Letters, 2019, 123, 245501.	7.8	11
60	Measuring the shock impedance mismatch between high-density carbon and deuterium at the National Ignition Facility. Physical Review B, 2018, 97, .	3.2	21
61	Crystal structure and equation of state of Fe-Si alloys at super-Earth core conditions. Science Advances, 2018, 4, eaao5864.	10.3	56
62	Equation of state of iron under core conditions of large rocky exoplanets. Nature Astronomy, 2018, 2, 452-458.	10.1	71
63	Experimental evidence for superionic water ice using shock compression. Nature Physics, 2018, 14, 297-302.	16.7	165
64	Femtosecond diffraction studies of solid and liquid phase changes in shock-compressed bismuth. Scientific Reports, 2018, 8, 16927.	3.3	33
65	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
66	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
67	Conceptual design for time-resolved x-ray diffraction in a single laser-driven compression experiment. AIP Conference Proceedings, 2018, , .	0.4	4
68	X-ray diffraction of ramp-compressed aluminum to 475â€‰GPa. Physics of Plasmas, 2018, 25, .	1.9	17
69	Insulator-metal transition in dense fluid deuterium. Science, 2018, 361, 677-682.	12.6	108
70	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
71	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
72	An iterative forward analysis technique to determine the equation of state of dynamically compressed materials. Journal of Applied Physics, 2017, 121, .	2.5	13

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73	Measurement of Body-Centered-Cubic Aluminum at 475ÂGPa. Physical Review Letters, 2017, 119, 175702.	7.8	37
74	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
75	X-ray source development for EXAFS measurements on the National Ignition Facility. Review of Scientific Instruments, 2017, 88, 083907.	1.3	22
76	Hugoniot and release measurements in diamond shocked up to 26 Mbar. Physical Review B, 2017, 95, .	3.2	32
77	Ghost fringe removal techniques using Lissajous data presentation. AIP Conference Proceedings, 2017, , .	0.4	1
78	TARDIS-C: A target diagnostic for measuring material structure at high pressure. Journal of Physics: Conference Series, 2016, 717, 012115.	0.4	3
79	Ghost fringe removal techniques using Lissajous data presentation. Review of Scientific Instruments, 2016, 87, 033106.	1.3	7
80	Absolute calibration of the OMEGA streaked optical pyrometer for temperature measurements of compressed materials. Review of Scientific Instruments, 2016, 87, 114903.	1.3	34
81	Inelastic response of silicon to shock compression. Scientific Reports, 2016, 6, 24211.	3.3	24
82	X-ray diffraction of molybdenum under ramp compression to 1 TPa. Physical Review B, 2016, 94, .	3.2	33
83	Dynamic compression of copper to over 450 GPa: A high-pressure standard. Physical Review B, 2016, 93, .	3.2	50
84	X-ray diffraction of molybdenum under shock compression to 450 GPa. Physical Review B, 2015, 92, .	3.2	38
85	Direct Observation of Melting in Shock-Compressed Bismuth With Femtosecond X-ray Diffraction. Physical Review Letters, 2015, 115, 095701.	7.8	64
86	X-Ray Diffraction of Solid Tin to 1.2ÂTPa. Physical Review Letters, 2015, 115, 075502.	7.8	52
87	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
88	Shock compression of stishovite and melting of silica at planetary interior conditions. Science, 2015, 347, 418-420.	12.6	123
89	Single Hit Energy-resolved Laue Diffraction. Review of Scientific Instruments, 2015, 86, 053908.	1.3	3
90	The effect of nearly steady shock waves in ramp compression experiments. Journal of Applied Physics, 2015, 117, 245903.	2.5	13

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91	Ramp compression of tantalum to 330â€‰GPa. High Pressure Research, 2015, 35, 339-354.	1.2	25
92	Ultrafast visualization of crystallization and grain growth in shock-compressed SiO2. Nature Communications, 2015, 6, 8191.	12.8	106
93	Single photon energy dispersive x-ray diffraction. Review of Scientific Instruments, 2014, 85, 033906.	1.3	11
94	X-ray area backlighter development at the National Ignition Facility (invited). Review of Scientific Instruments, 2014, 85, 11D502.	1.3	22
95	Ramp compression of diamond to five terapascals. Nature, 2014, 511, 330-333.	27.8	195
96	Internal target reflections and line-imaging velocimetry. High Energy Density Physics, 2014, 11, 26-29.	1.5	4
97	Ramp compression of magnesium oxide to 234 GPa. Journal of Physics: Conference Series, 2014, 500, 062002.	0.4	4
98	Solid Iron Compressed Up to 560 GPa. Physical Review Letters, 2013, 111, 065501.	7.8	137
99	Heterogeneous flow and brittle failure in shock-compressed silicon. Journal of Applied Physics, 2013, 114, .	2.5	23
100	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
101	Ramp compression of iron to 273 GPa. Journal of Applied Physics, 2013, 114, .	2.5	49
102	A novel approach to Hugoniot measurements utilizing transparent crystals. Journal of Applied Physics, 2013, 114, .	2.5	31
103	Nuclear imaging of the fuel assembly in ignition experiments. Physics of Plasmas, 2013, 20, 056320.	1.9	65
104	Experimental evidence for a phase transition in magnesium oxide at exoplanet pressures. Nature Geoscience, 2013, 6, 926-929.	12.9	170
105	Time-dependence of the alpha to epsilon phase transformation in iron. Journal of Applied Physics, 2013, 114, .	2.5	75
106	Progress toward ignition at the National Ignition Facility. Plasma Physics and Controlled Fusion, 2013, 55, 124015.	2.1	23
107	Ignition tuning for the National Ignition Campaign. EPJ Web of Conferences, 2013, 59, 01003.	0.3	1
108	Lithographically fabricated gratings for the interferometric measurement of material shear moduli under extreme conditions. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 06F306.	1.2	3

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109	Probing dynamic material strength using in situ x-ray diffraction. , 2012, , .		2
110	Assembly of High-Areal-Density Deuterium-Tritium Fuel from Indirectly Driven Cryogenic Implosions. Physical Review Letters, 2012, 108, 215005.	7.8	57
111	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
112	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
113	Powder diffraction from solids in the terapascal regime. Review of Scientific Instruments, 2012, 83, 113904.	1.3	84
114	Plasma-accelerated flyer-plates for equation of state studies. Review of Scientific Instruments, 2012, 83, 073504.	1.3	12
115	Phase Transformations and Metallization of Magnesium Oxide at High Pressure and Temperature. Science, 2012, 338, 1330-1333.	12.6	156
116	Implosion dynamics measurements at the National Ignition Facility. Physics of Plasmas, 2012, 19, .	1.9	125
117	MASS-RADIUS RELATIONSHIPS FOR EXOPLANETS. Astrophysical Journal, 2012, 744, 59.	4.5	134
118	Orientation and rate dependence in high strain-rate compression of single-crystal silicon. Physical Review B, 2012, 86, .	3.2	28
119	Shock timing experiments on the National Ignition Facility: Initial results and comparison with simulation. Physics of Plasmas, 2012, 19, .	1.9	115
120	Extended data set for the equation of state of warm dense hydrogen isotopes. Physical Review B, 2012, 86, .	3.2	95
121	Shock vaporization of silica and the thermodynamics of planetary impact events. Journal of Geophysical Research, 2012, 117, .	3.3	91
122	Progress in the indirect-drive National Ignition Campaign. Plasma Physics and Controlled Fusion, 2012, 54, 124026.	2.1	38
123	Evidence for a Phase Transition in Silicate Melt at Extreme Pressure and Temperature Conditions. Physical Review Letters, 2012, 108, 065701.	7.8	61
124	Precision Shock Tuning on the National Ignition Facility. Physical Review Letters, 2012, 108, 215004.	7.8	83
125	Index of refraction of shock-released materials. Journal of Applied Physics, 2011, 110, 083509.	2.5	12
126	High strain-rate plastic flow in Al and Fe. Journal of Applied Physics, 2011, 110, .	2.5	110

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127	Refractive index of lithium fluoride ramp compressed to 800 GPa. Journal of Applied Physics, 2011, 109, .	2.5	58
128	The direct measurement of ablation pressure driven by 351-nm laser radiation. Journal of Applied Physics, 2011, 110, .	2.5	43
129	Strength effects in diamond under shock compression from 0.1 to 1 TPa. Physical Review B, 2010, 81, .	3.2	87
130	Melting temperature of diamond at ultrahighÂpressure. Nature Physics, 2010, 6, 40-43.	16.7	210
131	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
132	Insulator-to-Conducting Transition in Dense Fluid Helium. Physical Review Letters, 2010, 104, 184503.	7.8	93
133	Laser-driven single shock compression of fluid deuterium from 45 to 220 GPa. Physical Review B, 2009, 79, .	3.2	138
134	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
135	Diamond spheres for inertial confinement fusion. Nuclear Fusion, 2009, 49, 112001.	3.5	94
136	Shock Experiments on Pre-Compressed Fluid Helium. , 2009, , .		5
137	Large elastic wave amplitude and attenuation in shocked pure aluminum. Journal of Applied Physics, 2009, 105, .	2.5	39
138	Diamond at 800ÂGPa. Physical Review Letters, 2009, 102, 075503.	7.8	155
139	Recreating core states of giant planets in the laboratory. , 2009, , .		0
140	TOWN HALL MEETINGâ€”SCCM 2009. , 2009, , .		1
141	MEASUREMENTS OF THE RELEASE OF ALPHA QUARTZ: A NEW STANDARD FOR IMPEDANCE-MATCHING EXPERIMENTS. AIP Conference Proceedings, 2008, , .	0.4	4
142	High-precision measurements of the diamond Hugoniot in and above the melt region. Physical Review B, 2008, 78, .	3.2	82
143	Hugoniot Data for Helium in the Ionization Regime. Physical Review Letters, 2008, 100, 124503.	7.8	103
144	Ultrafast Dynamic Compression Technique to Study the Kinetics of Phase Transformations in Bismuth. Physical Review Letters, 2008, 101, 065701.	7.8	57

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145	RAMP WAVE STRESS-DENSITY MEASUREMENTS OF TA AND W. AIP Conference Proceedings, 2008, , .	0.4	9
146	NEW OPTICAL DIAGNOSTICS FOR EQUATION OF STATE EXPERIMENTS ON THE JANUS LASER. AIP Conference Proceedings, 2008, , .	0.4	2
147	EQUATION-OF-STATE MEASUREMENTS IN Ta[sub 2]O[sub 5] AEROGEL. AIP Conference Proceedings, 2008, , .	0.4	5
148	Quasi-isentropic material property studies at extreme pressures: from omega to NIF. Journal of Physics: Conference Series, 2008, 112, 042024.	0.4	11
149	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
150	High planarity x-ray drive for ultrafast shockless-compression experiments. Physics of Plasmas, 2007, 14, 057105.	1.9	27
151	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
152	Streaked optical pyrometer system for laser-driven shock-wave experiments on OMEGA. Review of Scientific Instruments, 2007, 78, 034903.	1.3	143
153	Stiff Response of Aluminum under Ultrafast Shockless Compression to 110ÂGPA. Physical Review Letters, 2007, 98, 065701.	7.8	87
154	Laser-shock compression of diamond and evidence of a negative-slope melting curve. Nature Materials, 2007, 6, 274-277.	27.5	98
155	The first target experiments on the National Ignition Facility. European Physical Journal D, 2007, 44, 273-281.	1.3	11
156	Modeling Planetary Interiors in Laser Based Experiments Using Shockless Compression. Astrophysics and Space Science, 2007, 307, 285-289.	1.4	10
157	Modeling Planetary Interiors in Laser Based Experiments Using Shockless Compression. , 2007, , 285-289.		0
158	Dissociation of Liquid Silica at High Pressures and Temperatures. Physical Review Letters, 2006, 97, 025502.	7.8	158
159	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
160	X-ray preheating of window materials in direct-drive shock-wave timing experiments. Physics of Plasmas, 2006, 13, 122702.	1.9	29
161	Picosecond x-ray diffraction studies of shocked single crystals. , 2006, , .		0
162	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

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163	Laser-driven shock experiments on precompressed water: Implications for â€œicyâ€•giant planets. Journal of Chemical Physics, 2006, 125, 014701.	3.0	77
164	Shock Induced Î±-Îµ Phase Change in Iron: Analysis of MD Simulations and Experiment. AIP Conference Proceedings, 2006, , .	0.4	2
165	Direct Observation of the Î±-Îµ Transition in Shocked Single Crystal Iron. AIP Conference Proceedings, 2006, , .	0.4	0
166	Picosecond X-Ray Diffraction from Laser-Shocked Copper and Iron. AIP Conference Proceedings, 2006, , .	0.4	4
167	The first experiments on the national ignition facility. European Physical Journal Special Topics, 2006, 133, 43-45.	0.2	1
168	Laser driven quasi-isentropic compression experiments (ICE) for dynamically loading materials at high strain rates. European Physical Journal Special Topics, 2006, 134, 529-534.	0.2	0
169	Imaging VISAR diagnostic for the National Ignition Facility (NIF). , 2005, , .		14
170	Shock compression of quartz in the high-pressure fluid regime. Physics of Plasmas, 2005, 12, 082702.	1.9	89
171	EXAFS Measurement of Iron bcc-to-hcp Phase Transformation in Nanosecond-Laser Shocks. Physical Review Letters, 2005, 95, 075501.	7.8	106
172	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
173	Direct Observation of theÎ±â^'ÎµTransition in Shock-Compressed Iron via Nanosecond X-Ray Diffraction. Physical Review Letters, 2005, 95, 075502.	7.8	270
174	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
175	Properties of fluid deuterium under double-shock compression to several Mbar. Physics of Plasmas, 2004, 11, L49-L52.	1.9	58
176	Shock Compressing Diamond to a Conducting Fluid. Physical Review Letters, 2004, 93, 195506.	7.8	81
177	High pressures generated by laser driven shocks: applications to planetary physics. Nuclear Fusion, 2004, 44, S208-S214.	3.5	30
178	Electronic conduction in shock-compressed water. Physics of Plasmas, 2004, 11, L41-L44.	1.9	96
179	Coupling static and dynamic compressions: first measurements in dense hydrogen. High Pressure Research, 2004, 24, 25-31.	1.2	96
180	Shock-Induced Transformation ofAl2O3and LiF into Semiconducting Liquids. Physical Review Letters, 2003, 91, 035502.	7.8	97

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181	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
182	Ortho-para conversion of hydrogen at high pressures. Physical Review B, 2002, 66, .	3.2	10
183	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
184	Structure of liquid water at high pressures and temperatures. Journal of Physics Condensed Matter, 2002, 14, 11385-11394.	1.8	17
185	Computations of Vibron Excitations and Raman Spectra of Solid Hydrogens. Journal of Low Temperature Physics, 2001, 122, 389-399.	1.4	1
186	Inexpensive wooden-ball models for close-packed crystal structures. American Journal of Physics, 2000, 68, 1061-1063.	0.7	2
187	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
188	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
189	Spectroscopic Studies of p-H2 to Above 200 GPa. Journal of Low Temperature Physics, 1998, 110, 75-88.	1.4	21
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