

# Isaac F Silvera

## List of Publications by Year in descending order

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3398  
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#	ARTICLE	IF	CITATIONS
1	Reflectance of rhenium as a function of pressure in a diamond anvil cell. Applied Physics Letters, 2022, 120, .	3.3	1
2	The High-Pressure Search for Metallic Hydrogen. Inference, 2022, 6, .	0.0	0
3	Phases of the hydrogen isotopes under pressure: metallic hydrogen. Advances in Physics: X, 2021, 6, .	4.1	5
4	Metallic Hydrogen. Inference, 2021, 6, .	0.0	0
5	Finite-element simulation of the liquid-liquid transition to metallic hydrogen. Physical Review B, 2019, 100, .	3.2	8
6	Quantum phase transition in solid hydrogen at high pressure. Physical Review B, 2019, 100, .	3.2	19
7	Striking isotope effect on the metallization phase lines of liquid hydrogen and deuterium. Physical Review B, 2018, 98, .	3.2	19
8	Metallic hydrogen. Journal of Physics Condensed Matter, 2018, 30, 254003.	1.8	21
9	Observation of the Wigner-Huntington transition to metallic hydrogen. Science, 2017, 355, 715-718.	12.6	438
10	Metallic Hydrogen. Journal of Low Temperature Physics, 2017, 187, 4-19.	1.4	2
11	The Creation of Long-Lived Multielectron Bubbles in Superfluid Helium. Journal of Low Temperature Physics, 2017, 187, 54-61.	1.4	6
12	Conductivity and dissociation in liquid metallic hydrogen and implications for planetary interiors. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11873-11877.	7.1	41
13	Response to Comment on "Observation of the Wigner-Huntington transition to metallic hydrogen". Science, 2017, 357, .	12.6	15
14	Response to Comment on "Observation of the Wigner-Huntington transition to metallic hydrogen". Science, 2017, 357, .	12.6	15
15	Reply to "Comment on "Evidence of a first-order phase transition to metallic hydrogen" ". Physical Review B, 2017, 96, .	3.2	1
16	Reply to "Comment on "Evidence of a first-order phase transition to metallic hydrogen" ". Physical Review B, 2017, 96, .	3.2	2
17	New Phases and Dissociation-Recombination of Hydrogen Deuteride to 3.4 Mbar. Physical Review Letters, 2016, 116, 145501.	7.8	22
18	Evidence of a first-order phase transition to metallic hydrogen. Physical Review B, 2016, 93, .	3.2	118

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19	Evidence of a liquid-liquid phase transition in hot dense hydrogen. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8040-8044.	7.1	92
20	Novel methods to create multielectron bubbles in superfluid helium. Review of Scientific Instruments, 2011, 82, 033904.	1.3	11
21	Nanoshells as a high-pressure gauge analyzed to 200 GPa. Journal of Applied Physics, 2011, 110, .	2.5	3
22	Pressure distribution in a quasi-hydrostatic pressure medium: A finite element analysis. Journal of Applied Physics, 2011, 110, .	2.5	6
23	The insulator-metal transition in hydrogen. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12743-12744.	7.1	17
24	Molten under pressure. Nature Physics, 2010, 6, 9-10.	16.7	7
25	Metallic hydrogen: The most powerful rocket fuel yet to exist. Journal of Physics: Conference Series, 2010, 215, 012194.	0.4	20
26	Thermionic emission and a novel electron collector in a liquid helium environment. Review of Scientific Instruments, 2009, 80, 043901.	1.3	15
27	Strategy and enhanced temperature determination in a laser heated diamond anvil cell. Journal of Applied Physics, 2009, 105, .	2.5	14
28	Melting Line of Hydrogen at High Pressures. Physical Review Letters, 2008, 100, 155701.	7.8	121
29	Conceptual Launch Vehicles Using Metallic Hydrogen Propellant. AIP Conference Proceedings, 2008, , .	0.4	5
30	Electron Emission in Superfluid and Low Temperature Vapor Phase Helium. Physical Review Letters, 2008, 100, 117602.	7.8	7
31	Calibration of the ruby pressure scale to 150 GPa. Physica Status Solidi (B): Basic Research, 2007, 244, 460-467.	1.5	30
32	The c-DAC: A novel cubic diamond anvil cell with large sample volume/area and multidirectional optics. Review of Scientific Instruments, 2006, 77, 115105.	1.3	8
33	Megabar-Pressure Infrared Study of Hydrogen Deuteride. Physical Review Letters, 2006, 97, 255701.	7.8	9
34	Multielectron Bubbles in Helium and Wigner Crystallization. Journal of Low Temperature Physics, 2005, 139, 495-502.	1.4	1
35	Pulsed laser heating and temperature determination in a diamond anvil cell. Review of Scientific Instruments, 2005, 76, 125104.	1.3	35
36	The ruby pressure standard to 150GPa. Journal of Applied Physics, 2005, 98, 114905.	2.5	231

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37	High-pressure equations of state of Al, Cu, Ta, and W. <i>Journal of Applied Physics</i> , 2005, 98, 073526.	2.5	84
38	Properties of the spherical 2D electron system in a multielectron bubble in liquid helium. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2004, 22, 771-774.	2.7	3
39	Impurity proton NMR signals from common $\alpha$ -proton-free laboratory materials. <i>Journal of Magnetic Resonance</i> , 2003, 162, 417-422.	2.1	6
40	Temperature determination for nanosecond pulsed laser heating. <i>Review of Scientific Instruments</i> , 2003, 74, 3820-3825.	1.3	45
41	Adhesives for highly polished surfaces and low temperature: A simple test and results. <i>Review of Scientific Instruments</i> , 2002, 73, 2108-2114.	1.3	3
42	Effect of Pressure on Statics, Dynamics, and Stability of Multielectron Bubbles. <i>Physical Review Letters</i> , 2001, 87, 275301.	7.8	65
43	X-ray-induced thinning of $^3\text{He}$ and $^3\text{He}/^4\text{He}$ mixture films. <i>Physical Review B</i> , 2000, 62, 9641-9647.	3.2	2
44	$^4\text{He}$ liquid-vapor interface below 1 K studied using x-ray reflectivity. <i>Physical Review B</i> , 2000, 62, 9621-9640.	3.2	30
45	The double-diamond anvil cell, the poor-man's megabar pressure cell. <i>Review of Scientific Instruments</i> , 1999, 70, 4609-4611.	1.3	7
46	A High Pressure Study of Ortho-para Conversion in Hydrogen by NMR. <i>Journal of Low Temperature Physics</i> , 1998, 113, 711-716.	1.4	2
47	Spin-polarized Hydrogen in a High Field Trap: Towards a Two-Component Bose Gas. <i>Journal of Low Temperature Physics</i> , 1998, 113, 211-216.	1.4	4
48	The Validity of Ortho and Para States of Hydrogen at Megabar Pressures. <i>Journal of Low Temperature Physics</i> , 1998, 112, 237-250.	1.4	9
49	NMR Study of Ortho-Para Conversion at High Pressure in Hydrogen. <i>Physical Review Letters</i> , 1998, 81, 4180-4183.	7.8	55
50	Hydrogen at megabar pressures and the importance of ortho-para concentration. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 11169-11177.	1.8	4
51	Nuclear magnetic resonance in a diamond anvil cell at very high pressures. <i>Review of Scientific Instruments</i> , 1998, 69, 479-484.	1.3	36
52	Index of refraction, polarizability, and equation of state of solid molecular hydrogen. <i>Physical Review B</i> , 1998, 57, 14105-14109.	3.2	35
53	The Ruby Scale at Megabar Pressures. <i>Materials Research Society Symposia Proceedings</i> , 1997, 499, 265.	0.1	1
54	Investigations of possible metallic and critical behavior in the solid hydrogens at megabar pressures. <i>Journal of Non-Crystalline Solids</i> , 1996, 205-207, 290-294.	3.1	2

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55	Extended Infrared Studies of High Pressure Hydrogen. <i>Physical Review Letters</i> , 1996, 76, 1663-1666.	7.8	88
56	Excitation of ruby fluorescence at multimegabar pressures. <i>Review of Scientific Instruments</i> , 1996, 67, 4275-4278.	1.3	26
57	X-ray induced electrostatic charging of helium films. <i>Journal of Low Temperature Physics</i> , 1995, 101, 489-494.	1.4	1
58	Ultra-sensitive bolometers for atomic hydrogen detection. <i>Journal of Low Temperature Physics</i> , 1995, 101, 555-559.	1.4	0
59	The quest for Bose-Einstein condensation in atomic hydrogen. <i>Journal of Low Temperature Physics</i> , 1995, 101, 49-58.	1.4	9
60	Infrared Properties of Ortho and Mixed Crystals of Solid Deuterium at Megabar Pressures and the Question of Metallization in the Hydrogens. <i>Physical Review Letters</i> , 1995, 74, 4011-4014.	7.8	32
61	Excitations, order parameters, and phase diagram of solid deuterium at megabar pressures. <i>Physical Review B</i> , 1995, 51, 14987-14997.	3.2	50
62	Nonlocal distribution of the recombination energy in spin-polarized atomic hydrogen. <i>Physical Review B</i> , 1994, 50, 9339-9343.	3.2	7
63	Megabar pressure triple point in solid deuterium. <i>Physical Review Letters</i> , 1994, 72, 3048-3051.	7.8	40
64	Demonstration of neutral atom trapping with microwaves. <i>Physical Review Letters</i> , 1994, 72, 3162-3165.	7.8	65
65	Comment on "The weakest bond: Experimental observation of helium dimer" [J. Chem. Phys. 98, 3564 (1993)]. <i>Journal of Chemical Physics</i> , 1994, 100, 4021-4022.	3.0	25
66	Novel technique for producing ultracold He4 beams. <i>Physical Review Letters</i> , 1993, 70, 908-911.	7.8	12
67	Surface-state hydrogen maser. <i>Physical Review A</i> , 1993, 48, 3921-3929.	2.5	2
68	Remarkable high pressure phase line of orientational order in solid hydrogen deuteride. <i>Physical Review Letters</i> , 1993, 71, 3814-3817.	7.8	56
69	X-ray specular-reflectivity study of the liquid-vapor density profile of He4. <i>Physical Review B</i> , 1993, 48, 9644-9659.	3.2	43
70	Pressure dependence of the vibron in H2, HD, and D2: Implications for inter- and intramolecular forces. <i>Physical Review B</i> , 1993, 48, 12613-12619.	3.2	28
71	Cold collisions of ground state He4: Giant S-wave scattering cross sections. <i>Physical Review Letters</i> , 1993, 71, 1343-1346.	7.8	28
72	X-ray study of pressure-collapsed fullerite. <i>Physical Review B</i> , 1993, 48, 8474-8475.	3.2	18

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73	Demonstration of the microwave trap for cesium atoms. AIP Conference Proceedings, 1993, , .	0.4	0
74	Heat transport via evaporation of superfluid helium films: Giant effective Kapitza resistance. Physical Review Letters, 1992, 68, 3068-3071.	7.8	9
75	Gap reduction and the collapse of solid C <sub>60</sub> to a new phase of carbon under pressure. Physical Review Letters, 1992, 69, 466-469.	7.8	118
76	Pressure dependence of the vibron modes in solid hydrogen and deuterium. Physical Review B, 1992, 46, 5791-5794.	3.2	26
77	Dielectric properties of solid molecular hydrogen at high pressure. Physical Review B, 1992, 45, 9709-9715.	3.2	16
78	Measurement of a hyperfine-induced spin-exchange frequency shift in atomic hydrogen. Physical Review A, 1992, 46, 2495-2512.	2.5	18
79	Liquid-vapor density profile of helium: An x-ray study. Physical Review Letters, 1992, 68, 2628-2631.	7.8	72
80	Spin-polarized hydrogen: A weakly interacting boson gas. Journal of Low Temperature Physics, 1992, 87, 343-374.	1.4	10
81	Prospects for Bose-Einstein condensation in atomic hydrogen and other gases. Journal of Low Temperature Physics, 1992, 89, 287-296.	1.4	4
82	Measurements of giant cross sections in low temperature <sup>4</sup> He- <sup>4</sup> He scattering. Journal of Low Temperature Physics, 1992, 89, 569-572.	1.4	8
83	A novel magnetic trap for spin-polarized hydrogen. Journal of Low Temperature Physics, 1992, 89, 703-706.	1.4	2
84	A hybrid microwave-static magnetic trap for spin-polarized hydrogen. Physica B: Condensed Matter, 1991, 169, 449-450.	2.7	8
85	X-ray specular reflectivity of the <sup>4</sup> He liquid-vapor interface. Physica B: Condensed Matter, 1991, 169, 507-508.	2.7	3
86	The insulator-metal transition in molecular hydrogen and the three-state Potts model. Physica B: Condensed Matter, 1991, 169, 551-552.	2.7	1
87	Density dependence of the intramolecular distance in solid H <sub>2</sub> : A. Spectroscopic determination. Physical Review B, 1991, 43, 10191-10196.	3.2	55
88	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
89	Absorption and reflectance in hydrogen up to 230 GPa: Implications for metallization. Physical Review Letters, 1991, 66, 193-196.	7.8	71
90	Third sound of helium on a hydrogen substrate. Physical Review B, 1991, 44, 12453-12462.	3.2	29

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91	Test of the linearity of quantum mechanics in an atomic system with a hydrogen maser. Physical Review Letters, 1990, 64, 2599-2602.	7.8	51
92	Order parameter and a critical point on the megabar-pressure hydrogen-A phase line. Physical Review Letters, 1990, 65, 1901-1904.	7.8	32
93	Orientalional phase transitions in hydrogen at megabar pressures. Physical Review Letters, 1990, 64, 1939-1942.	7.8	113
94	Observation of the $J=4$ roton band in solid deuterium under pressure. Physical Review Letters, 1990, 65, 2677-2679.	7.8	3
95	Deuterated palladium at temperatures from 4.3 to 400 K and pressures to 105 kbar: Search for cold fusion. Physical Review B, 1990, 42, 9143-9146.	3.2	7
96	Reply to "Comment on "Ruby at high pressure. I. Optical line shifts to 156 GPa". Physical Review B, 1990, 42, 9191-9192.	3.2	8
97	Nonlinear quantum mechanics for systems of composite spin. Physical Review A, 1990, 42, 63-68.	2.5	2
98	Evidence for Band Overlap Metallization of Hydrogen. Science, 1990, 247, 863-863.	12.6	0
99	Ruby at high pressure. II. Fluorescence lifetime of the R1 line to 130 GPa. Physical Review B, 1989, 40, 5733-5738.	3.2	54
100	Ruby at high pressure. I. Optical line shifts to 156 GPa. Physical Review B, 1989, 40, 5724-5732.	3.2	120
101	Optical Evidence for the Metallization of Xenon at 132(5) GPa. Physical Review Letters, 1989, 62, 665-668.	7.8	164
102	Trapping of neutral atoms with resonant microwave radiation. Physical Review Letters, 1989, 62, 2361-2364.	7.8	68
103	Evidence for a structural phase transition in solid hydrogen at megabar pressures. Physical Review Letters, 1989, 63, 2080-2083.	7.8	124
104	Three-body recombination of spin-polarized atomic hydrogen in very strong magnetic fields. Physical Review B, 1989, 40, 210-223.	3.2	9
105	Eddy current shielding and heating: Reduction of dissipation for very low-temperature experiments in the presence of magnetic field ripple. Review of Scientific Instruments, 1989, 60, 2964-2968.	1.3	11
106	Elimination of pressure-induced fluorescence in diamond anvils. Applied Physics Letters, 1988, 53, 2489-2491.	3.3	25
107	Temperature dependence of resistance of solid hydrogen iodide at high pressure. Journal of Chemical Physics, 1988, 88, 478-480.	3.0	2
108	Pressure dependence of the optical-absorption edge of solid hydrogen in a diamond-anvil cell. Physical Review B, 1988, 37, 6478-6481.	3.2	29

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109	Study of pressure distributions in a megabar diamond indenter cell. Review of Scientific Instruments, 1988, 59, 2583-2591.	1.3	9
110	Spin-polarized hydrogen in high magnetic fields. Physical Review B, 1988, 38, 9231-9234.	3.2	6
111	Equation of state of solid molecular H <sub>2</sub> and D <sub>2</sub> at 5 K. Physical Review B, 1988, 37, 1989-2000.	3.2	85
112	ESR pumping experiments in spin-polarized atomic hydrogen. Physical Review B, 1988, 37, 4831-4838.	3.2	5
113	Magnetic-field dependence of resonance recombination in spin-polarized atomic hydrogen. Physical Review B, 1988, 37, 1520-1524.	3.2	4
114	Vibrational mode frequencies, phase diagram, and optical transmission of solid hydrogen iodide to 25 GPa. Physical Review B, 1987, 36, 9253-9262.	3.2	6
115	A hydrogen maser at temperatures below 1 K. IEEE Transactions on Instrumentation and Measurement, 1987, IM-36, 588-593.	4.7	3
116	Electrical resistance measurements on cryocrystals in a diamond anvil cell to 70 GPa. Review of Scientific Instruments, 1987, 58, 994-996.	1.3	15
117	Semiempirical equation of state of solid hydrogen iodide. Physical Review B, 1987, 36, 9301-9303.	3.2	6
118	Ortho-para dependence of the equation of state and the phonon frequency of solid hydrogen. Physical Review B, 1987, 35, 6649-6658.	3.2	3
119	Spin-Polarized Atomic Hydrogen in Very High Magnetic Fields. Japanese Journal of Applied Physics, 1987, 26, 229.	1.5	3
120	Cooling of a Gas of Atomic Hydrogen with Microwave Radiation. Japanese Journal of Applied Physics, 1987, 26, 245.	1.5	2
121	Equation of state of solid He <sub>4</sub> . Physical Review B, 1986, 33, 3269-3288.	3.2	73
122	Hydrogen maser at temperatures below 1 K. Physical Review A, 1986, 34, 2550-2553.	2.5	35
123	Spin exchange and dipolar relaxation rates in atomic hydrogen: Lifetimes in magnetic traps. Physical Review B, 1986, 33, 626-628.	3.2	63
124	Improved adhesion of thin conformal organic films to metal surfaces. Review of Scientific Instruments, 1986, 57, 1381-1383.	1.3	38
125	Observation of Metal-insulator and Metal-Metal Transitions in Hydrogen Iodide under Pressure. Physical Review Letters, 1986, 57, 766-769.	7.8	31
126	Transmission line tunnel diode oscillator: A sensitive, fast, and flexible low temperature detection system. Review of Scientific Instruments, 1986, 57, 2842-2847.	1.3	4



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127	Experiments with $\tilde{\epsilon}$ -doubly $\tilde{\epsilon}$ -spin-polarized atomic hydrogen. Physical Review B, 1986, 34, 6172-6182.	3.2	16
128	Interaction of Atomic Hydrogen with Undersaturated Helium Films. Physical Review Letters, 1985, 55, 1311-1314.	7.8	20
129	Roton-phonon mixing in solid hydrogen and deuterium. Physical Review B, 1985, 31, 1352-1358.	3.2	5
130	Compression experiments with spin-polarized atomic hydrogen. Physical Review B, 1985, 32, 5668-5682.	3.2	28
131	Diamond anvil cell and cryostat for low-temperature optical studies. Review of Scientific Instruments, 1985, 56, 121-124.	1.3	113
132	Raman spectra of diamond at high pressures. Physical Review B, 1985, 32, 1423-1425.	3.2	163
133	Ortho-para conversion of solid hydrogen as a function of density. Physical Review B, 1984, 30, 2517-2526.	3.2	31
134	Study of doubly polarized atomic hydrogen by electron-spin resonance. Physical Review B, 1984, 30, 2386-2400.	3.2	6
135	An improved experimental equation of state of solid hydrogen and deuterium. Journal of Low Temperature Physics, 1984, 54, 361-395.	1.4	28
136	The high-pressure equation of state of solid molecular tritium. Journal of Low Temperature Physics, 1984, 54, 565-585.	1.4	2
137	Ultimate fate of a gas of atomic hydrogen in a liquid-helium chamber: Recombination and burial. Physical Review B, 1984, 29, 3899-3904.	3.2	36
138	A model for the determination of the crystal field potential in H <sub>2</sub> and D <sub>2</sub> from high pressure experiments. Physics Letters, Section A: General, Atomic and Solid State Physics, 1983, 99, 97-100.	2.1	2
139	Raman studies of argon dimers in a supersonic expansion. I. Spectroscopy. Physical Review A, 1983, 27, 3008-3018.	2.5	38
140	Compression of Spin-Polarized Hydrogen to High Density. Physical Review Letters, 1983, 51, 479-482.	7.8	56
141	Raman studies of argon dimers in a supersonic expansion. II. Kinetics of dimer formation. Physical Review A, 1983, 27, 3019-3030.	2.5	25
142	Direct Microscopic Study of Doubly Polarized Atomic Hydrogen by Electron-Spin Resonance. Physical Review Letters, 1983, 50, 53-56.	7.8	25
143	Pressure dependence of the optical phonon in solid hydrogen and deuterium up to 230 kbar. Physical Review B, 1983, 27, 5084-5087.	3.2	23
144	Rotational R branch Raman spectroscopy in CO <sub>2</sub> . Journal of Chemical Physics, 1983, 78, 121-123.	3.0	5

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145	Rotational Raman spectroscopy in CO <sub>2</sub> : Reply. Journal of Chemical Physics, 1983, 79, 2491-2491.	3.0	1
146	Pressure dependence of the vibron in solid hydrogen and deuterium up to 600 kbar. Physical Review B, 1982, 26, 4957-4962.	3.2	29
147	State-Dependent Recombination and Suppressed Nuclear Relaxation in Atomic Hydrogen. Physical Review Letters, 1982, 49, 153-157.	7.8	46
148	Ballistic heat pulses in spin-polarized atomic hydrogen to T=200mK. Physical Review B, 1982, 25, 6002-6005.	3.2	13
149	Helium temperature beam source of atomic hydrogen. Review of Scientific Instruments, 1982, 53, 1167-1181.	1.3	67
150	Raman Spectroscopy of Argon Dimers. Physical Review Letters, 1982, 48, 1337-1340.	7.8	29
151	Low-Temperature Equation of State of Molecular Hydrogen and Deuterium to 0.37 Mbar: Implications for Metallic Hydrogen. Physical Review Letters, 1982, 48, 97-100.	7.8	81
152	Atomic hydrogen in an inhomogeneous magnetic field: Density profile and Bose-Einstein condensation. Physical Review B, 1981, 24, 2870-2873.	3.2	165
153	Spin-polarized atomic hydrogen: A magnetic gas (invited). Journal of Applied Physics, 1981, 52, 2304-2308.	2.5	17
154	A stabilised gas of atomic hydrogen. Physics Bulletin, 1981, 32, 352-353.	0.0	0
155	Roton softening in the solid hydrogens. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 84, 28-31.	2.1	31
156	Measurement of Pressure of Gaseous H <sub>2</sub> : Adsorption Energies and Surface Recombination Rates on Helium. Physical Review Letters, 1981, 46, 668-671.	7.8	62
157	New Low-Temperature Phase of Molecular Deuterium at Ultrahigh Pressure. Physical Review Letters, 1981, 47, 39-42.	7.8	144
158	Adsorption Energy and Nuclear Relaxation of H <sub>2</sub> on He <sup>3</sup> -He <sup>4</sup> Mixtures. Physical Review Letters, 1981, 47, 800-803.	7.8	38
159	Density, Magnetization, Compression, and Thermal Leakage of Low-Temperature Atomic Hydrogen. Physical Review Letters, 1980, 44, 168-171.	7.8	39
160	Raman Spectrum of Solid Orthodeuterium to 150 kbar at 5 K. Physical Review Letters, 1980, 44, 456-459.	7.8	20
161	Spin-Polarized Atomic Deuterium: Stabilization, Limitations on Density, and Adsorption Energy on Helium. Physical Review Letters, 1980, 45, 1268-1271.	7.8	55
162	Atomic Hydrogen in Contact with a Helium Surface: Bose Condensation, Adsorption Isotherms, and Stability. Physical Review Letters, 1980, 45, 915-918.	7.8	37

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163	Magnetic Equation of State of a Gas of Spin-Polarized Atomic Hydrogen. Physical Review Letters, 1980, 45, 449-452.	7.8	80
164	Stabilization of Atomic Hydrogen at Low Temperature. Physical Review Letters, 1980, 44, 164-168.	7.8	209
165	The solid molecular hydrogens in the condensed phase: Fundamentals and static properties. Reviews of Modern Physics, 1980, 52, 393-452.	45.6	1,097
166	Anomalous double-peaked one-phonon far infrared absorption in compressed deuterium. Physics Letters, Section A: General, Atomic and Solid State Physics, 1979, 70, 337-340.	2.1	3
167	An atomic beam technique for the study of active solid nitrogen. Physics Letters, Section A: General, Atomic and Solid State Physics, 1979, 73, 119-122.	2.1	5
168	Direct determination of the temperature and density of gaseous atomic hydrogen at low temperature by atomic beam techniques. Physics Letters, Section A: General, Atomic and Solid State Physics, 1979, 74, 193-196.	2.1	10
169	Experimental determination of the equation of state of solid hydrogen and deuterium at high pressures. Journal of Low Temperature Physics, 1979, 34, 255-305.	1.4	46
170	Frequency dependence of Raman-active phonons in solid HCP hydrogen on ortho-para concentration and temperature. Journal of Low Temperature Physics, 1979, 35, 611-625.	1.4	9
171	Far-infrared absorption in solid hydrogen and deuterium in the ordered state as a function of density. Journal of Low Temperature Physics, 1979, 36, 243-278.	1.4	8
172	Orientalional Ordering in Solid Hydrogen: Dependence of Critical Temperature and Concentration on Density. Physical Review Letters, 1979, 43, 377-380.	7.8	19
173	Far-infrared absorption by phonons and librations in solid H <sub>2</sub> and D <sub>2</sub> in the ordered state. Journal of Low Temperature Physics, 1978, 32, 185-219.	1.4	19
174	The libron spectra and conversion as a function of ortho-para concentration in solid H <sub>2</sub> and D <sub>2</sub> . Journal of Low Temperature Physics, 1978, 32, 401-417.	1.4	8
175	Experimental study of spin aligned atomic hydrogen condensed on surfaces. Physics Letters, Section A: General, Atomic and Solid State Physics, 1978, 66, 247-250.	2.1	14
176	The equation of state of solid molecular hydrogen and deuterium. Physics Letters, Section A: General, Atomic and Solid State Physics, 1978, 68, 207-210.	2.1	17
177	The isotropic intermolecular potential for H <sub>2</sub> and D <sub>2</sub> in the solid and gas phases. Journal of Chemical Physics, 1978, 69, 4209-4213.	3.0	560
178	Intracavity Raman Scattering from Molecular Beams: Direct Determination of Local Properties in an Expanding Jet Beam. Physical Review Letters, 1976, 37, 136-140.	7.8	40
179	Inelastic Neutron Scattering and Separation Coefficient of Absorbed Hydrogen: Molecular Alignment and Energy Levels. Physical Review Letters, 1976, 37, 1275-1278.	7.8	64
180	Raman scattering in oriented crystals of paradeuterium and orthohydrogen. Physical Review B, 1975, 12, 753-789.	3.2	44

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181	Raman-Active Optical Phonons in the Hexagonal Phases of Solid H <sub>2</sub> , D <sub>2</sub> , and HD. Physical Review B, 1972, 5, 1578-1586.	3.2	39
182	Precision Frequency Calibrator for Raman Spectrometers. Review of Scientific Instruments, 1972, 43, 58-62.	1.3	11
183	Libron Spectra of Oriented Crystals of Paradeuterium and Orthohydrogen in the Ordered State. Physical Review Letters, 1971, 26, 127-131.	7.8	40
184	Direct Observation of Isolated J=1 Pairs in Solid Deuterium and Hydrogen by Raman Scattering. Physical Review B, 1971, 4, 2724-2733.	3.2	22
185	Mylar Windows for Use at Low Temperatures. Review of Scientific Instruments, 1970, 41, 1513-1514.	1.3	14
186	A Variable Temperature, Variable Path Length Cell for IR Studies of Liquefied and Solidified Gases. Review of Scientific Instruments, 1970, 41, 1592-1594.	1.3	3
187	Observation of Librational Waves in the Ordered State of Solid Hydrogen and Deuterium by Raman Scattering. Physical Review Letters, 1969, 22, 297-300.	7.8	39
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