

# William Evans

## List of Publications by Year in descending order

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74  
papers

2,629  
citations

147801

31  
h-index

189892

50  
g-index

75  
all docs

75  
docs citations

75  
times ranked

2698  
citing authors



#	ARTICLE	IF	CITATIONS
19	Strength and Debye temperature measurements of cerium across the $\hat{I}^3 \hat{\alpha}^1 \hat{I}^{\pm}$ volume collapse: the lattice contribution. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 345401.	1.8	14
20	Magnetism and structural distortions in uranium sulfide under pressure. <i>Physical Review B</i> , 2013, 87, .	3.2	11
21	High-temperature experiments using a resistively heated high-pressure membrane diamond anvil cell. <i>Review of Scientific Instruments</i> , 2013, 84, 095114.	1.3	38
22	A versatile medium-resolution x-ray emission spectrometer for diamond anvil cell applications. <i>Review of Scientific Instruments</i> , 2013, 84, 083908.	1.3	7
23	Inter-tube thermal conductance in carbon nanotubes arrays and bundles: Effects of contact area and pressure. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	59
24	Experimental and theoretical study of Ti-6Al-4V to 220 GPa. <i>Physical Review B</i> , 2012, 85, .	3.2	16
25	X-ray Emission Spectroscopy of Cerium Across the $\hat{I}^3 \hat{\alpha}^1 \hat{I}^{\pm}$ Volume Collapse Transition. <i>Physical Review Letters</i> , 2012, 109, 195705.	7.8	38
26	Time-Resolved Synchrotron X-ray Diffraction on Pulse Laser Heated Iron in Diamond Anvil Cell. <i>Journal of Physics: Conference Series</i> , 2012, 377, 012108.	0.4	5
27	Electronic structure of iron in magnesium silicate glasses at high pressure. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	14
28	electron delocalization and volume collapse in praseodymium metal. <i>Physical Review B</i> , 2012, 85, .	3.2	24
29	Effects of the Fe <sup>3+</sup> spin transition on the properties of aluminous perovskite—New insights for lower-mantle seismic heterogeneities. <i>Earth and Planetary Science Letters</i> , 2011, 310, 293-302.	4.4	84
30	Structural phase transition in vanadium at high pressure and high temperature: Influence of nonhydrostatic conditions. <i>Physical Review B</i> , 2011, 83, .	3.2	43
31	In situ X-ray diffraction study of the $\hat{I}^1$ to $\hat{I}^{\pm}$ isothermal martensitic transformation kinetics in a Pu—Ga alloy. <i>Journal of Nuclear Materials</i> , 2011, 412, 327-333.	2.7	9
32	An Experimental and Theoretical Multi-Mbar Study of Ti-6Al-4V. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1369, 1.	0.1	2
33	Synthesis and characterization of a nanocrystalline diamond aerogel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 8550-8553.	7.1	52
34	Plasma etching of cavities into diamond anvils for experiments at high pressures and high temperatures. <i>High Pressure Research</i> , 2011, 31, 191-198.	1.2	3
35	In situ electrical conductivity and Raman study of C <sub>60</sub> tetragonal polymer at high pressures up to 30 GPa. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 3068-3071.	1.5	6
36	The pressure-temperature phase diagram of URu <sub>2</sub> Si <sub>2</sub> under hydrostatic conditions. <i>Materials Research Society Symposia Proceedings</i> , 2010, 1264, 1.	0.1	0

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37	Diamond anvil cell measurement of high-pressure yield strength of vanadium using <i>in situ</i> thickness determination. <i>Physical Review B</i> , 2010, 81, .	3.2	21
38	High pressure crystal structure of PrN. <i>Journal of Physics: Conference Series</i> , 2010, 215, 012010.	0.4	10
39	Thermal conductivity of carbon nanotube cross-bar structures. <i>Nanotechnology</i> , 2010, 21, 475704.	2.6	18
40	Spin state of ferric iron in MgSiO <sub>3</sub> perovskite and its effect on elastic properties. <i>Earth and Planetary Science Letters</i> , 2010, 289, 68-75.	4.4	129
41	Experimental method for <i>in situ</i> determination of material textures at simultaneous high pressure and high temperature by means of radial diffraction in the diamond anvil cell. <i>Review of Scientific Instruments</i> , 2009, 80, 104501.	1.3	43
42	Ammonium salicylate: a synchrotron study. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2009, 65, o2062-o2062.	0.2	6
43	Atomic structure and phase transformations in Pu alloys. <i>Progress in Materials Science</i> , 2009, 54, 909-943.	32.8	43
44	Intermediate-spin ferrous iron in lowermost mantle post-perovskite and perovskite. <i>Nature Geoscience</i> , 2008, 1, 688-691.	12.9	131
45	Thermal Signatures of the Kondo Volume Collapse in Cerium. <i>Physical Review Letters</i> , 2008, 101, 165703.	7.8	103
46	Raman shift of stressed diamond anvils: Pressure calibration and culet geometry dependence. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	32
47	Pressure-induced loss of electronic interlayer state and metallization in the ionic solid $\text{Li}^{\frac{3}{2}}\text{Mn}^{\frac{8}{7}}$ Experiment and theory. <i>Physical Review B</i> , 2008, 78, .	3.2	8
48	Dynamic pressure-induced dendritic and shock crystal growth of ice VI. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 9178-9181.	7.1	40
49	Transformation of molecular nitrogen to nonmolecular phases at megabar pressures by direct laser heating. <i>Physical Review B</i> , 2007, 76, .	3.2	74
50	Search for superconductivity in LiBCat high pressure: Diamond anvil cell experiments and first-principles calculations. <i>Physical Review B</i> , 2007, 75, .	3.2	24
51	Coherent Anti-Stokes Raman Spectroscopy of Highly Compressed Solid Deuterium at 300 K: Evidence for a New Phase and Implications for the Band Gap. <i>Physical Review Letters</i> , 2007, 98, 235503.	7.8	23
52	Dynamic diamond anvil cell (dDAC): A novel device for studying the dynamic-pressure properties of materials. <i>Review of Scientific Instruments</i> , 2007, 78, 073904.	1.3	81
53	Electrical conductivity of the lower mantle ferropericlase across the electronic spin transition. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	56
54	Six-fold coordinated carbon dioxide VI. <i>Nature Materials</i> , 2007, 6, 34-38.	27.5	120

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55	Pressure-Induced Polymerization of Carbon Monoxide: Disproportionation and Synthesis of an Energetic Lactonic Polymer. <i>Chemistry of Materials</i> , 2006, 18, 2520-2531.	6.7	92
56	Crystallization of water in a dynamic diamond-anvil cell: Evidence for ice VII-like local order in supercompressed water. <i>Physical Review B</i> , 2006, 74, .	3.2	52
57	Pressure-induced antiferroto-antiferro phase transition in lithium oxide. <i>Physical Review B</i> , 2006, 73, .	3.2	54
58	New Cubic Phase of $\text{Li}_3\text{N}$ : Stability of the $\text{N}^{3-}$ Ion to 200 GPa. <i>Physical Review Letters</i> , 2005, 95, 165503.	7.8	45
59	High-energy-density extended CO solid. <i>Nature Materials</i> , 2005, 4, 211-215.	27.5	120
60	Cryogenic loading of large volume presses for high-pressure experimentation and synthesis of novel materials. <i>Review of Scientific Instruments</i> , 2005, 76, 053903.	1.3	9
61	First-Order Isostructural Mott Transition in Highly Compressed MnO. <i>Physical Review Letters</i> , 2005, 94, 115502.	7.8	106
62	Hybrid Bridgman anvil design: an optical window for in situ spectroscopy in large volume presses. <i>High Pressure Research</i> , 2005, 25, 205-210.	1.2	3
63	X-ray diffraction and Raman studies of beryllium: Static and elastic properties at high pressures. <i>Physical Review B</i> , 2005, 72, .	3.2	42
64	Anomalous Molecular Phase of Nitrogen: Implications to the Phase Diagram. <i>High Pressure Research</i> , 2002, 22, 5-8.	1.2	1
65	Vibrational Spectroscopy at High Pressures in $\text{CF}_4$ : Implications to the Phase Diagram. <i>Journal of Low Temperature Physics</i> , 2001, 122, 279-290.	1.4	6
66	Carbon Monoxide: Spectroscopic Characterization of the High-Pressure Polymerized Phase. <i>Journal of Low Temperature Physics</i> , 1998, 111, 247-256.	1.4	45
67	Index of refraction, polarizability, and equation of state of solid molecular hydrogen. <i>Physical Review B</i> , 1998, 57, 14105-14109.	3.2	35
68	Nanocrystalline diamond: Effect of confinement, pressure, and heating on phonon modes. <i>Physical Review B</i> , 1997, 56, 5978-5984.	3.2	51
69	High-pressure phases of $\text{PbF}_2$ : A joint experimental and theoretical study. <i>Physical Review B</i> , 1997, 56, 543-551.	3.2	27
70	Dielectric properties of solid molecular hydrogen at high pressure. <i>Physical Review B</i> , 1992, 45, 9709-9715.	3.2	16
71	Ruby at high pressure. III. A pumping scheme for the R lines up to 230 GPa. <i>Physical Review B</i> , 1991, 44, 7202-7208.	3.2	38
72	Absorption and reflectance in hydrogen up to 230 GPa: Implications for metallization. <i>Physical Review Letters</i> , 1991, 66, 193-196.	7.8	71

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73	Irreversibility in the Galton board via conservative classical and quantum hamiltonian and gaussian dynamics. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 133, 114-120.	2.1	27
74	Wavemeter for lead-salt diode laser calibration. Applied Optics, 1986, 25, 2867.	2.1	3