Ravhi S Kumar

List of Publications by Year
in descending order

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69 papers	1,928 citations	236612 25 h-index	264894 42 g-index
72 all docs	72 docs citations	72 times ranked	2629 citing authors

#	Article	IF	Citations
1	High-pressure structural, elastic, and electronic properties of the scintillator host material<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">K</mml:mi><mml:mi mathvariant="normal">Mg</mml:mi><mml:msub><mml:mi mathvariant="normal">F</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2007, 76, .	1.1	162
2	Characteristics of silicone fluid as a pressure transmitting medium in diamond anvil cells. Review of Scientific Instruments, 2004, 75, 4450-4454.	0.6	126
3	Effect of Pressure and Temperature on Structural Stability of MoS₂. Journal of Physical Chemistry C, 2014, 118, 3230-3235.	1.5	110
4	High-pressure X-ray diffraction study of SrMoO4 and pressure-induced structural changes. Journal of Solid State Chemistry, 2008, 181, 355-364.	1.4	94
5	Reaction mechanism studies towards effective fabrication of lithium-rich anti-perovskites Li3OX (X=) Tj ETQq1 1 0.784314 rgBT /Over	1.3	89
6	Crystal and Electronic Structure of FeSe at High Pressure and Low Temperature. Journal of Physical Chemistry B, 2010, 114, 12597-12606.	1.2	79
7	Post-spinel transformations and equation of state in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>ZnGa</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml: Determination at high pressure byin situx-ray diffraction. Physical Review B, 2009, 79, .	1.1	77
8	Structural transitions in NaBH4 under pressure. Applied Physics Letters, 2005, 87, 261916.	1.5	66
9	Vanadium Diboride (VB₂) Synthesized at High Pressure: Elastic, Mechanical, Electronic, and Magnetic Properties and Thermal Stability. Inorganic Chemistry, 2018, 57, 1096-1105.	1.9	64
10	Compressibility of Nb2AsC to 41 GPa. Applied Physics Letters, 2005, 86, 111904.	1.5	62
11	High-pressure x-ray diffraction study on the structure and phase transitions of the defect-stannite ZnGa2Se4 and defect-chalcopyrite CdGa2S4. Journal of Applied Physics, 2008, 104, .	1.1	58
12	Pressure induced structural transitions in CuSbS2 and CuSbSe2 thermoelectric compounds. Journal of Alloys and Compounds, 2015, 643, 186-194.	2.8	54
13	X-ray Raman scattering studies on C60 fullerenes and multi-walled carbon nanotubes under pressure. Diamond and Related Materials, 2007, 16, 1250-1253.	1.8	53
14	Enhanced ionic conductivity with Li7O2Br3 phase in Li3OBr anti-perovskite solid electrolyte. Applied Physics Letters, 2016, 109, .	1.5	48
15	High-pressure structural study of fluoro-perovskite<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>CsCdF</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml: to 60 GPa: A combined experimental and theoretical study. Physical Review B, 2010, 81, .	1.1	46
16	Experimental and theoretical investigation of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>ThGeO</mml:mtext></mml:mrow><mml:mn>4</mml:mn></mml: high pressure. Physical Review B, 2009, 80, .	1.1	40
17	Pressure-Driven Phase Transitions in NaBH4:Â Theory and Experiments. Journal of Physical Chemistry B, 2007, 111, 13873-13876.	1.2	37
18	Structural Phase Transitions in the Potential Hydrogen Storage Compound KBH₄ under Compression. Journal of Physical Chemistry C, 2008, 112, 8452-8457.	1.5	34

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19	Structure of nanocrystalline ZnO up to 85GPa. Current Applied Physics, 2007, 7, 135-138.	1.1	32
20	Structural studies of CuAlSe2 and CuAlS2 chalcopyrites at high pressures. Journal of Alloys and Compounds, 2000, 312, 4-8.	2.8	30
21	High pressure transport characteristics of Bi2Te3, Sb2Te3, and BiSbTe3. Journal of Physics and Chemistry of Solids, 2012, 73, 1154-1158.	1.9	30
22	Compressibility ofCeMIn5andCe2MIn8(M=Rh, Ir, and Co) compounds. Physical Review B, 2004, 70, .	1.1	29
23	Pressure induced structural changes in the potential hydrogen storage compound ammonia borane: A combined X-ray, neutron and theoretical investigation. Chemical Physics Letters, 2010, 495, 203-207.	1.2	28
24	Pressure-induced valence change in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>YbAl</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:ms A combined high-pressure inelastic x-ray scattering and theoretical investigation. Physical Review B, 2008, 78, .	1.1	27
25	High-pressure transition to the post-barite phase in BaCrO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>hashemite. Physical Review B, 2012, 86, .	1.1	27
26	Structural stability of WS₂ under high pressure. International Journal of Modern Physics B, 2014, 28, 1450168.	1.0	26
27	Pressure induced structural phase transition inAgSbTe2. Physical Review B, 2005, 72, .	1.1	23
28	Pressure-induced structural phase transition inNaAlH4. Physical Review B, 2007, 75, .	1.1	23
29	Heat capacity studies of Ce and Rh site substitution in the heavy-fermion antiferromagnetCeRhIn5:Short-range magnetic interactions and non-Fermi-liquid behavior. Physical Review B, 2004, 69, .	1.1	22
30	Pressure-induced structural transitions in Tb-pyrochlore oxides. Applied Physics Letters, 2006, 88, 031903.	1.5	21
31	Anisotropic elastic properties ofCeRhIn5. Physical Review B, 2004, 69, .	1.1	19
32	Structural behavior of non-oxide perovskite superconductor MgCNi3 at pressures up to 32GPa. Physica B: Condensed Matter, 2005, 363, 190-195.	1.3	17
33	High-pressure structural studies of dysprosium using angle-dispersive x-ray diffraction. Physical Review B, 2007, 75, .	1.1	17
34	Structural phase transitions in RbBH4 under compression. Journal of Alloys and Compounds, 2009, 476, 5-8.	2.8	16
35	Inelastic X-ray scattering experiments on B4C under high static pressures. Diamond and Related Materials, 2010, 19, 530-532.	1.8	16
36	Pressure induced valence change of Eu in EuFe2As2 at low temperature and high pressures probed by resonant inelastic x-ray scattering. Applied Physics Letters, 2014, 104, .	1.5	15

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37	Synthesis and high pressure studies of the semiconductor AgSbSe2. Journal of Alloys and Compounds, 1999, 285, 48-50.	2.8	13
38	Pressure induced high spin-low spin transition in FeSe superconductor studied by x-ray emission spectroscopy and ab initio calculations. Applied Physics Letters, 2011, 99, 061913.	1.5	13
39	High pressure structure of Tb2Ti2O7 pyrochlore at cryogenic temperatures. Physica Status Solidi (B): Basic Research, 2007, 244, 266-269.	0.7	12
40	Pressure-Induced Valence and Structural Changes in YbMn2Ge2â€"Inelastic X-ray Spectroscopy and Theoretical Investigations. Inorganic Chemistry, 2013, 52, 832-839.	1.9	12
41	Compressibility and thermoelectric behavior of TiCoSb half-Heusler compound at high pressures. Intermetallics, 2018, 95, 137-143.	1.8	12
42	Pressure-Induced Enhancement of Thermoelectric Figure of Merit and Structural Phase Transition in TiNiSn. Journal of Physical Chemistry Letters, 2021, 12, 1046-1051.	2.1	12
43	Pressure induced structural transition and enhancement of superconductivity in Co doped CeFeAsO. Applied Physics Letters, 2011, 98, 012511.	1.5	11
44	High-pressure structure of LaSr2Mn2O7 bilayer manganite. Journal of Physics and Chemistry of Solids, 2006, 67, 2046-2050.	1.9	10
45	Bonding changes in single wall carbon nanotubes (SWCNT) on Ti and TiH2 addition probed by X-ray Raman scattering. Diamond and Related Materials, 2007, 16, 1136-1139.	1.8	9
46	High pressure structural and transport measurements of InTe, GaTe, and InGaTe2. Journal of Physics and Chemistry of Solids, 2013, 74, 723-728.	1.9	9
47	Pressure-induced superconductivity in LaFeAsO: The role of anionic height and magnetic ordering. Applied Physics Letters, 2014, 105, .	1.5	9
48	High pressure structural studies on SrRuO3. Journal of Physics and Chemistry of Solids, 2008, 69, 2237-2239.	1.9	8
49	Effect of pressure and temperature on structural stability of potential hydrogen storage compound Li3AlH6. Chemical Physics Letters, 2008, 460, 442-446.	1.2	8
50	Structural Phase Transitions and Thermoelectric Properties of AgPb18SbTe20 Under Compression. Journal of Electronic Materials, 2010, 39, 1828-1831.	1.0	8
51	Giant Pressureâ€Induced Enhancement of Seebeck Coefficient and Thermoelectric Efficiency in SnTe. ChemPhysChem, 2017, 18, 3315-3319.	1.0	8
52	Transport Properties of Ni and PbTe Under Pressure. Journal of Electronic Materials, 2012, 41, 633-638.	1.0	7
53	High-pressure Seebeck coefficients and thermoelectric behaviors of Bi and PbTe measured using a Paris-Edinburgh cell. Journal of Synchrotron Radiation, 2016, 23, 1368-1378.	1.0	7
54	Structural, electrical, and thermoelectric properties of CrSi 2 thin films. Thin Solid Films, 2013, 545, 100-105.	0.8	6

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55	Disturbing the spin liquid state in Tb2Ti2O7: Heat capacity measurements on rare earth titanates. Physica B: Condensed Matter, 2005, 359-361, 1243-1245.	1.3	5
56	Response to â€œComment on â€˜Characteristics of silicone fluid as a pressure transmitting medium in diamond anvil cellsâ€™â€•[Rev. Sci. Instrum. 75, 4450 (2004)]. Review of Scientific Instruments, 2005, 76, 057102.	0.6	5
57	Structural studies on Na0.75CoO2 thermoelectric material at high pressures. Solid State Communications, 2009, 149, 1712-1716.	0.9	5
58	High pressure transport and structural studies on Nb3Ga superconductor. Physica B: Condensed Matter, 2015, 459, 21-23.	1.3	5
59	Equation of state of nanocrystalline BaTiO3 up to 52 GPa at room temperature. Physica Status Solidi (B): Basic Research, 2007, 244, 290-294.	0.7	4
60	Synthesis, structural and magnetic properties of spin ladder compound Ca1â^'xCoxCu2O3. Journal of Magnetism and Magnetic Materials, 2011, 323, 3033-3037.	1.0	3
61	Effect of Pressure on Valence and Structural Properties of YbFe₂Ge₂ Heavy Fermion Compoundâ€”A Combined Inelastic X-ray Spectroscopy, X-ray Diffraction, and Theoretical Investigation. Inorganic Chemistry, 2015, 54, 10250-10255.	1.9	3
62	Correlation between superconductivity and structural properties under high pressure of iron pnictide superconductor Ce_{0.6}Y_{0.4}FeAsO_{0.8}F_{0.2}. Applied Physics Letters, 2012, 100, 052601.	1.5	2
63	Effect of pressure on crystal structure and superconductivity of NbSexTe2â^'x (xâ€¯=â€¯2, 1.5). Chemical Physics Letters, 2018, 692, 249-252.	1.2	2
64	Pressure effect on the antiferromagnetic compound Ce2Ni3Ge5. AIP Advances, 2018, 8, 101323.	0.6	2
65	The crystal structure of CeRhIn5 under pressure. Physica B: Condensed Matter, 2005, 359-361, 407-409.	1.3	1
66	Uranium (and Cerium) Compounds At High Pressures and Magnetic Fields. Materials Research Society Symposia Proceedings, 2003, 802, 244.	0.1	0
67	Structural Properties of GdSr2RuCu2O8 under Strong Compression. AIP Conference Proceedings, 2006, , .	0.3	0
68	Pressure effect on crystal structure and superconductivity of La_{0.8}Th_{0.2}FeAsO. Physica Status Solidi - Rapid Research Letters, 2011, 5, 208-210.	1.2	0
69	Materials Research at University of Nevada, Las Vegas. Materials Science Forum, 2016, 879, 386-389.	0.3	0