Yusheng Zhao

List of Publications by Year
in descending order

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250 papers	13,245 citations	20817 60 h-index	30922 102 g-index
251 all docs	251 docs citations	251 times ranked	13924 citing authors

#	Article	IF	Citations
1	Hydrogen Clusters in Clathrate Hydrate. Science, 2002, 297, 2247-2249.	12.6	795
2	Superionic Conductivity in Lithium-Rich Anti-Perovskites. Journal of the American Chemical Society, 2012, 134, 15042-15047.	13.7	458
3	Pressure-Induced Phase Transformation, Reversible Amorphization, and Anomalous Visible Light Response in Organolead Bromide Perovskite. Journal of the American Chemical Society, 2015, 137, 11144-11149.	13.7	303
4	Morphology-tuned wurtzite-type ZnS nanobelts. Nature Materials, 2005, 4, 922-927.	27.5	295
5	Hydrogen Adsorption in a Highly Stable Porous Rare-Earth Metal-Organic Framework: Sorption Properties and Neutron Diffraction Studies. Journal of the American Chemical Society, 2008, 130, 9626-9627.	13.7	294
6	Structure and Dynamics of Hydrogen Molecules in the Novel Clathrate Hydrate by High Pressure Neutron Diffraction. Physical Review Letters, 2004, 93, 125503.	7.8	266
7	Boron suboxide: As hard as cubic boron nitride. Applied Physics Letters, 2002, 81, 643-645.	3.3	264
8	Hard superconducting nitrides. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3198-3201.	7.1	256
9	High pressure Raman spectroscopy of spinel-type ferrite ZnFe2O4. Journal of Physics and Chemistry of Solids, 2003, 64, 2517-2523.	4.0	230
10	Ultrafast Sodium/Potassiumâ€Ion Intercalation into Hierarchically Porous Thin Carbon Shells. Advanced Materials, 2019, 31, e1805430.	21.0	214
11	P-V-T equation of state of (Mg,Fe)SiO3 perovskite: constraints on composition of the lower mantle. Physics of the Earth and Planetary Interiors, 1994, 83, 13-40.	1.9	197
12	A New Molybdenum Nitride Catalyst with Rhombohedral MoS₂ Structure for Hydrogenation Applications. Journal of the American Chemical Society, 2015, 137, 4815-4822.	13.7	195
13	Fluorineâ€Doped Antiperovskite Electrolyte for Allâ€Solidâ€State Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2016, 55, 9965-9968.	13.8	192
14	Metalâ€“organic frameworks for solid-state electrolytes. Energy and Environmental Science, 2020, 13, 2386-2403.	30.8	182
15	Enhanced Structural Stability and Photo Responsiveness of CH₃NH₃SnI₃ Perovskite via Pressureâ€Induced Amorphization and Recrystallization. Advanced Materials, 2016, 28, 8663-8668.	21.0	176
16	Thermal expansion and structural distortion of perovskite â€" data for NaMgF3 perovskite. Part I. Physics of the Earth and Planetary Interiors, 1993, 76, 1-16.	1.9	166
17	Microstrain and grain-size analysis from diffraction peak width and graphical derivation of high-pressure thermomechanics. Journal of Applied Crystallography, 2008, 41, 1095-1108.	4.5	166
18	Antiperovskite Li₃OCl Superionic Conductor Films for Solidâ€State Liâ€Ion Batteries. Advanced Science, 2016, 3, 1500359.	11.2	162

#	Article	IF	Citations
19	Storage and separation applications of nanoporous metalâ€“organic frameworks. CrystEngComm, 2010, 12, 1337-1353.	2.6	157
20	Synthesis, Crystal Structure, and Elastic Properties of Novel Tungsten Nitrides. Chemistry of Materials, 2012, 24, 3023-3028.	6.7	154
21	A quenchable superhard carbon phase synthesized by cold compression of carbon nanotubes. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13699-13702.	7.1	153
22	Enhanced Electron Transport in Nb-Doped TiO₂ Nanoparticles via Pressure-Induced Phase Transitions. Journal of the American Chemical Society, 2014, 136, 419-426.	13.7	151
23	Vanadium-Based Oxide on Two-Dimensional Vanadium Carbide MXene (V₂O_x@V₂CT_x) as Cathode for Rechargeable Aqueous Zinc-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 4677-4689.	5.1	138
24	Ab initiostudy of the stabilities of and mechanism of superionic transport in lithium-rich antiperovskites. Physical Review B, 2013, 87, .	3.2	135
25	Li-rich anti-perovskite Li₃OCl films with enhanced ionic conductivity. Chemical Communications, 2014, 50, 11520-11522.	4.1	130
26	Pressure-Induced Remarkable Enhancement of Self-Trapped Exciton Emission in One-Dimensional CsCu₂I₃ with Tetrahedral Units. Journal of the American Chemical Society, 2020, 142, 1786-1791.	13.7	121
27	Discovery of the recoverable high-pressure iron oxide Fe₄O₅. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17281-17285.	7.1	120
28	Emergent superconductivity in an iron-based honeycomb lattice initiated by pressure-driven spin-crossover. Nature Communications, 2018, 9, 1914.	12.8	119
29	Thermal equations of state of theÎ±,Î², andÏ‰phases of zirconium. Physical Review B, 2005, 71, .	3.2	113
30	Critical phenomena and phase transition of perovskite â€” data for NaMgF3 perovskite. Part II. Physics of the Earth and Planetary Interiors, 1993, 76, 17-34.	1.9	111
31	Effect of Pressure and Temperature on Structural Stability of MoS₂. Journal of Physical Chemistry C, 2014, 118, 3230-3235.	3.1	110
32	Enhancement of fracture toughness in nanostructured diamondâ€“SiC composites. Applied Physics Letters, 2004, 84, 1356-1358.	3.3	100
33	Structural manipulation approaches towards enhanced sodium ionic conductivity in Na-rich antiperovskites. Journal of Power Sources, 2015, 293, 735-740.	7.8	97
34	Ultrahard diamond single crystals from chemical vapor deposition. Physica Status Solidi A, 2004, 201, R25-R27.	1.7	95
35	Experimental visualization of lithium conduction pathways in garnet-type Li7La3Zr2O12. Chemical Communications, 2012, 48, 9840.	4.1	95
36	Structure Distortion Induced Monoclinic Nickel Hexacyanoferrate as Highâ€Performance Cathode for Naâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1803158.	19.5	93

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37	Antiperovskites with Exceptional Functionalities. Advanced Materials, 2020, 32, e1905007.	21.0	93
38	Pressure-Driven Cooperative Spin-Crossover, Large-Volume Collapse, and Semiconductor-to-Metal Transition in Manganese(II) Honeycomb Lattices. Journal of the American Chemical Society, 2016, 138, 15751-15757.	13.7	91
39	Cubic to Tetragonal Phase Transformation in Cold-Compressed Pd Nanocubes. Nano Letters, 2008, 8, 972-975.	9.1	89
40	Reaction mechanism studies towards effective fabrication of lithium-rich anti-perovskites Li3OX (X=) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.7	89
41	A Novel Helical Double-Layered Cobalt(II)â^'Organic Framework with Tetranuclear [Co₄(Î¼₃-OH)₂] Clusters Linked by an Unsymmetrical Pyridylbenzoate Ligand. Inorganic Chemistry, 2007, 46, 9021-9023.	4.0	84
42	Fast synthesis method and phase diagram of hydrogen clathrate hydrate. Applied Physics Letters, 2006, 88, 131909.	3.3	83
43	Freestanding agaric-like molybdenum carbide/graphene/N-doped carbon foam as effective polysulfide anchor and catalyst for high performance lithium sulfur batteries. Energy Storage Materials, 2020, 33, 73-81.	18.0	81
44	The Hardest Superconducting Metal Nitride. Scientific Reports, 2015, 5, 13733.	3.3	78
45	Self-Regulated Phenomenon of Inorganic Artificial Solid Electrolyte Interphase for Lithium Metal Batteries. Nano Letters, 2020, 20, 4029-4037.	9.1	78
46	Experimental constraints on the phase diagram of elemental zirconium. Journal of Physics and Chemistry of Solids, 2005, 66, 1213-1219.	4.0	77
47	Thermal expansion of SrZrO3 and BaZrO3 perovskites. Physics and Chemistry of Minerals, 1991, 18, 294.	0.8	76
48	Hardness and fracture toughness of brittle materials:â€‚A density functional theory study. Physical Review B, 2004, 70, .	3.2	76
49	Pressure-Induced Cubic to Monoclinic Phase Transformation in Erbium Sesquioxide Er2O3. Inorganic Chemistry, 2007, 46, 6164-6169.	4.0	71
50	Ultrastrong Boron Frameworks in ZrB₁₂: A Highway for Electron Conducting. Advanced Materials, 2017, 29, 1604003.	21.0	71
51	Pressure-Induced Disordered Substitution Alloy in Sb₂Te₃. Inorganic Chemistry, 2011, 50, 11291-11293.	4.0	70
52	Pressure-Induced Amorphization in Single-Crystal Ta₂O₅ Nanowires: A Kinetic Mechanism and Improved Electrical Conductivity. Journal of the American Chemical Society, 2013, 135, 13947-13953.	13.7	70
53	Thermoelastic equation of state of molybdenum. Physical Review B, 2000, 62, 8766-8776.	3.2	69
54	Thermodynamic and Mechanical Stabilities of Tantalum Nitride. Physical Review Letters, 2009, 103, 185501.	7.8	68

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55	Sodium Ion Transport Mechanisms in Antiperovskite Electrolytes Na₃OBr and Na₄OI₂: An in Situ Neutron Diffraction Study. Inorganic Chemistry, 2016, 55, 5993-5998.	4.0	68
56	A Porous Metalâ˜'Organic Replica of Î±-PbO₂ for Capture of Nerve Agent Surrogate. Journal of the American Chemical Society, 2010, 132, 17996-17999.	13.7	66
57	Vanadium Diboride (VB₂) Synthesized at High Pressure: Elastic, Mechanical, Electronic, and Magnetic Properties and Thermal Stability. Inorganic Chemistry, 2018, 57, 1096-1105.	4.0	64
58	Thermoelastic equation of state of jadeiteNaAlSi2O6: An energy-dispersive Reitveld Refinement Study of low symmetry and multiple phases diffraction. Geophysical Research Letters, 1997, 24, 5-8.	4.0	63
59	Mineral physics constraints on the chemical composition of the Earth's lower mantle. Physics of the Earth and Planetary Interiors, 1994, 85, 273-292.	1.9	62
60	Encapsulation kinetics and dynamics of carbon monoxide in clathrate hydrate. Nature Communications, 2014, 5, 4128.	12.8	62
61	A high P-T single-crystal X-ray diffraction study of thermoelasticity of MgSiO3 orthoenstatite. Physics and Chemistry of Minerals, 1995, 22, 393.	0.8	61
62	Phase transformation in Sm2O3 at high pressure: In situ synchrotron X-ray diffraction study and ab initio DFT calculation. Solid State Communications, 2008, 145, 250-254.	1.9	59
63	Electrolyte solvation chemistry for lithiumâ€“sulfur batteries with electrolyte-lean conditions. Journal of Energy Chemistry, 2021, 55, 80-91.	12.9	57
64	Size-Induced Reduction of Transition Pressure and Enhancement of Bulk Modulus of AlN Nanocrystals. Journal of Physical Chemistry B, 2004, 108, 11506-11508.	2.6	56
65	Characterization of Reaction Intermediate Aggregates in Aniline Oxidative Polymerization at Low Proton Concentration. Journal of Physical Chemistry B, 2010, 114, 10337-10346.	2.6	56
66	Pressure-Induced Isostructural Phase Transition and Correlation of FeAs Coordination with the Superconducting Properties of 111-Type Na_{1â€“x}FeAs. Journal of the American Chemical Society, 2011, 133, 7892-7896.	13.7	55
67	Hardness, elastic, and electronic properties of chromium monoboride. Applied Physics Letters, 2015, 106, .	3.3	54
68	Pressure induced structural transitions in CuSbS2 and CuSbSe2 thermoelectric compounds. Journal of Alloys and Compounds, 2015, 643, 186-194.	5.5	54
69	Pore size-controlled gases and alcohols separation within ultramicroporous homochiral lanthanideâ€“organic frameworks. Journal of Materials Chemistry, 2012, 22, 7813.	6.7	53
70	Insights into the Li+ storage mechanism of TiC@C-TiO2 core-shell nanostructures as high performance anodes. Nano Energy, 2018, 50, 25-34.	16.0	53
71	Thermodynamic stability and unusual strength of ultra-incompressible rhenium nitrides. Physical Review B, 2011, 83, .	3.2	52
72	Formation of zirconium metallic glass. Nature, 2004, 430, 332-335.	27.8	51

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73	What is the theoretical density of a nanocrystalline material?. Acta Materialia, 2008, 56, 3663-3671.	7.9	51
74	Synthesis, Hardness, and Electronic Properties of Stoichiometric VN and CrN. Crystal Growth and Design, 2016, 16, 351-358.	3.0	50
75	Phase Transition and Compressibility in Silicon Nanowires. Nano Letters, 2008, 8, 2891-2895.	9.1	49
76	Strength Weakening by Nanocrystals in Ceramic Materials. Nano Letters, 2007, 7, 3196-3199.	9.1	48
77	Enhanced ionic conductivity with Li7O2Br3 phase in Li3OBr anti-perovskite solid electrolyte. Applied Physics Letters, 2016, 109, .	3.3	48
78	Thermal equations of state for titanium obtained by high pressureâ€”temperature diffraction studies. Physical Review B, 2008, 78, .	3.2	47
79	Experimental invalidation of phase-transition-induced elastic softening in CrN. Physical Review B, 2012, 86, .	3.2	47
80	Reversible switching between pressure-induced amorphization and thermal-driven recrystallization in VO2(B) nanosheets. Nature Communications, 2016, 7, 12214.	12.8	47
81	Cubic phases ofBC2N: A first-principles study. Physical Review B, 2007, 75, .	3.2	43
82	Impact of hydrostatic pressure on the crystal structure and photoluminescence properties of Mn⁴⁺-doped BaTiF₆red phosphor. Dalton Transactions, 2015, 44, 7578-7585.	3.3	43
83	Porous Metalâ^'Organic Frameworks Containing Alkali-Bridged Two-Fold Interpenetration: Synthesis, Gas Adsorption, and Fluorescence Properties. Crystal Growth and Design, 2010, 10, 1301-1306.	3.0	42
84	Large volume high pressure research using the wiggler port at NSLS. High Pressure Research, 1992, 8, 617-623.	1.2	41
85	Nanocrystalline tungsten carbide: As incompressible as diamond. Applied Physics Letters, 2009, 95, .	3.3	41
86	Perovskite at high P-T conditions: An in situ synchrotron X ray diffraction study of NaMgF3perovskite. Journal of Geophysical Research, 1994, 99, 2871-2885.	3.3	40
87	Thermoelastic Equation of State of Monoclinic Pyroxene: CaMgSi2O6 Diopside.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1998, 7, 25-27.	0.0	40
88	First-principles prediction of mechanical properties of gamma-boron. Applied Physics Letters, 2009, 94, 191906.	3.3	40
89	3D Printing of Hierarchical Graphene Lattice for Advanced Na Metal Anodes. ACS Applied Energy Materials, 2019, 2, 3869-3877.	5.1	40
90	Ca-doped Na2Zn2TeO6 layered sodium conductor for all-solid-state sodium-ion batteries. Electrochimica Acta, 2019, 298, 121-126.	5.2	40

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91	Synthesis of Stoichiometric and Bulk CrN through a Solidâ€State Ionâ€Exchange Reaction. Chemistry - A European Journal, 2012, 18, 15459-15463.	3.3	39
92	P-V- TData of hexagonal boron nitridehBN and determination of pressure and temperature using thermoelastic equations of state of multiple phases. High Pressure Research, 1997, 15, 369-386.	1.2	38
93	Comparative studies of compressibility between nanocrystalline and bulk nickel. Applied Physics Letters, 2007, 90, 043112.	3.3	38
94	Elastic moduli and strength of nanocrystalline cubic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>BC</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu x-ray diffraction under nonhydrostatic compression. Physical Review B, 2009, 79, .	3.2	38
95	Growth of boron suboxide crystals in the Bâ€“B₂O₃ system at high pressure and high temperature. Journal of Materials Research, 2002, 17, 284-290.	2.6	37
96	Pressure induced increase of particle size and resulting weakening of elastic stiffness of CeO2 nanocrystals. Applied Physics Letters, 2004, 85, 124-126.	3.3	37
97	Pressure-Induced Amorphization and Phase Transformations in Î²-LiAlSiO4. Chemistry of Materials, 2005, 17, 2817-2824.	6.7	37
98	Pressure-Driven Phase Transitions in NaBH4:Â Theory and Experiments. Journal of Physical Chemistry B, 2007, 111, 13873-13876.	2.6	37
99	Modeling reaction kinetics of rigid polyurethane foaming process. Journal of Applied Polymer Science, 2013, 130, 1131-1138.	2.6	37
100	Crystal Chemistry and Phase Transitions of Perovskite inPâ€“Tâ€“XSpace: Data for (KxNa1â^'x)MgF3Perovskites. Journal of Solid State Chemistry, 1998, 141, 121-132.	2.9	36
101	A high Pâ€“T cell assembly for neutron diffraction up to 10GPa and 1500 K. High Pressure Research, 1999, 16, 161-177.	1.2	36
102	Simultaneous ultrasonic and synchrotron x-ray studies on pressure induced Î±-Ï‰ phase transition in zirconium. Journal of Applied Physics, 2008, 104, .	2.5	36
103	Charge transfer in spinel Co₃O₄at high pressures. Journal of Physics Condensed Matter, 2012, 24, 435401.	1.8	36
104	Crystal structure and encapsulation dynamics of ice II-structured neon hydrate. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10456-10461.	7.1	36
105	Pressure-Driven Reversible Switching between n- and p-Type Conduction in Chalcopyrite CuFeS₂. Journal of the American Chemical Society, 2019, 141, 505-510.	13.7	36
106	Engineering Frenkel defects of anti-perovskite solid-state electrolytes and their applications in all-solid-state lithium-ion batteries. Chemical Communications, 2020, 56, 1251-1254.	4.1	36
107	Enhancement of yield strength in zirconium metal through high-pressure induced structural phase transition. Applied Physics Letters, 2007, 91, .	3.3	35
108	Thermal equation of state of rhenium diboride by high pressure-temperature synchrotron x-ray studies. Physical Review B, 2008, 78, .	3.2	35

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109	Pressure-induced structural and electronic transitions, metallization, and enhanced visible-light responsiveness in layered rhenium disulphide. Physical Review B, 2018, 97, .	3.2	35
110	Experiment and finite element simulation of X-type shear fractures from a crack in marble. Tectonophysics, 1987, 144, 141-150.	2.2	34
111	The single crystal elastic moduli of neighborite. Physics and Chemistry of Minerals, 1993, 20, 419.	0.8	34
112	Elasticity of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Ï‰</mml:mi></mml:math>-phase zirconium. Physical Review B, 2007, 76, .	3.2	34
113	In situ X-ray study of ammonia borane at high pressures. International Journal of Hydrogen Energy, 2010, 35, 11064-11070.	7.1	34
114	The mobility of Nb in rutile-saturated NaCl- and NaF-bearing aqueous fluids from 1â€“6.5 GPa and 300â€“800 Â°C. American Mineralogist, 2015, 100, 1600-1609.	1.9	34
115	Thermomechanics of Nanocrystalline Nickel under High Pressureâ^'Temperature Conditions. Nano Letters, 2007, 7, 426-432.	9.1	33
116	Nanoscale twinning-induced elastic strengthening in silicon carbide nanowires. Scripta Materialia, 2010, 63, 981-984.	5.2	33
117	High pressure-high temperature synthesis of lithium-rich Li3O(Cl, Br) and Li3â^'xCax/2OCl anti-perovskite halides. Inorganic Chemistry Communication, 2014, 48, 140-143.	3.9	33
118	Thermal equation of state of silicon carbide. Applied Physics Letters, 2016, 108, .	3.3	33
119	Inelastic neutron scattering study of hydrogen in d8-THFâ•D2O ice clathrate. Journal of Chemical Physics, 2007, 127, 134505.	3.0	32
120	Giant Pressureâ€Driven Lattice Collapse Coupled with Intermetallic Bonding and Spinâ€State Transition in Manganese Chalcogenides. Angewandte Chemie - International Edition, 2016, 55, 10350-10353.	13.8	32
121	<scp>Antiâ€perovskite</scp> materials for energy storage batteries. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	17.3	32
122	High-temperature phase transitions in CsH2PO4 under ambient and high-pressure conditions: A synchrotron x-ray diffraction study. Journal of Chemical Physics, 2007, 127, 194701.	3.0	31
123	Simulation Blowing Agent Performance, Cell Morphology, and Cell Pressure in Rigid Polyurethane Foams. Industrial & Engineering Chemistry Research, 2016, 55, 2336-2344.	3.7	31
124	In situ neutron diffraction study of deuterated portlandite Ca(OD)2 at high pressure and temperature. Physics and Chemistry of Minerals, 2007, 34, 223-232.	0.8	30
125	Constitutive Law and Flow Mechanism in Diamond Deformation. Scientific Reports, 2012, 2, 876.	3.3	29
126	Synthesis of Onion-Like Î'-MoN Catalyst for Selective Hydrogenation. Journal of Physical Chemistry C, 2017, 121, 19451-19460.	3.1	29

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127	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.	2.6	28
128	Diamond-cBN alloy: A universal cutting material. Applied Physics Letters, 2015, 107, .	3.3	28
129	Thermally reduced graphene paper with fast Li ion diffusion for stable Li metal anode. Electrochimica Acta, 2019, 294, 413-422.	5.2	28
130	Experimental constraints on the phase diagram of titanium metal. Journal of Physics and Chemistry of Solids, 2008, 69, 2559-2563.	4.0	27
131	Size Dependence of Cubic to Trigonal Structural Distortion in Silver Micro- and Nanocrystals under High Pressure. Journal of Physical Chemistry C, 2008, 112, 20135-20137.	3.1	27
132	Phase-Transition Induced Elastic Softening and Band Gap Transition in Semiconducting PbS at High Pressure. Inorganic Chemistry, 2013, 52, 8638-8643.	4.0	27
133	Threshold Pressure for Disappearance of Size-Induced Effect in Spinel-Structure Ge3N4Nanocrystals. Journal of Physical Chemistry B, 2003, 107, 14151-14153.	2.6	26
134	Digital ultrasonic pulse-echo overlap system and algorithm for unambiguous determination of pulse transit time. Review of Scientific Instruments, 2005, 76, 114902.	1.3	26
135	In situ pressure Raman spectroscopy and mechanical stability of superhard boron suboxide. Applied Physics Letters, 2005, 86, 041911.	3.3	26
136	Impurity effects on the phase transformations and equations of state of zirconium metals. Journal of Physics and Chemistry of Solids, 2007, 68, 2297-2302.	4.0	26
137	Structural stability of WS₂ under high pressure. International Journal of Modern Physics B, 2014, 28, 1450168.	2.0	26
138	Sulfur-catalyzed phase transition in MoS2 under high pressure and temperature. Journal of Physics and Chemistry of Solids, 2014, 75, 100-104.	4.0	26
139	Thermal equation of state of copper studied by high P-T synchrotron x-ray diffraction. Applied Physics Letters, 2009, 94, .	3.3	25
140	Impact of the maximum foam reaction temperature on reducing foam shrinkage. RSC Advances, 2015, 5, 17171-17178.	3.6	25
141	Revisit of Pressure-Induced Phase Transition in PbSe: Crystal Structure, and Thermoelastic and Electrical Properties. Inorganic Chemistry, 2015, 54, 4981-4989.	4.0	25
142	Variable pressure-temperature neutron diffraction of wÃ¼stite (Fe1âˆ'xO): Absence of long-range magnetic order to 20GPa. Applied Physics Letters, 2005, 86, 052505.	3.3	24
143	Superhard diamondlike<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>BC</mml:mtext></mml:mrow><mml:mn>5</mml:mn></mml:msub></mml:mrow></mml:math>: A first-principles investigation. Physical Review B, 2009, 80, .	3.2	24
144	High-pressure neutron diffraction studies at LANSCE. Applied Physics A: Materials Science and Processing, 2010, 99, 585-599.	2.3	24

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145	Reaction modeling of urethane polyols using fraction primary secondary and hinderedâ€secondary hydroxyl content. Journal of Applied Polymer Science, 2014, 131, .	2.6	24
146	Simulation of liquid physical blowing agents for forming rigid urethane foams. Journal of Applied Polymer Science, 2015, 132, .	2.6	24
147	Strain stiffening, high load-invariant hardness, and electronic anomalies of boron phosphide under pressure. Physical Review B, 2020, 101, .	3.2	24
148	Thermoelastic and texture behavior of aluminum at high pressure and high temperature investigated byin situneutron diffraction. Journal of Applied Physics, 2004, 95, 4645-4650.	2.5	23
149	Structural Stability and Compressibility Study for ZnO Nanobelts under High Pressure. Journal of Physical Chemistry C, 2012, 116, 2074-2079.	3.1	23
150	Kinetics of SiC formation during high Pâ€“T reaction between diamond and silicon. Diamond and Related Materials, 2005, 14, 1611-1615.	3.9	22
151	Synthesis, Cation Ordering, and Magnetic Properties of the (Sb1-xPbx)2(Mn1-ySby)O4Solid Solutions with the Sb2MnO4-Type Structure. Chemistry of Materials, 2005, 17, 1123-1134.	6.7	22
152	High-pressure/low-temperature neutron scattering of gas inclusion compounds: Progress and prospects. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 5727-5731.	7.1	22
153	Xâ€Ray Induced Synthesis of 8H Diamond. Advanced Materials, 2008, 20, 3303-3307.	21.0	22
154	Superhard diamond/tungsten carbide nanocomposites. Applied Physics Letters, 2011, 98, .	3.3	22
155	Thermal equations of state and phase relation of PbTiO3: A high P-T synchrotron x-ray diffraction study. Journal of Applied Physics, 2011, 110, 084103.	2.5	22
156	High-temperature crystal structures and chemical modifications in RbH₂PO₄. Journal of Physics Condensed Matter, 2009, 21, 325401.	1.8	21
157	Kinetic hysteresis in gas adsorption behavior for a rigid MOF arising from zig-zag channel structures. Journal of Materials Chemistry, 2012, 22, 10166.	6.7	21
158	Modeling impact of catalyst loading on polyurethane foam polymerization. Applied Catalysis A: General, 2014, 469, 229-238.	4.3	21
159	High Pressure Phase-Transformation Induced Texture Evolution and Strengthening in Zirconium Metal: Experiment and Modeling. Scientific Reports, 2015, 5, 12552.	3.3	21
160	First principles prediction of vanadium and niobium nitrides with M2N3 stoichiometry. Scripta Materialia, 2010, 63, 532-535.	5.2	20
161	Anisotropic elasticity of jarosite: A high-P synchrotron XRD study. American Mineralogist, 2010, 95, 19-23.	1.9	20
162	Density modeling of polyurethane box foam. Polymer Engineering and Science, 2014, 54, 1503-1511.	3.1	20

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163	Critical pressure for weakening of size-induced stiffness in spinel-structure Si3N4 nanocrystals. Applied Physics Letters, 2003, 83, 3174-3176.	3.3	19
164	Selfâ€Assembled Polyaniline Nanotubes with Rectangular Crossâ€Sections. Macromolecular Chemistry and Physics, 2009, 210, 1600-1606.	2.2	19
165	Thermal expansion and decomposition of jarosite: a high-temperature neutron diffraction study. Physics and Chemistry of Minerals, 2010, 37, 73-82.	0.8	19
166	Unusual Mott transition in multiferroic PbCrO ₃. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15320-15325.	7.1	18
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