

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	<sc>Anti-perovskite</sc> materials for energy storage batteries. Informa-Materially, 2022, 4, .	17.3	32
2	Giant Viscoelasticity near Mott Criticality in PbCrO_3 with Large Lattice Anomalies. Physical Review Letters, 2022, 128, 095702.	7.8	3
3	Electrolyte solvation chemistry for lithium-sulfur batteries with electrolyte-lean conditions. Journal of Energy Chemistry, 2021, 55, 80-91.	12.9	57
4	Operation of large-volume cubic press above 8 GPa and 2500°C with a centimeter-sized cell volume using an optimized hybrid assembly. High Pressure Research, 2021, 41, 132-141.	1.2	3
5	Calibration of Manganin pressure gauge for diamond-anvil cells. Review of Scientific Instruments, 2021, 92, 033905.	1.3	2
6	Crystal structures and formation mechanisms of boron-rich tungsten borides. Physical Review B, 2021, 104, .	3.2	10
7	Configuring solid-state batteries to power electric vehicles: a deliberation on technology, chemistry and energy. Chemical Communications, 2021, 57, 12587-12594.	4.1	18
8	Pressure-Induced Remarkable Enhancement of Self-Trapped Exciton Emission in One-Dimensional CsCu_2I_3 with Tetrahedral Units. Journal of the American Chemical Society, 2020, 142, 1786-1791.	13.7	121
9	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
10	Antiperovskites with Exceptional Functionalities. Advanced Materials, 2020, 32, e1905007.	21.0	93
11	Metal-organic frameworks for solid-state electrolytes. Energy and Environmental Science, 2020, 13, 2386-2403.	30.8	182
12	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
13	Europium-Doped Ceria Nanowires as Anode for Solid Oxide Fuel Cells. Frontiers in Chemistry, 2020, 8, 348.	3.6	11
14	Bandgap widening by pressure-induced disorder in two-dimensional lead halide perovskite. Applied Physics Letters, 2020, 116, 101901.	3.3	12
15	Compressibility and thermoelasticity of CrN. High Pressure Research, 2020, 40, 423-433.	1.2	2
16	Effect of pressure on the kinetics of peridotite serpentinization. Physics and Chemistry of Minerals, 2020, 47, 1.	0.8	10
17	Probing the continuum scattering and magnetic collapse in single-crystalline Li_2IrO_4 by Raman spectroscopy. Physical Review B, 2020, 101, .	3.2	11
18	Strain stiffening, high load-invariant hardness, and electronic anomalies of boron phosphide under pressure. Physical Review B, 2020, 101, .	3.2	24

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19	Enhanced Structural Stability of Sb ₂ Se ₃ via Pressure-Induced Alloying and Amorphization. <i>Journal of Physical Chemistry C</i> , 2020, 124, 3421-3428.	3.1	8
20	Large-volume cubic press produces high temperatures above 4000 Kelvin for study of the refractory materials at pressures. <i>Review of Scientific Instruments</i> , 2020, 91, 015118.	1.3	17
21	Self-Regulated Phenomenon of Inorganic Artificial Solid Electrolyte Interphase for Lithium Metal Batteries. <i>Nano Letters</i> , 2020, 20, 4029-4037.	9.1	78
22	Neutron diffraction study of crystal structure and temperature driven molecular reorientation in solid \pm -CO. <i>AIP Advances</i> , 2020, 10, 045301.	1.3	4
23	Growth of Millimeter Size B ₆ O Single Crystals in a B-H ₃ BO ₃ System at High Pressure and High Temperature. <i>Crystal Growth and Design</i> , 2020, 20, 3732-3736.	3.0	2
24	Vanadium-Based Oxide on Two-Dimensional Vanadium Carbide MXene (V ₂ O _x @V ₂ CT _x) as Cathode for Rechargeable Aqueous Zinc-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 4677-4689.	5.1	138
25	Structural disorder, sublattice melting, and thermo-elastic properties of anti-perovskite Li ₃ OBr under high pressure and temperature. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	7
26	Phase Stability and Compressibility of 3R-MoN ₂ at High Pressure. <i>Scientific Reports</i> , 2019, 9, 10524.	3.3	5
27	Nanobundles of Iron Phosphide Fabricated by Direct Phosphorization of Metal-Organic Frameworks as an Efficient Hydrogen-Evolving Electrocatalyst. <i>Chemistry - A European Journal</i> , 2019, 26, 4001.	3.3	13
28	Metallic interface induced by electronic reconstruction in crystalline-amorphous bilayer oxide films. <i>Science Bulletin</i> , 2019, 64, 1567-1572.	9.0	2
29	Pressure-Induced Phase Transition and Band Gap Engineering in Propylammonium Lead Bromide Perovskite. <i>Journal of Physical Chemistry C</i> , 2019, 123, 15204-15208.	3.1	18
30	Pressure-Controlled Structural Symmetry Transition in Layered InSe. <i>Laser and Photonics Reviews</i> , 2019, 13, 1900012.	8.7	13
31	3D Printing of Hierarchical Graphene Lattice for Advanced Na Metal Anodes. <i>ACS Applied Energy Materials</i> , 2019, 2, 3869-3877.	5.1	40
32	Ca-doped Na ₂ Zn ₂ TeO ₆ layered sodium conductor for all-solid-state sodium-ion batteries. <i>Electrochimica Acta</i> , 2019, 298, 121-126.	5.2	40
33	Ultrafast Sodium/Potassium-Ion Intercalation into Hierarchically Porous Thin Carbon Shells. <i>Advanced Materials</i> , 2019, 31, e1805430.	21.0	214
34	Thermally reduced graphene paper with fast Li ion diffusion for stable Li metal anode. <i>Electrochimica Acta</i> , 2019, 294, 413-422.	5.2	28
35	Pressure-Driven Reversible Switching between <i>n</i> - and <i>p</i> -Type Conduction in Chalcopyrite CuFeS ₂ . <i>Journal of the American Chemical Society</i> , 2019, 141, 505-510.	13.7	36
36	Structure Distortion Induced Monoclinic Nickel Hexacyanoferrate as High-Performance Cathode for Na-Ion Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1803158.	19.5	93

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37	Pressure-induced anomalies and structural instability in compressed $\hat{\Gamma}^2$ -Sb ₂ O ₃ . Physical Chemistry Chemical Physics, 2018, 20, 11430-11436.	2.8	6
38	Vanadium Diboride (VB ₂) Synthesized at High Pressure: Elastic, Mechanical, Electronic, and Magnetic Properties and Thermal Stability. Inorganic Chemistry, 2018, 57, 1096-1105.	4.0	64
39	Synthesis of single-crystal perovskite PbCrO ₃ through a new reaction route at high pressure. High Pressure Research, 2018, 38, 136-144.	1.2	3
40	Thermoelasticity and anomalies in the pressure dependence of phonon velocities in niobium. Applied Physics Letters, 2018, 112, .	3.3	15
41	Magnetic origin of phase stability in cubic $\hat{\Gamma}^3$ -MoN. Applied Physics Letters, 2018, 113, 221901.	3.3	6
42	Insights into the Li ⁺ storage mechanism of TiC@C-TiO ₂ core-shell nanostructures as high performance anodes. Nano Energy, 2018, 50, 25-34.	16.0	53
43	Emergent superconductivity in an iron-based honeycomb lattice initiated by pressure-driven spin-crossover. Nature Communications, 2018, 9, 1914.	12.8	119
44	Thermally Induced Anomaly in the Shear Behavior of Magnetite at High Pressure. Physical Review Applied, 2018, 10, .	3.8	3
45	Pressure-induced structural and electronic transitions, metallization, and enhanced visible-light responsiveness in layered rhenium disulphide. Physical Review B, 2018, 97, .	3.2	35
46	Stoichiometric $\hat{\Gamma}$ -NbN: The Most Incompressible Cubic Transition Metal Mononitride. Physica Status Solidi (B): Basic Research, 2017, 254, 1700063.	1.5	3
47	Synthesis of Onion-Like $\hat{\Gamma}$ -MoN Catalyst for Selective Hydrogenation. Journal of Physical Chemistry C, 2017, 121, 19451-19460.	3.1	29
48	Ultrastrong Boron Frameworks in ZrB ₁₂ : A Highway for Electron Conducting. Advanced Materials, 2017, 29, 1604003.	21.0	71
49	Pressure-induced shift of T _c and structural transition in $\hat{\Gamma}$ -type pnictide superconductor Ca _{0.34} Na _{0.66} Fe ₂ As ₂ . AIP Advances, 2016, 6, 075104.	1.3	2
50	Reversible switching between pressure-induced amorphization and thermal-driven recrystallization in VO ₂ (B) nanosheets. Nature Communications, 2016, 7, 12214.	12.8	47
51	Enhanced ionic conductivity with Li ₇ O ₂ Br ₃ phase in Li ₃ OBr anti-perovskite solid electrolyte. Applied Physics Letters, 2016, 109, .	3.3	48
52	Thermal equation of state of silicon carbide. Applied Physics Letters, 2016, 108, .	3.3	33
53	Local structural distortion and electrical transport properties of Bi(Ni _{1/2} Ti _{1/2})O ₃ perovskite under high pressure. Scientific Reports, 2016, 5, 18229.	3.3	7
54	High pressure effects on U L ₃ -x-ray absorption in partial fluorescence yield mode and single crystal x-ray diffraction in the heavy fermion compound UCd ₁₁ . Journal of Physics Condensed Matter, 2016, 28, 105601.	1.8	9

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55	Robust high pressure stability and negative thermal expansion in sodium-rich antiperovskites Na ₃ OBr and Na ₄ OI ₂ . Journal of Applied Physics, 2016, 119, .	2.5	13
56	Elastic, magnetic and electronic properties of iridium phosphide Ir ₂ P. Scientific Reports, 2016, 6, 21787.	3.3	15
57	Simulation Blowing Agent Performance, Cell Morphology, and Cell Pressure in Rigid Polyurethane Foams. Industrial & Engineering Chemistry Research, 2016, 55, 2336-2344.	3.7	31
58	Giant Pressure-Driven Lattice Collapse Coupled with Intermetallic Bonding and Spin-State Transition in Manganese Chalcogenides. Angewandte Chemie - International Edition, 2016, 55, 10350-10353.	13.8	32
59	Enhanced Structural Stability and Photo Responsiveness of CH ₃ NH ₃ Sn ₃ Perovskite via Pressure-Induced Amorphization and Recrystallization. Advanced Materials, 2016, 28, 8663-8668.	21.0	176
60	Fluorine-Doped Antiperovskite Electrolyte for All-Solid-State Lithium-Ion Batteries. Angewandte Chemie - International Edition, 2016, 55, 9965-9968.	13.8	192
61	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
62	Sodium Ion Transport Mechanisms in Antiperovskite Electrolytes Na ₃ OBr and Na ₄ OI ₂ : An <i>in Situ</i> Neutron Diffraction Study. Inorganic Chemistry, 2016, 55, 5993-5998.	4.0	68
63	Antiperovskite Li ₃ OCl Superionic Conductor Films for Solid-State Li-Ion Batteries. Advanced Science, 2016, 3, 1500359.	11.2	162
64	Reaction mechanism studies towards effective fabrication of lithium-rich anti-perovskites Li ₃ OX (X=) Tj ETQq0 0 0 r gBT /Overlock 10 Tf 2.7 89	2.7	89
65	Synthesis, Hardness, and Electronic Properties of Stoichiometric VN and CrN. Crystal Growth and Design, 2016, 16, 351-358.	3.0	50
66	Pressure induced polymerization of acetylide anions in CaC ₂ and 10 ⁷ fold enhancement of electrical conductivity. Chemical Science, 2016, 8, 298-304.	7.4	17
67	Impact of the maximum foam reaction temperature on reducing foam shrinkage. RSC Advances, 2015, 5, 17171-17178.	3.6	25
68	Pressure-induced cation-cation bonding in V_2O_3 . Physical Review B, 2015, 92, .	3.2	17
69	The Hardest Superconducting Metal Nitride. Scientific Reports, 2015, 5, 13733.	3.3	78
70	High Pressure Phase-Transformation Induced Texture Evolution and Strengthening in Zirconium Metal: Experiment and Modeling. Scientific Reports, 2015, 5, 12552.	3.3	21
71	Simulation of liquid physical blowing agents for forming rigid urethane foams. Journal of Applied Polymer Science, 2015, 132, .	2.6	24
72	Computational study on reaction enthalpies of urethane-forming reactions. Polymer Engineering and Science, 2015, 55, 1420-1428.	3.1	8

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73	Hardness, elastic, and electronic properties of chromium monoboride. Applied Physics Letters, 2015, 106, .	3.3	54
74	Structural manipulation approaches towards enhanced sodium ionic conductivity in Na-rich antiperovskites. Journal of Power Sources, 2015, 293, 735-740.	7.8	97
75	The mobility of Nb in rutile-saturated NaCl- and NaF-bearing aqueous fluids from 1â€“6.5 GPa and 300â€“800 Å°C. American Mineralogist, 2015, 100, 1600-1609.	1.9	34
76	Pressure induced structural transitions in CuSbS2 and CuSbSe2 thermoelectric compounds. Journal of Alloys and Compounds, 2015, 643, 186-194.	5.5	54
77	A New Molybdenum Nitride Catalyst with Rhombohedral MoS ₂ Structure for Hydrogenation Applications. Journal of the American Chemical Society, 2015, 137, 4815-4822.	13.7	195
78	Impact of hydrostatic pressure on the crystal structure and photoluminescence properties of Mn ⁴⁺ -doped BaTiF ₆ red phosphor. Dalton Transactions, 2015, 44, 7578-7585.	3.3	43
79	Revisit of Pressure-Induced Phase Transition in PbSe: Crystal Structure, and Thermoelastic and Electrical Properties. Inorganic Chemistry, 2015, 54, 4981-4989.	4.0	25
80	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
81	Diamond- <i>c</i> /BN alloy: A universal cutting material. Applied Physics Letters, 2015, 107, .	3.3	28
82	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
83	High pressure transport and structural studies on Nb3Ga superconductor. Physica B: Condensed Matter, 2015, 459, 21-23.	2.7	5
84	Encapsulation kinetics and dynamics of carbon monoxide in clathrate hydrate. Nature Communications, 2014, 5, 4128.	12.8	62
85	Structural stability of WS ₂ under high pressure. International Journal of Modern Physics B, 2014, 28, 1450168.	2.0	26
86	Pressure-induced superconductivity in LaFeAsO: The role of anionic height and magnetic ordering. Applied Physics Letters, 2014, 105, .	3.3	9
87	High pressure-high temperature synthesis of lithium-rich Li3O(Cl, Br) and Li3âˆ™xCax/2OCl anti-perovskite halides. Inorganic Chemistry Communication, 2014, 48, 140-143.	3.9	33
88	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, .	3.3	15
89	Nuclear forward scattering and first-principles studies of the iron oxide phase Fe_4O_5 . Physical Review B, 2014, 90, .	3.8	8
90	Density modeling of polyurethane box foam. Polymer Engineering and Science, 2014, 54, 1503-1511.	3.1	20

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91	Sulfur-catalyzed phase transition in MoS ₂ under high pressure and temperature. Journal of Physics and Chemistry of Solids, 2014, 75, 100-104.	4.0	26
92	Enhanced Electron Transport in Nb-Doped TiO ₂ Nanoparticles via Pressure-Induced Phase Transitions. Journal of the American Chemical Society, 2014, 136, 419-426.	13.7	151
93	Effect of Pressure and Temperature on Structural Stability of MoS ₂ . Journal of Physical Chemistry C, 2014, 118, 3230-3235.	3.1	110
94	Porous Ice Phases with VI and Distorted VII Structures Constrained in Nanoporous Silica. Nano Letters, 2014, 14, 6554-6558.	9.1	11
95	Li-rich anti-perovskite Li ₃ OCl films with enhanced ionic conductivity. Chemical Communications, 2014, 50, 11520-11522.	4.1	130
96	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
97	Simulation of Catalyzed Urethane Polymerization: An Approach to Expedite Commercialization of Bio-based Materials. Catalysis Surveys From Asia, 2014, 18, 89-98.	2.6	7
98	Modeling impact of catalyst loading on polyurethane foam polymerization. Applied Catalysis A: General, 2014, 469, 229-238.	4.3	21
99	Reaction modeling of urethane polyols using fraction primary secondary and hindered secondary hydroxyl content. Journal of Applied Polymer Science, 2014, 131, .	2.6	24
100	Conventional empirical law reverses in the phase transitions of 122-type iron-based superconductors. Scientific Reports, 2014, 4, 7172.	3.3	16
101	Pressure-induced reversal between thermal contraction and expansion in ferroelectric PbTiO ₃ . Scientific Reports, 2014, 4, 3700.	3.3	16
102	High-temperature neutron diffraction study of deuterated brucite. Physics and Chemistry of Minerals, 2013, 40, 799-810.	0.8	17
103	Pressure-Induced Amorphization in Single-Crystal Ta ₂ O ₅ Nanowires: A Kinetic Mechanism and Improved Electrical Conductivity. Journal of the American Chemical Society, 2013, 135, 13947-13953.	13.7	70
104	Thermal equation of state and thermodynamic Grüneisen parameter of beryllium metal. Journal of Applied Physics, 2013, 114, .	2.5	10
105	<i>Ab initio</i> study of the stabilities of and mechanism of superionic transport in lithium-rich antiperovskites. Physical Review B, 2013, 87, .	3.2	135
106	Modeling reaction kinetics of rigid polyurethane foaming process. Journal of Applied Polymer Science, 2013, 130, 1131-1138.	2.6	37
107	Grain size effects on the compressibility and yield strength of copper. Journal of Physics and Chemistry of Solids, 2013, 74, 75-79.	4.0	11
108	Unusual structural evolution in KCuF ₃ at high temperatures by neutron powder diffraction. Physical Review B, 2013, 87, .	3.2	12

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109	Pressure-Induced Valence and Structural Changes in YbMn ₂ Ge ₂ —Inelastic X-ray Spectroscopy and Theoretical Investigations. <i>Inorganic Chemistry</i> , 2013, 52, 832-839.	4.0	12
110	New exploration on phase transition and structure of PbS under high pressure and temperature. <i>Journal of Applied Physics</i> , 2013, 113, 043509.	2.5	2
111	Temperature and pressure effects of multiferroic Bi ₂ NiTiO ₆ compound. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	11
112	Phase-Transition Induced Elastic Softening and Band Gap Transition in Semiconducting PbS at High Pressure. <i>Inorganic Chemistry</i> , 2013, 52, 8638-8643.	4.0	27
113	K ₃ Fe(CN) ₆ : Pressure-Induced Polymerization and Enhanced Conductivity. <i>Journal of Physical Chemistry C</i> , 2013, 117, 24174-24180.	3.1	17
114	Nuclear and charge density distributions in ferroelectric PbTiO ₃ : maximum entropy method analysis of neutron and X-ray diffraction data. <i>Powder Diffraction</i> , 2013, 28, 276-280.	0.2	4
115	Compressive-tensile deformation of nanocrystalline nickel at high pressure and temperature conditions. <i>Applied Physics Letters</i> , 2013, 103, 043118.	3.3	2
116	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} . <i>Applied Physics Letters</i> , 2012, 100, 052601.	3.3	2
117	Experimental invalidation of phase-transition-induced elastic softening in CrN. <i>Physical Review B</i> , 2012, 86, .	3.2	47
118	Charge transfer in spinel Co ₃ O ₄ at high pressures. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 435401.	1.8	36
119	High pressure neutron and synchrotron X-ray diffraction studies of tetragonal LaFeAsO _{0.9} F _{0.1} . <i>High Pressure Research</i> , 2012, 32, 405-411.	1.2	2
120	Synthesis of Stoichiometric and Bulk CrN through a Solid-State Ion-Exchange Reaction. <i>Chemistry - A European Journal</i> , 2012, 18, 15459-15463.	3.3	39
121	Constitutive Law and Flow Mechanism in Diamond Deformation. <i>Scientific Reports</i> , 2012, 2, 876.	3.3	29
122	Kinetic hysteresis in gas adsorption behavior for a rigid MOF arising from zig-zag channel structures. <i>Journal of Materials Chemistry</i> , 2012, 22, 10166.	6.7	21
123	Synthesis, Crystal Structure, and Elastic Properties of Novel Tungsten Nitrides. <i>Chemistry of Materials</i> , 2012, 24, 3023-3028.	6.7	154
124	Comparative studies of yield strength and elastic compressibility between nanocrystalline and bulk cobalt. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	7
125	Experimental visualization of lithium conduction pathways in garnet-type Li ₇ La ₃ Zr ₂ O ₁₂ . <i>Chemical Communications</i> , 2012, 48, 9840.	4.1	95
126	Pore size-controlled gases and alcohols separation within ultramicroporous homochiral lanthanide-organic frameworks. <i>Journal of Materials Chemistry</i> , 2012, 22, 7813.	6.7	53

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127	Structural Stability and Compressibility Study for ZnO Nanobelts under High Pressure. Journal of Physical Chemistry C, 2012, 116, 2074-2079.	3.1	23
128	<i>In situ</i> structure characterization of $\text{Pb}(\text{Yb}_{1/2}\text{Nb}_{1/2})\text{O}_3\text{-PbTiO}_3$ crystals under high pressure-temperature. Applied Physics Letters, 2012, 101, 062904.	3.3	8
129	Superionic Conductivity in Lithium-Rich Anti-Perovskites. Journal of the American Chemical Society, 2012, 134, 15042-15047.	13.7	458
130	High pressure synchrotron x-ray diffraction studies of superprotonic transitions in phosphate solid acids. Solid State Ionics, 2012, 213, 58-62.	2.7	12
131	Pressure-Induced Isostructural Phase Transition and Correlation of FeAs Coordination with the Superconducting Properties of 111-Type NaFeAs . Journal of the American Chemical Society, 2011, 133, 7892-7896.	13.7	55
132	Pressure-Induced Disordered Substitution Alloy in Sb_2Te_3 . Inorganic Chemistry, 2011, 50, 11291-11293.	4.0	70
133	Superhard diamond/tungsten carbide nanocomposites. Applied Physics Letters, 2011, 98, .	3.3	22
134	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.	3.3	13
135	Discovery of the recoverable high-pressure iron oxide Fe_4O_5 . Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17281-17285.	7.1	120
136	Pressure effect on crystal structure and superconductivity of $\text{La}_{0.8}\text{Th}_{0.2}\text{FeAsO}$. Physica Status Solidi - Rapid Research Letters, 2011, 5, 208-210.	2.4	0
137	Comparative studies of constitutive properties of nanocrystalline and bulk iron during compressive deformation. Acta Materialia, 2011, 59, 3384-3389.	7.9	15
138	Pressure induced structural transition and enhancement of superconductivity in Co doped CeFeAsO . Applied Physics Letters, 2011, 98, 012511.	3.3	11
139	Thermodynamic stability and unusual strength of ultra-incompressible rhenium nitrides. Physical Review B, 2011, 83, .	3.2	52
140	Thermal equations of state and phase relation of PbTiO_3 : A high P-T synchrotron x-ray diffraction study. Journal of Applied Physics, 2011, 110, 084103.	2.5	22
141	Thermal expansion and decomposition of jarosite: a high-temperature neutron diffraction study. Physics and Chemistry of Minerals, 2010, 37, 73-82.	0.8	19
142	High-pressure neutron diffraction studies at LANSCE. Applied Physics A: Materials Science and Processing, 2010, 99, 585-599.	2.3	24
143	First principles prediction of vanadium and niobium nitrides with M_2N_3 stoichiometry. Scripta Materialia, 2010, 63, 532-535.	5.2	20
144	Nanoscale twinning-induced elastic strengthening in silicon carbide nanowires. Scripta Materialia, 2010, 63, 981-984.	5.2	33

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145	Polyaniline Morphology and Detectable Intermediate Aggregates. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 627-634.	2.2	17
146	In situ X-ray study of ammonia borane at high pressures. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 11064-11070.	7.1	34
147	Pressure induced structural changes in the potential hydrogen storage compound ammonia borane: A combined X-ray, neutron and theoretical investigation. <i>Chemical Physics Letters</i> , 2010, 495, 203-207.	2.6	28
148	Thermal equation of state of TiC: A synchrotron x-ray diffraction study. <i>Journal of Applied Physics</i> , 2010, 107, .	2.5	8
149	Porous Metal-Organic Frameworks Containing Alkali-Bridged Two-Fold Interpenetration: Synthesis, Gas Adsorption, and Fluorescence Properties. <i>Crystal Growth and Design</i> , 2010, 10, 1301-1306.	3.0	42
150	Storage and separation applications of nanoporous metal-organic frameworks. <i>CrystEngComm</i> , 2010, 12, 1337-1353.	2.6	157
151	Anisotropic elasticity of jarosite: A high-P synchrotron XRD study. <i>American Mineralogist</i> , 2010, 95, 19-23.	1.9	20
152	Characterization of Reaction Intermediate Aggregates in Aniline Oxidative Polymerization at Low Proton Concentration. <i>Journal of Physical Chemistry B</i> , 2010, 114, 10337-10346.	2.6	56
153	A Porous Metal-Organic Replica of PbO_2 for Capture of Nerve Agent Surrogate. <i>Journal of the American Chemical Society</i> , 2010, 132, 17996-17999.	13.7	66
154	Experimental and theoretical studies on the elasticity of molybdenum to 12 GPa. <i>Journal of Applied Physics</i> , 2009, 106, .	2.5	16
155	Elastic moduli and strength of nanocrystalline cubic BC_2 x-ray diffraction under nonhydrostatic compression. <i>Physical Review B</i> , 2009, 79, .	3.2	38
156	First-principles prediction of mechanical properties of gamma-boron. <i>Applied Physics Letters</i> , 2009, 94, 191906.	3.3	40
157	High-temperature crystal structures and chemical modifications in RbH_2PO_4 . <i>Journal of Physics Condensed Matter</i> , 2009, 21, 325401.	1.8	21
158	Self-Assembled Polyaniline Nanotubes with Rectangular Cross-Sections. <i>Macromolecular Chemistry and Physics</i> , 2009, 210, 1600-1606.	2.2	19
159	Thermal equation of state of copper studied by high P-T synchrotron x-ray diffraction. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	25
160	Superhard diamondlike BC_5 A first-principles investigation. <i>Physical Review B</i> , 2009, 80, .	6.2	24
161	Thermodynamic and Mechanical Stabilities of Tantalum Nitride. <i>Physical Review Letters</i> , 2009, 103, 185501.	7.8	68
162	Nanocrystalline tungsten carbide: As incompressible as diamond. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	41

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163	Microstrain and grain-size analysis from diffraction peak width and graphical derivation of high-pressure thermomechanics. <i>Journal of Applied Crystallography</i> , 2008, 41, 1095-1108.	4.5	166
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