Tian Cui

List of Publications by Year
in descending order

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390	10,312	46918 47	56606 83
papers	citations	h-index	g-index

396	396	396	7156
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Pressure-induced metallization of dense (H2S)2H2 with high-Tc superconductivity. Scientific Reports, 2014, 4, 6968.	1.6	802
2	Superhard Monoclinic Polymorph of Carbon. Physical Review Letters, 2009, 102, 175506.	2.9	480
3	Color-Switchable Electroluminescence of Carbon Dot Light-Emitting Diodes. ACS Nano, 2013, 7, 11234-11241.	7.3	471
4	Pressure-induced decomposition of solid hydrogen sulfide. Physical Review B, 2015, 91, .	1.1	255
5	Superconducting High Pressure Phase of Germane. Physical Review Letters, 2008, 101, 107002.	2.9	224
6	Cagelike Diamondoid Nitrogen at High Pressures. Physical Review Letters, 2012, 109, 175502.	2.9	176
7	High-pressure crystal structures and superconductivity of Stannane (SnH ₄). Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1317-1320.	3.3	168
8	Origin of hardness in WB4 and its implications for ReB4, TaB4, MoB4, TcB4, and OsB4. Applied Physics Letters, 2008, 93, .	1.5	154
9	Structural Modifications and Mechanical Properties of Molybdenum Borides from First Principles. Journal of Physical Chemistry C, 2010, 114, 6722-6725.	1.5	142
10	Superconductivity at â¼100ÂK in dense SiH ₄ (H ₂) ₂ predicted by first principles. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15708-15711.	3.3	132
11	Highly Enhanced Luminescence from Single-Crystalline C60Â·1m-xylene Nanorods. Chemistry of Materials, 2006, 18, 4190-4194.	3.2	117
12	High-Temperature Superconducting Phases in Cerium Superhydride with a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>T</mml:mi></mml:mrow><mml:mrow><mml:mi>c</mml:mi></mml:m up to 115ÂK below a Pressure of 1ÂMegabar. Physical Review Letters, 2021, 127, 117001.	2.9	112
13	Structure and superconductivity of hydrides at high pressures. National Science Review, 2017, 4, 121-135.	4.6	109
14	Superconducting high-pressure phases of disilane. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9969-9973.	3.3	102
15	Novel Superhard <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>s</mml:mi><mml:msup><mml:mi>p</mml:mi><mml:mn>3</mml:mn></mml:msup></mml:m Carbon Allotrope from Cold-Compressed <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mrow><mml:mn>70</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Peapods. Physical Review Letters, 2017, 118, 245701.	2.9	100
16	Superconducting praseodymium superhydrides. Science Advances, 2020, 6, eaax6849.	4.7	99
17	First-principles study of electron-phonon coupling in hole- and electron-doped diamonds in the virtual crystal approximation. Physical Review B, 2005, 72, .	1.1	96
18	Design Principles for High-Temperature Superconductors with a Hydrogen-Based Alloy Backbone at Moderate Pressure. Physical Review Letters, 2022, 128, 047001.	2.9	91

#	Article	IF	Citations
19	Hydrogen Pentagraphenelike Structure Stabilized by Hafnium: A High-Temperature Conventional Superconductor. Physical Review Letters, 2020, 125, 217001.	2.9	87
20	Polyhydride CeH9 with an atomic-like hydrogen clathrate structure. Nature Communications, 2019, 10, 3461.	5.8	81
21	Lowest enthalpy polymorph of cold-compressed graphite phase. Physical Chemistry Chemical Physics, 2012, 14, 4347.	1.3	80
22	Exploring Hardness and the Distorted sp² Hybridization of Bâ€“B Bonds in WB₃. Chemistry of Materials, 2014, 26, 5297-5302.	3.2	80
23	Ab initiostudy revealing a layered structure in hydrogen-rich KH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>6</mml:mn></mml:msub></mml:math>under high pressure. Physical Review B, 2012, 86, .	1.1	79
24	Alkaline-earth metal (Mg) polynitrides at high pressure as possible high-energy materials. Physical Chemistry Chemical Physics, 2017, 19, 9246-9252.	1.3	77
25	Polymerization of nitrogen in lithium azide. Journal of Chemical Physics, 2013, 139, 164710.	1.2	69
26	Pressure-Induced Amorphization and Polyamorphism in One-Dimensional Single-Crystal TiO₂ Nanomaterials. Journal of Physical Chemistry Letters, 2010, 1, 309-314.	2.1	68
27	A Novel Polymerization of Nitrogen in Beryllium Tetranitride at High Pressure. Journal of Physical Chemistry C, 2017, 121, 9766-9772.	1.5	67
28	Synthesis of molecular metallic barium superhydride: pseudocubic BaH12. Nature Communications, 2021, 12, 273.	5.8	66
29	Ab initio prediction of superconductivity in molecular metallic hydrogen under high pressure. Solid State Communications, 2007, 141, 610-614.	0.9	65
30	High-temperature superconductivity in sulfur hydride evidenced by alternating-current magnetic susceptibility. National Science Review, 2019, 6, 713-718.	4.6	63
31	Synthesis of High-Density Nanocavities inside TiO₂â^'B Nanoribbons and Their Enhanced Electrochemical Lithium Storage Properties. Inorganic Chemistry, 2008, 47, 9870-9873.	1.9	62
32	Superconductivity of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LaH</mml:mi><mml:mn>10</mml:mn></mml:msub></mml and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LaH</mml:mi><mml:mn>16</mml:mn></mml:msub></mml polyhydrides. Physical Review B, 2020, 101, .	1.1	62
33	Nitrogen concentration driving the hardness of rhenium nitrides. Scientific Reports, 2014, 4, 4797.	1.6	61
34	Superhard three-dimensional carbon with metallic conductivity. Carbon, 2017, 123, 311-317.	5.4	61
35	Superhard semiconductingC3N2compounds predicted via first-principles calculations. Physical Review B, 2008, 78, .	1.1	60
36	Structural stability of polymeric nitrogen: A first-principles investigation. Journal of Chemical Physics, 2010, 132, 024502.	1.2	60

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37	High-Pressure Synthesis of Magnetic Neodymium Polyhydrides. Journal of the American Chemical Society, 2020, 142, 2803-2811.	6.6	59
38	Ultra-incompressible phases of tungsten dinitride predicted from first principles. Physical Review B, 2009, 79, .	1.1	58
39	Divergent synthesis routes and superconductivity of ternary hydride<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MgSiH</mml:mi><mml:mn>6</mml:mn></mml:msub> high pressure. Physical Review B, 2017, 96, .	3.7	57
40	New Metallic Ordered Phase of Perovskite CsPbI₃ under Pressure. Advanced Science, 2019, 6, 1900399.	5.6	57
41	High pressure-temperature Brillouin study of liquid water: Evidence of the structural transition from low-density water to high-density water. Journal of Chemical Physics, 2005, 123, 174511.	1.2	56
42	Pressure confinement effect in MoS₂monolayers. Nanoscale, 2015, 7, 9075-9082.	2.8	56
43	Mechanical and metallic properties of tantalum nitrides from first-principles calculations. RSC Advances, 2014, 4, 10133.	1.7	55
44	Stability of Hydrogen-Bonded Supramolecular Architecture under High Pressure Conditions: Pressure-Induced Amorphization in Melamineâ˜Boric Acid Adduct. Langmuir, 2009, 25, 4787-4791.	1.6	54
45	Enhanced Vickers hardness by quasi-3D boron network in MoB2. RSC Advances, 2013, 3, 18317.	1.7	53
46	Pressure-Induced Phase Transition in Hydrogen-Bonded Supramolecular Adduct Formed by Cyanuric Acid and Melamine. Journal of Physical Chemistry B, 2009, 113, 14719-14724.	1.2	52
47	Two-dimensional Penta-BP5 Sheets: High-stability, Strain-tunable Electronic Structure and Excellent Mechanical Properties. Scientific Reports, 2017, 7, 2404.	1.6	52
48	Cubic C₉₆: a novel carbon allotrope with a porous nanocube network. Journal of Materials Chemistry A, 2015, 3, 10448-10452.	5.2	47
49	Manganese mono-boride, an inexpensive room temperature ferromagnetic hard material. Scientific Reports, 2017, 7, 43759.	1.6	47
50	Hexagonal-structured Îµ-NbN: ultra-incompressibility, high shear rigidity and a possible hard superconducting material. Scientific Reports, 2015, 5, 10811.	1.6	46
51	Morphology-Tuned Phase Transitions of Anatase TiO₂ Nanowires under High Pressure. Journal of Physical Chemistry C, 2013, 117, 8516-8521.	1.5	45
52	Synthesis and high pressure induced amorphization of C60 nanosheets. Applied Physics Letters, 2007, 91, .	1.5	43
53	Rotational dynamics of confined C ₆₀ from near-infrared Raman studies under high pressure. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22135-22138.	3.3	43
54	Hydrogen bond symmetrization and superconducting phase of HBr and HCl under high pressure: An ab initio study. Journal of Chemical Physics, 2010, 133, 074509.	1.2	41

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55	Real-time and on-chip surface temperature sensing of GaN LED chips using PbSe quantum dots. Nanoscale, 2013, 5, 10481.	2.8	41
56	Pressure-Stabilized Superconductive Ionic Tantalum Hydrides. Inorganic Chemistry, 2017, 56, 3901-3908.	1.9	41
57	Cubic gauche-CN: A superhard metallic compound predicted via first-principles calculations. Journal of Chemical Physics, 2010, 133, 044512.	1.2	40
58	Prediction of superconducting ternary hydride MgGeH₆: from divergent high-pressure formation routes. Physical Chemistry Chemical Physics, 2017, 19, 27406-27412.	1.3	40
59	High T _c Superconductivity in Heavy Rare Earth Hydrides. Chinese Physics Letters, 2021, 38, 107401.	1.3	40
60	Pressure-Induced Irreversible Phase Transition in the Energetic Material Urea Nitrate: Combined Raman Scattering and X-ray Diffraction Study. Journal of Physical Chemistry C, 2013, 117, 152-159.	1.5	39
61	High photocurrent PbSe solar cells with thin active layers. Journal of Materials Chemistry A, 2015, 3, 8501-8507.	5.2	38
62	Ternary superconducting cophosphorus hydrides stabilized via lithium. Npj Computational Materials, 2019, 5, .	3.5	38
63	Tetragonal high-pressure phase of ZnO predicted from first principles. Physical Review B, 2009, 79, .	1.1	37
64	Discovery of Superconductivity in Hard Hexagonal Îµ-NbN. Scientific Reports, 2016, 6, 22330.	1.6	36
65	Pressure-Dependent Light Emission of Charged and Neutral Excitons in Monolayer MoSe₂. Journal of Physical Chemistry Letters, 2017, 8, 3556-3563.	2.1	36
66	Ab initiostudies of solid bromine under high pressure. Physical Review B, 2007, 76, .	1.1	35
67	Tailoring Building Blocks and Their Boundary Interaction for the Creation of New, Potentially Superhard, Carbon Materials. Advanced Materials, 2015, 27, 3962-3968.	11.1	34
68	Pressure-Induced Structures and Properties in Indium Hydrides. Inorganic Chemistry, 2015, 54, 9924-9928.	1.9	34
69	Bonding Properties of Aluminum Nitride at High Pressure. Inorganic Chemistry, 2017, 56, 7494-7500.	1.9	34
70	Pressure-Induced Phase Transition in Hydrogen-Bonded Supramolecular Structure: Guanidinium Nitrate. Journal of Physical Chemistry B, 2010, 114, 6765-6769.	1.2	33
71	Reversible Polymerization in Doped Fullerides Under Pressure: The Case Of C₆₀(Fe(C₅H₅)₂)₂. Journal of Physical Chemistry B, 2012, 116, 2643-2650.	1.2	33
72	High pressure structures and superconductivity of AlH₃(H₂) predicted by first principles. RSC Advances, 2015, 5, 5096-5101.	1.7	33

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73	Potentially superhard hcp<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Cr</mml:mi><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>compound studied at high pressure. Physical Review B, 2016, 93, .	1.1	33
74	Unique Phase Diagram and Superconductivity of Calcium Hydrides at High Pressures. Inorganic Chemistry, 2019, 58, 2558-2564.	1.9	33
75	Novel Strongly Correlated Europium Superhydrides. Journal of Physical Chemistry Letters, 2021, 12, 32-40.	2.1	33
76	Large Volume Collapse during Pressure-Induced Phase Transition in Lithium Amide. Journal of Physical Chemistry C, 2012, 116, 9744-9749.	1.5	32
77	Structural phase transition and photoluminescence properties of YF3 and YF3:Eu3+ under high pressure. Physical Chemistry Chemical Physics, 2013, 15, 19925.	1.3	32
78	Pressure-Induced Phase Transitions of C₇₀ Nanotubes. Journal of Physical Chemistry C, 2011, 115, 8918-8922.	1.5	31
79	Investigating Robust Honeycomb Borophenes Sandwiching Manganese Layers in Manganese Diboride. Inorganic Chemistry, 2016, 55, 11140-11146.	1.9	31
80	Thermal equation of state of Molybdenum determined from in situ synchrotron X-ray diffraction with laser-heated diamond anvil cells. Scientific Reports, 2016, 6, 19923.	1.6	31
81	High-temperature superconductivity in ternary clathrate YCaH₁₂ under high pressures. Journal of Physics Condensed Matter, 2019, 31, 245404.	0.7	31
82	Moderate Pressure Stabilized Pentazolate Cyclo-N₅^{â€“} Anion in Zn(N₅)₂ Salt. Inorganic Chemistry, 2020, 59, 8002-8012.	1.9	31
83	A new phase of solid iodine with different molecular covalent bonds. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 4999-5001.	3.3	30
84	Shape-selective synthesis and optical performance of ceria nanocrystal/graphene hybrid composites. CrystEngComm, 2013, 15, 3739.	1.3	30
85	Stability of Sulfur Nitrides: A First-Principles Study. Journal of Physical Chemistry C, 2017, 121, 1515-1520.	1.5	30
86	Superconducting ScH₃ and LuH₃ at Megabar Pressures. Inorganic Chemistry, 2021, 60, 15330-15335.	1.9	30
87	Pressure-induced transformation and superhard phase in fullerenes: The effect of solvent intercalation. Applied Physics Letters, 2013, 103, .	1.5	29
88	A New Carbon Phase Constructed by Longâ€Range Ordered Carbon Clusters from Compressing C₇₀ Solvates. Advanced Materials, 2014, 26, 7257-7263.	11.1	29
89	Modulated T carbon-like carbon allotropes: an ab initio study. RSC Advances, 2014, 4, 17364.	1.7	29
90	Structural Phase Transition and Photoluminescence Properties of YF₃:Eu³⁺ Nanocrystals under High Pressure. Journal of Physical Chemistry C, 2014, 118, 22739-22745.	1.5	29

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91	Structures and Properties of Osmium Hydrides under Pressure from First Principle Calculation. Journal of Physical Chemistry C, 2015, 119, 15905-15911.	1.5	29
92	Interlayer Coupling Affected Structural Stability in Ultrathin MoS₂: An Investigation by High Pressure Raman Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 24992-24998.	1.5	29
93	Pressure-induced superconducting ternary hydride H3SXe: A theoretical investigation. Frontiers of Physics, 2018, 13, 1.	2.4	29
94	Ab Initio Approach and Its Impact on Superconductivity. Journal of Superconductivity and Novel Magnetism, 2019, 32, 53-60.	0.8	29
95	Superconductivity and equation of state of lanthanum at megabar pressures. Physical Review B, 2020, 102, .	1.1	29
96	Ultrahard boron-rich tantalum boride: Monoclinic TaB 4. Journal of Alloys and Compounds, 2014, 617, 660-664.	2.8	28
97	Nanotwinned diamond synthesized from multicore carbon onion. Carbon, 2017, 120, 405-410.	5.4	28
98	WB2: not a superhard material for strong polarization character of interlayer Wâ€“B bonding. Physical Chemistry Chemical Physics, 2017, 19, 8919-8924.	1.3	28
99	Raman spectroscopy study of carbon nanotube peapods excited by near-IR laser under high pressure. Physical Review B, 2007, 76, .	1.1	27
100	Phase diagram, mechanical properties, and electronic structure of Nbâ€“N compounds under pressure. Physical Chemistry Chemical Physics, 2015, 17, 22837-22845.	1.3	27
101	Structural phase transition of BaZrO3 under high pressure. Journal of Applied Physics, 2014, 115, .	1.1	26
102	Miscibility and ordered structures of MgO-ZnO alloys under high pressure. Scientific Reports, 2014, 4, 5759.	1.6	26
103	First-principles study on the structural and electronic properties of metallic HfH2 under pressure. Scientific Reports, 2015, 5, 11381.	1.6	26
104	Stability and properties of the Ruâ€“H system at high pressure. Physical Chemistry Chemical Physics, 2016, 18, 1516-1520.	1.3	26
105	Superconducting Zirconium Polyhydrides at Moderate Pressures. Journal of Physical Chemistry Letters, 2020, 11, 646-651.	2.1	26
106	Structural and dynamical properties of solid ammonia borane under high pressure. Journal of Chemical Physics, 2011, 134, 024517.	1.2	25
107	High-temperature Superconductivity in compressed Solid Silane. Scientific Reports, 2015, 5, 8845.	1.6	25
108	Green synthesis of 3D SnO₂/graphene aerogels and their application in lithium-ion batteries. RSC Advances, 2015, 5, 39746-39751.	1.7	25

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109	Pressure-stabilized polymerization of nitrogen in alkaline-earth-metal strontium nitrides. Physical Chemistry Chemical Physics, 2020, 22, 5242-5248.	1.3	25
110	Proposed Superconducting Electride <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Li</mml:mi></mml:mrow><mml:mrow><mml:mn>6</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">C</mml:mi></mml:mrow></mml:math> by <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>s</mml:mi><mml:mi>p</mml:mi></mml:mrow></mml:math> -Hybridized Cage States at Moderate Pressures. Physical Review Letters, 2021, 127, 157002.	2.9	25
111	Effect of nonhydrostatic pressure on superconductivity of monatomic iodine: Anab initiostudy. Physical Review B, 2009, 79, .	1.1	24
112	Predicted structures and superconductivity of hypothetical Mg-CH4compounds under high pressures. Materials Research Express, 2015, 2, 046001.	0.8	24
113	The velocity, refractive index, and equation of state of liquid ammonia at high temperatures and high pressures. Journal of Chemical Physics, 2009, 131, 134502.	1.2	23
114	The low coordination number of nitrogen in hard tungsten nitrides: a first-principles study. Physical Chemistry Chemical Physics, 2015, 17, 13397-13402.	1.3	23
115	Formation of twelve-fold iodine coordination at high pressure. Nature Communications, 2022, 13, 412.	5.8	23
116	Effect of Surface Trap States on Photocatalytic Activity of Semiconductor Quantum Dots. Journal of Physical Chemistry C, 2018, 122, 9312-9319.	1.5	22
117	High-Pressure Formation of Cobalt Polyhydrides: A First-Principle Study. Inorganic Chemistry, 2018, 57, 181-186.	1.9	22
118	Modulating Hardness in Molybdenum Monoborides by Adjusting an Array of Boron Zigzag Chains. Chemistry of Materials, 2019, 31, 200-206.	3.2	22
119	Temperature-Dependent Photoluminescence of ZnCuInS/ZnSe/ZnS Quantum Dots. Journal of Physical Chemistry C, 0, , 130912104257009.	1.5	21
120	Pressure-Driven Topological Transformations of Iodine Confined in One-Dimensional Channels. Journal of Physical Chemistry C, 2013, 117, 25052-25058.	1.5	21
121	High Energetic Polymeric Nitrogen Stabilized in the Confinement of Boron Nitride Nanotube at Ambient Conditions. Journal of Physical Chemistry C, 2016, 120, 16412-16417.	1.5	21
122	Crossover from metal to insulator in dense lithium-rich compound CLi ₄. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2366-2369.	3.3	21
123	Crystal structures and electronic properties of solid fluorine under high pressure. Chinese Physics B, 2017, 26, 076103.	0.7	21
124	Synthesis and Electrochemical Properties of TiO ₂â^'B@C Coreâ^'Shell Nanoribbons. Crystal Growth and Design, 2008, 8, 1812-1814.	1.4	20
125	The redshift of surface plasmon resonance of colloidal gold nanoparticles induced by pressure with diamond anvil cell. Journal of Applied Physics, 2014, 115, .	1.1	20
126	Electronic Topological Transition in Ag2Te at High-pressure. Scientific Reports, 2015, 5, 14681.	1.6	20

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127	Pressure-induced metallization and amorphization in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">V</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mrow><mml:mo>(</mml:mo><mml:mi> Physical Review B, 2016, 93.	1.1	20
128	Linear Tunability of the Band Gap and Two-Dimensional (2D) to Three-Dimensional (3D) Isostructural Transition in WSe₂ under High Pressure. Journal of Physical Chemistry C, 2017, 121, 26019-26026.	1.5	20
129	Raman scattering system for a laser heated diamond anvil cell. Review of Scientific Instruments, 2004, 75, 2432-2434.	0.6	19
130	High pressure Raman scattering and X-ray diffraction studies of MgNb2O6. RSC Advances, 2013, 3, 13210.	1.7	19
131	Predicted novel metallic metastable phases of polymeric nitrogen at high pressures. New Journal of Physics, 2013, 15, 013010.	1.2	19
132	Tunable near-Infrared Luminescence of PbSe Quantum Dots for Multigas Analysis. Analytical Chemistry, 2014, 86, 11312-11318.	3.2	19
133	White-light-emitting diodes using GaN-excited CdSe/CdS/ZnS quantum dots. Particuology, 2014, 15, 90-93.	2.0	19
134	Structural Transition of MnNb₂O₆ under Quasi-Hydrostatic Pressure. Journal of Physical Chemistry C, 2014, 118, 19280-19286.	1.5	19
135	Predicted Formation of H₃⁺ in Solid Halogen Polyhydrides at High Pressures. Journal of Physical Chemistry A, 2015, 119, 11059-11065.	1.1	19
136	The structural phase transition process of free-standing monoclinic vanadium dioxide micron-sized rods: temperature-dependent Raman study. RSC Advances, 2015, 5, 83139-83143.	1.7	19
137	Ground state structures of tantalum tetraboride and triboride: an ab initio study. Physical Chemistry Chemical Physics, 2016, 18, 18074-18080.	1.3	19
138	Coupling-Assisted Renormalization of Excitons and Vibrations in Compressed MoSe₂â€“WSe₂ Heterostructure. Journal of Physical Chemistry C, 2018, 122, 5820-5828.	1.5	19
139	Metallic and anti-metallic properties of strongly covalently bonded energetic AlN5 nitrides. Physical Chemistry Chemical Physics, 2019, 21, 12029-12035.	1.3	19
140	Xâ€ray diffraction of cubic Gd₂O₃/Er under high pressure. Physica Status Solidi (B): Basic Research, 2011, 248, 1123-1127.	0.7	18
141	Pressure-Induced Amorphization in Gd₂O₃/Er³⁺ Nanorods. Journal of Physical Chemistry C, 2013, 117, 8503-8508.	1.5	18
142	Pressure induced phase transition in MH2 (M = V, Nb). Journal of Chemical Physics, 2014, 140, 114703.	1.2	18
143	In situ measurement of electrical resistivity and Seebeck coefficient simultaneously at high temperature and high pressure. Review of Scientific Instruments, 2014, 85, 013904.	0.6	18
144	High-pressure close-packed structure of boron. RSC Advances, 2014, 4, 203-207.	1.7	18

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145	Excellent mechanical properties of metastable c-WN fabricated at high pressure and high temperature. International Journal of Refractory Metals and Hard Materials, 2017, 66, 63-67.	1.7	18
146	Correlatively Dependent Lattice and Electronic Structural Evolutions in Compressed Monolayer Tungsten Disulfide. Journal of Physical Chemistry Letters, 2017, 8, 941-947.	2.1	18
147	Investigation of superconductivity in compressed vanadium hydrides. Physical Chemistry Chemical Physics, 2017, 19, 26280-26284.	1.3	18
148	New Ordered Structure of Amorphous Carbon Clusters Induced by Fullereneâ€“Cubane Reactions. Advanced Materials, 2018, 30, e1706916.	11.1	18
149	Double-zigzag boron chain-enhanced Vickers hardness and manganese bilayers-induced high d-electron mobility in Mn₃B₄. Physical Chemistry Chemical Physics, 2019, 21, 2697-2705.	1.3	18
150	Order-disorder phase transition and dissociation of hydrogen sulfide under high pressure: Ab initio molecular dynamics study. Journal of Chemical Physics, 2010, 132, 164506.	1.2	17
151	Optical interband transitions in Zn₂TiO₄ single crystals. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2596-2599.	0.8	17
152	A novel and tunable upconversion luminescent material GdPO4: Yb3+, Ln3+ (Ln=Er, Tm, Ho). Materials Research Bulletin, 2014, 56, 138-142.	2.7	17
153	Pressure-induced phase transitions of TiO₂ nanosheets with high reactive {001} facets. RSC Advances, 2014, 4, 12873-12877.	1.7	17
154	Tuning surface plasmon resonance by the plastic deformation of Au nanoparticles within a diamond anvil cell. Applied Physics Letters, 2015, 107, 201909.	1.5	17
155	Polymerization of Nitrogen in Ammonium Azide at High Pressures. Journal of Physical Chemistry C, 2015, 119, 25268-25272.	1.5	17
156	Confirmation of the Structural Phase Transitions in XeF₂ under High Pressure. Journal of Physical Chemistry C, 2017, 121, 6264-6271.	1.5	17
157	Effect of electrons scattered by optical phonons on superconductivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>M</mml:mi><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> () Tj ETQq1 1 0.784314 rgBT /Ov	1.1	17
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