

Tian Cui

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368
papers

7,438
citations

38
h-index

71
g-index

396
ext. papers

8,907
ext. citations

4.4
avg, IF

5.8
L-index

#	Paper	IF	Citations
368	Pressure-induced metallization of dense (HS)H ₂ with high-T _c superconductivity. <i>Scientific Reports</i> , 2014 , 4, 6968	4.9	502
367	Superhard monoclinic polymorph of carbon. <i>Physical Review Letters</i> , 2009 , 102, 175506	7.4	434
366	Color-switchable electroluminescence of carbon dot light-emitting diodes. <i>ACS Nano</i> , 2013 , 7, 11234-41	16.7	413
365	Pressure-induced decomposition of solid hydrogen sulfide. <i>Physical Review B</i> , 2015 , 91,	3.3	213
364	Superconducting high pressure phase of germane. <i>Physical Review Letters</i> , 2008 , 101, 107002	7.4	204
363	High-pressure crystal structures and superconductivity of Stannane (SnH ₄). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 1317-20	11.5	153
362	Origin of hardness in WB ₄ and its implications for ReB ₄ , TaB ₄ , MoB ₄ , TcB ₄ , and OsB ₄ . <i>Applied Physics Letters</i> , 2008 , 93, 101905	3.4	140
361	Cagelike diamondoid nitrogen at high pressures. <i>Physical Review Letters</i> , 2012 , 109, 175502	7.4	139
360	Structural Modifications and Mechanical Properties of Molybdenum Borides from First Principles. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 6722-6725	3.8	125
359	Superconductivity at approximately 100 K in dense SiH ₄ (H ₂) ₂ predicted by first principles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 15708-11	11.5	121
358	Highly Enhanced Luminescence from Single-Crystalline C ₆₀ -m-xylene Nanorods. <i>Chemistry of Materials</i> , 2006 , 18, 4190-4194	9.6	104
357	Superconducting high-pressure phases of disilane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 9969-73	11.5	91
356	First-principles study of electron-phonon coupling in hole- and electron-doped diamonds in the virtual crystal approximation. <i>Physical Review B</i> , 2005 , 72,	3.3	89
355	Lowest enthalpy polymorph of cold-compressed graphite phase. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 4347-50	3.6	77
354	Novel Superhard sp ³ Carbon Allotrope from Cold-Compressed C ₇₀ Peapods. <i>Physical Review Letters</i> , 2017 , 118, 245701	7.4	69
353	Structure and superconductivity of hydrides at high pressures. <i>National Science Review</i> , 2017 , 4, 121-135	10.8	65
352	Ab initio study revealing a layered structure in hydrogen-rich KH ₆ under high pressure. <i>Physical Review B</i> , 2012 , 86,	3.3	63

351	Exploring Hardness and the Distorted sp ² Hybridization of BB Bonds in WB3. <i>Chemistry of Materials</i> , 2014 , 26, 5297-5302	9.6	59
350	Pressure-Induced Amorphization and Polyamorphism in One-Dimensional Single-Crystal TiO ₂ Nanomaterials. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 309-314	6.4	59
349	Synthesis of high-density nanocavities inside TiO ₂ -B nanoribbons and their enhanced electrochemical lithium storage properties. <i>Inorganic Chemistry</i> , 2008 , 47, 9870-3	5.1	56
348	Ultra-incompressible phases of tungsten dinitride predicted from first principles. <i>Physical Review B</i> , 2009 , 79,	3.3	55
347	Ab initio prediction of superconductivity in molecular metallic hydrogen under high pressure. <i>Solid State Communications</i> , 2007 , 141, 610-614	1.6	55
346	Polymerization of nitrogen in lithium azide. <i>Journal of Chemical Physics</i> , 2013 , 139, 164710	3.9	54
345	Mechanical and metallic properties of tantalum nitrides from first-principles calculations. <i>RSC Advances</i> , 2014 , 4, 10133	3.7	52
344	Superhard semiconducting C ₃ N ₂ compounds predicted via first-principles calculations. <i>Physical Review B</i> , 2008 , 78,	3.3	50
343	Superconducting praseodymium superhydrides. <i>Science Advances</i> , 2020 , 6, eaax6849	14.3	49
342	Pressure-induced phase transition in hydrogen-bonded supramolecular adduct formed by cyanuric acid and melamine. <i>Journal of Physical Chemistry B</i> , 2009 , 113, 14719-24	3.4	49
341	Structural stability of polymeric nitrogen: A first-principles investigation. <i>Journal of Chemical Physics</i> , 2010 , 132, 024502	3.9	48
340	High pressure-temperature Brillouin study of liquid water: evidence of the structural transition from low-density water to high-density water. <i>Journal of Chemical Physics</i> , 2005 , 123, 174511	3.9	48
339	Nitrogen concentration driving the hardness of rhenium nitrides. <i>Scientific Reports</i> , 2014 , 4, 4797	4.9	47
338	Stability of hydrogen-bonded supramolecular architecture under high pressure conditions: pressure-induced amorphization in melamine-boric acid adduct. <i>Langmuir</i> , 2009 , 25, 4787-91	4	46
337	Superhard three-dimensional carbon with metallic conductivity. <i>Carbon</i> , 2017 , 123, 311-317	10.4	45
336	Polyhydride CeH with an atomic-like hydrogen clathrate structure. <i>Nature Communications</i> , 2019 , 10, 3461	17.4	44
335	Alkaline-earth metal (Mg) polynitrides at high pressure as possible high-energy materials. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 9246-9252	3.6	43
334	Enhanced Vickers hardness by quasi-3D boron network in MoB ₂ . <i>RSC Advances</i> , 2013 , 3, 18317	3.7	42

- 333 Synthesis and high pressure induced amorphization of C60 nanosheets. *Applied Physics Letters*, **2007**, 91, 103112 3.4 42
- 332 A Novel Polymerization of Nitrogen in Beryllium Tetranitride at High Pressure. *Journal of Physical Chemistry C*, **2017**, 121, 9766-9772 3.8 38
- 331 Cubic C96: a novel carbon allotrope with a porous nanocube network. *Journal of Materials Chemistry A*, **2015**, 3, 10448-10452 13 38
- 330 Superconductivity of LaH10 and LaH16 polyhydrides. *Physical Review B*, **2020**, 101, 3.3 38
- 329 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 3.8 38
- 328 Morphology-Tuned Phase Transitions of Anatase TiO₂ Nanowires under High Pressure. *Journal of Physical Chemistry C*, **2013**, 117, 8516-8521 3.8 38
- 327 Hexagonal-structured ENbN: ultra-incompressibility, high shear rigidity, and a possible hard superconducting material. *Scientific Reports*, **2015**, 5, 10811 4.9 37
- 326 High photocurrent PbSe solar cells with thin active layers. *Journal of Materials Chemistry A*, **2015**, 3, 8501-8507 3.9 37
- 325 Real-time and on-chip surface temperature sensing of GaN LED chips using PbSe quantum dots. *Nanoscale*, **2013**, 5, 10481-6 7.7 37
- 324 Hydrogen bond symmetrization and superconducting phase of HBr and HCl under high pressure: An ab initio study. *Journal of Chemical Physics*, **2010**, 133, 074509 3.9 37
- 323 Rotational dynamics of confined C60 from near-infrared Raman studies under high pressure. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 22135-8 11.5 37
- 322 Two-dimensional Penta-BP Sheets: High-stability, Strain-tunable Electronic Structure and Excellent Mechanical Properties. *Scientific Reports*, **2017**, 7, 2404 4.9 36
- 321 Pressure confinement effect in MoS₂ monolayers. *Nanoscale*, **2015**, 7, 9075-82 7.7 34
- 320 Cubic gauche-CN: A superhard metallic compound predicted via first-principles calculations. *Journal of Chemical Physics*, **2010**, 133, 044512 3.9 34
- 319 Manganese mono-boride, an inexpensive room temperature ferromagnetic hard material. *Scientific Reports*, **2017**, 7, 43759 4.9 33
- 318 New Metallic Ordered Phase of Perovskite CsPbI₃ under Pressure. *Advanced Science*, **2019**, 6, 1900399 13.6 33
- 317 Tetragonal high-pressure phase of ZnO predicted from first principles. *Physical Review B*, **2009**, 79, 3.3 33
- 316 Divergent synthesis routes and superconductivity of ternary hydride MgSiH₆ at high pressure. *Physical Review B*, **2017**, 96, 3.3 32

315	High-temperature superconductivity in sulfur hydride evidenced by alternating-current magnetic susceptibility. <i>National Science Review</i> , 2019 , 6, 713-718	10.8	32
314	Ab initio studies of solid bromine under high pressure. <i>Physical Review B</i> , 2007 , 76,	3.3	32
313	Hydrogen Pentagraphenelike Structure Stabilized by Hafnium: A High-Temperature Conventional Superconductor. <i>Physical Review Letters</i> , 2020 , 125, 217001	7.4	31
312	Pressure-Stabilized Superconductive Ionic Tantalum Hydrides. <i>Inorganic Chemistry</i> , 2017 , 56, 3901-3908	5.1	30
311	Tailoring Building Blocks and Their Boundary Interaction for the Creation of New, Potentially Superhard, Carbon Materials. <i>Advanced Materials</i> , 2015 , 27, 3962-8	24	30
310	Pressure-induced phase transition in hydrogen-bonded supramolecular structure: guanidinium nitrate. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 6765-9	3.4	30
309	Large Volume Collapse during Pressure-Induced Phase Transition in Lithium Amide. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 9744-9749	3.8	29
308	Synthesis of molecular metallic barium superhydride: pseudocubic BaH. <i>Nature Communications</i> , 2021 , 12, 273	17.4	29
307	High-Pressure Synthesis of Magnetic Neodymium Polyhydrides. <i>Journal of the American Chemical Society</i> , 2020 , 142, 2803-2811	16.4	28
306	Modulated T carbon-like carbon allotropes: an ab initio study. <i>RSC Advances</i> , 2014 , 4, 17364	3.7	28
305	Pressure-induced transformation and superhard phase in fullerenes: The effect of solvent intercalation. <i>Applied Physics Letters</i> , 2013 , 103, 071913	3.4	28
304	Structural phase transition and photoluminescence properties of YF3 and YF3:Eu3+ under high pressure. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 19925-31	3.6	28
303	Pressure-Dependent Light Emission of Charged and Neutral Excitons in Monolayer MoSe. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 3556-3563	6.4	28
302	A new carbon phase constructed by long-range ordered carbon clusters from compressing C70 solvates. <i>Advanced Materials</i> , 2014 , 26, 7257-63	24	27
301	Pressure-Induced Phase Transitions of C70 Nanotubes. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 8918-8922	3.2	27
300	High pressure structures and superconductivity of AlH3(H2) predicted by first principles. <i>RSC Advances</i> , 2015 , 5, 5096-5101	3.7	26
299	Shape-selective synthesis and optical performance of ceria nanocrystal/graphene hybrid composites. <i>CrystEngComm</i> , 2013 , 15, 3739	3.3	26
298	Prediction of superconducting ternary hydride MgGeH: from divergent high-pressure formation routes. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 27406-27412	3.6	26

- 297 Reversible polymerization in doped fullerides under pressure: the case of C₆₀(Fe(C₅H₅)₂)₂. *Journal of Physical Chemistry B*, **2012**, 116, 2643-50 3.4 26
- 296 Structures and Properties of Osmium Hydrides under Pressure from First Principle Calculation. *Journal of Physical Chemistry C*, **2015**, 119, 15905-15911 3.8 25
- 295 Discovery of Superconductivity in Hard Hexagonal ϵ -NbN. *Scientific Reports*, **2016**, 6, 22330 4.9 25
- 294 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 11.5 25
- 293 Structural and dynamical properties of solid ammonia borane under high pressure. *Journal of Chemical Physics*, **2011**, 134, 024517 3.9 24
- 292 Pressure-Induced Structures and Properties in Indium Hydrides. *Inorganic Chemistry*, **2015**, 54, 9924-8 5.1 23
- 291 Structural Phase Transition and Photoluminescence Properties of YF₃:Eu³⁺ Nanocrystals under High Pressure. *Journal of Physical Chemistry C*, **2014**, 118, 22739-22745 3.8 23
- 290 Raman spectroscopy study of carbon nanotube peapods excited by near-IR laser under high pressure. *Physical Review B*, **2007**, 76, 3.3 23
- 289 Bonding Properties of Aluminum Nitride at High Pressure. *Inorganic Chemistry*, **2017**, 56, 7494-7500 5.1 22
- 288 Nanotwinned diamond synthesized from multicore carbon onion. *Carbon*, **2017**, 120, 405-410 10.4 22
- 287 Stability of Sulfur Nitrides: A First-Principles Study. *Journal of Physical Chemistry C*, **2017**, 121, 1515-1520, 3.8 22
- 286 Green synthesis of 3D SnO₂/graphene aerogels and their application in lithium-ion batteries. *RSC Advances*, **2015**, 5, 39746-39751 3.7 22
- 285 Investigating Robust Honeycomb Borophenes Sandwiching Manganese Layers in Manganese Diboride. *Inorganic Chemistry*, **2016**, 55, 11140-11146 5.1 22
- 284 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 4.9 22
- 283 Potentially superhard hcp CrN₂ compound studied at high pressure. *Physical Review B*, **2016**, 93, 3.3 21
- 282 Phase diagram, mechanical properties, and electronic structure of Nb-N compounds under pressure. *Physical Chemistry Chemical Physics*, **2015**, 17, 22837-45 3.6 20
- 281 Interlayer Coupling Affected Structural Stability in Ultrathin MoS₂: An Investigation by High Pressure Raman Spectroscopy. *Journal of Physical Chemistry C*, **2016**, 120, 24992-24998 3.8 20
- 280 Stability and properties of the Ru-H system at high pressure. *Physical Chemistry Chemical Physics*, **2016**, 18, 1516-20 3.6 20

279	Temperature-Dependent Photoluminescence of ZnCuInS/ZnSe/ZnS Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2013 , 130912104257009	3.8	20
278	The velocity, refractive index, and equation of state of liquid ammonia at high temperatures and high pressures. <i>Journal of Chemical Physics</i> , 2009 , 131, 134502	3.9	20
277	Effect of nonhydrostatic pressure on superconductivity of monatomic iodine: An ab initio study. <i>Physical Review B</i> , 2009 , 79,	3.3	20
276	Synthesis and Electrochemical Properties of TiO ₂ @Core-Shell Nanoribbons. <i>Crystal Growth and Design</i> , 2008 , 8, 1812-1814	3.5	20
275	Miscibility and ordered structures of MgO-ZnO alloys under high pressure. <i>Scientific Reports</i> , 2014 , 4, 5759	4.9	19
274	The low coordination number of nitrogen in hard tungsten nitrides: a first-principles study. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 13397-402	3.6	19
273	High-Pressure Formation of Cobalt Polyhydrides: A First-Principle Study. <i>Inorganic Chemistry</i> , 2018 , 57, 181-186	5.1	19
272	High Energetic Polymeric Nitrogen Stabilized in the Confinement of Boron Nitride Nanotube at Ambient Conditions. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 16412-16417	3.8	19
271	Structural phase transition of BaZrO ₃ under high pressure. <i>Journal of Applied Physics</i> , 2014 , 115, 124907	2.5	19
270	WB: not a superhard material for strong polarization character of interlayer W-B bonding. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 8919-8924	3.6	19
269	Pressure-Driven Topological Transformations of Iodine Confined in One-Dimensional Channels. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 25052-25058	3.8	19
268	Raman scattering system for a laser heated diamond anvil cell. <i>Review of Scientific Instruments</i> , 2004 , 75, 2432-2434	1.7	19
267	High-Temperature Superconducting Phases in Cerium Superhydride with a T _c up to 115K below a Pressure of 1 Megabar. <i>Physical Review Letters</i> , 2021 , 127, 117001	7.4	19
266	First-principles study on the structural and electronic properties of metallic HfH ₂ under pressure. <i>Scientific Reports</i> , 2015 , 5, 11381	4.9	18
265	Pressure-induced metallization and amorphization in VO ₂ (A) nanorods. <i>Physical Review B</i> , 2016 , 93,	3.3	18
264	High-temperature superconductivity in compressed solid silane. <i>Scientific Reports</i> , 2015 , 5, 8845	4.9	18
263	Tunable near-infrared luminescence of PbSe quantum dots for multigas analysis. <i>Analytical Chemistry</i> , 2014 , 86, 11312-8	7.8	18
262	High-pressure close-packed structure of boron. <i>RSC Advances</i> , 2014 , 4, 203-207	3.7	17

261	Pressure-induced superconducting ternary hydride H ₃ SXe: A theoretical investigation. <i>Frontiers of Physics</i> , 2018 , 13, 1	3.7	16
260	Ultra-hard boron-rich tantalum boride: Monoclinic TaB ₄ . <i>Journal of Alloys and Compounds</i> , 2014 , 617, 660-664	5.7	16
259	Electronic Topological Transition in Ag ₂ Te at High-pressure. <i>Scientific Reports</i> , 2015 , 5, 14681	4.9	16
258	Tuning surface plasmon resonance by the plastic deformation of Au nanoparticles within a diamond anvil cell. <i>Applied Physics Letters</i> , 2015 , 107, 201909	3.4	16
257	Predicted structures and superconductivity of hypothetical Mg-CH ₄ compounds under high pressures. <i>Materials Research Express</i> , 2015 , 2, 046001	1.7	16
256	The redshift of surface plasmon resonance of colloidal gold nanoparticles induced by pressure with diamond anvil cell. <i>Journal of Applied Physics</i> , 2014 , 115, 223503	2.5	16
255	Pressure induced phase transition in MH ₂ (M = V, Nb). <i>Journal of Chemical Physics</i> , 2014 , 140, 114703	3.9	16
254	A novel and tunable upconversion luminescent material GdPO ₄ : Yb ³⁺ , Ln ³⁺ (Ln=Er, Tm, Ho). <i>Materials Research Bulletin</i> , 2014 , 56, 138-142	5.1	16
253	Order-disorder phase transition and dissociation of hydrogen sulfide under high pressure: ab initio molecular dynamics study. <i>Journal of Chemical Physics</i> , 2010 , 132, 164506	3.9	16
252	Ab Initio Approach and Its Impact on Superconductivity. <i>Journal of Superconductivity and Novel Magnetism</i> , 2019 , 32, 53-60	1.5	16
251	Moderate Pressure Stabilized Pentazolate Cyclo-N Anion in Zn(N) Salt. <i>Inorganic Chemistry</i> , 2020 , 59, 8002-8012	5.1	15
250	Pressure-induced phase transitions of TiO ₂ nanosheets with high reactive {001} facets. <i>RSC Advances</i> , 2014 , 4, 12873-12877	3.7	15
249	In situ Raman and photoluminescence study on pressure-induced phase transition in C ₆₀ nanotubes. <i>Journal of Raman Spectroscopy</i> , 2012 , 43, 737-740	2.3	15
248	High pressure Raman scattering and X-ray diffraction studies of MgNb ₂ O ₆ . <i>RSC Advances</i> , 2013 , 3, 13210	3.7	15
247	Excellent mechanical properties of metastable c-WN fabricated at high pressure and high temperature. <i>International Journal of Refractory Metals and Hard Materials</i> , 2017 , 66, 63-67	4.1	14
246	Polymerization of Nitrogen in Ammonium Azide at High Pressures. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 25268-25272	3.8	14
245	New Ordered Structure of Amorphous Carbon Clusters Induced by Fullerene-Cubane Reactions. <i>Advanced Materials</i> , 2018 , 30, e1706916	24	14
244	Crossover from metal to insulator in dense lithium-rich compound CLi ₄ . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 2366-9	11.5	14

243	In situ measurement of electrical resistivity and Seebeck coefficient simultaneously at high temperature and high pressure. <i>Review of Scientific Instruments</i> , 2014 , 85, 013904	1.7	14
242	Hydrogen Bond in Compressed Solid Hydrazine. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 3236-3243	3.8	14
241	Structural Transition of MnNb ₂ O ₆ under Quasi-Hydrostatic Pressure. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19280-19286	3.8	14
240	Pressure-Induced Amorphization in Gd ₂ O ₃ /Er ³⁺ Nanorods. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 8503-8508	3.8	14
239	Crystal structures and electronic properties of solid fluorine under high pressure. <i>Chinese Physics B</i> , 2017 , 26, 076103	1.2	14
238	Predicted Formation of H ₃ (+) in Solid Halogen Polyhydrides at High Pressures. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 11059-65	2.8	14
237	High pressure and high temperature induced polymerization of C ₆₀ nanotubes. <i>CrystEngComm</i> , 2011 , 13, 3600	3.3	14
236	Modulating Hardness in Molybdenum Monoborides by Adjusting an Array of Boron Zigzag Chains. <i>Chemistry of Materials</i> , 2019 , 31, 200-206	9.6	14
235	Confirmation of the Structural Phase Transitions in XeF ₂ under High Pressure. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 6264-6271	3.8	13
234	The structural phase transition process of free-standing monoclinic vanadium dioxide micron-sized rods: temperature-dependent Raman study. <i>RSC Advances</i> , 2015 , 5, 83139-83143	3.7	13
233	Investigation of stable germane structures under high-pressure. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 27630-5	3.6	13
232	Coupling-Assisted Renormalization of Excitons and Vibrations in Compressed MoSe ₂ /WSe ₂ Heterostructure. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 5820-5828	3.8	13
231	Effect of Surface Trap States on Photocatalytic Activity of Semiconductor Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 9312-9319	3.8	13
230	Double-zigzag boron chain-enhanced Vickers hardness and manganese bilayers-induced high d-electron mobility in MnB. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 2697-2705	3.6	13
229	Ternary superconducting phosphorus hydrides stabilized via lithium. <i>Npj Computational Materials</i> , 2019 , 5,	10.9	13
228	Effects of magnetic ordering and electron correlations on the stability of FeN. <i>RSC Advances</i> , 2015 , 5, 31270-31274	3.7	13
227	Enhancement of T _c in the atomic phase of iodine-doped hydrogen at high pressures. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 32335-40	3.6	13
226	White-light-emitting diodes using GaN-excited CdSe/CdS/ZnS quantum dots. <i>Particuology</i> , 2014 , 15, 90-988		13

225	Predicted novel metallic metastable phases of polymeric nitrogen at high pressures. <i>New Journal of Physics</i> , 2013 , 15, 013010	2.9	13
224	High pressure and high temperature induced polymeric C60 nanocrystal. <i>Diamond and Related Materials</i> , 2008 , 17, 620-623	3.5	13
223	Unique Phase Diagram and Superconductivity of Calcium Hydrides at High Pressures. <i>Inorganic Chemistry</i> , 2019 , 58, 2558-2564	5.1	12
222	Ab initio study of germanium-hydride compounds under high pressure. <i>RSC Advances</i> , 2015 , 5, 19432-19438	3.7	12
221	Polarized Raman Study of Aligned Multiwalled Carbon Nanotubes Arrays under High Pressure. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 27759-27767	3.8	12
220	Structural transformation of confined iodine in the elliptical channels of AlPO(4)-11 crystals under high pressure. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 8301-9	3.6	12
219	Pressure-Induced Diversity of π -Stacking Motifs and Amorphous Polymerization in Pyrrole. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 12420-12427	3.8	12
218	Prediction of stoichiometric PoHn compounds: crystal structures and properties. <i>RSC Advances</i> , 2015 , 5, 103445-103450	3.7	12
217	Ab initio structure determination of n-diamond. <i>Scientific Reports</i> , 2015 , 5, 13447	4.9	12
216	Optical interband transitions in Zn ₂ TiO ₄ single crystals. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012 , 209, 2596-2599	1.6	12
215	X-ray diffraction of cubic Gd ₂ O ₃ /Er under high pressure. <i>Physica Status Solidi (B): Basic Research</i> , 2011 , 248, 1123-1127	1.3	12
214	Superconducting Zirconium Polyhydrides at Moderate Pressures. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 646-651	6.4	12
213	Effect of electrons scattered by optical phonons on superconductivity in MH ₃ (M=S, Ti, V, Se). <i>Physical Review B</i> , 2018 , 98,	3.3	11
212	Structural stability and compressive behavior of ZrH ₂ under hydrostatic pressure and nonhydrostatic pressure. <i>RSC Advances</i> , 2014 , 4, 46780-46786	3.7	11
211	Reversible pressure-induced polymerization of Fe(C ₅ H ₅) ₂ doped C70. <i>Carbon</i> , 2013 , 62, 447-454	10.4	11
210	Ab initio investigation of CaO-ZnO alloys under high pressure. <i>Scientific Reports</i> , 2015 , 5, 11003	4.9	11
209	Novel Strongly Correlated Europium Superhydrides. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 32-40	6.4	11
208	A Novel High-Density Phase and Amorphization of Nitrogen-Rich 1H-Tetrazole (CHN) under High Pressure. <i>Scientific Reports</i> , 2017 , 7, 39249	4.9	10

207	Unexpected calcium polyhydride CaH: A possible route to dissociation of hydrogen molecules. <i>Journal of Chemical Physics</i> , 2019 , 150, 044507	3.9	10
206	High-temperature superconductivity in ternary clathrate YCaH under high pressures. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 245404	1.8	10
205	Structural, mechanical, and electronic properties of Rh ₂ B and RhB ₂ : first-principles calculations. <i>Scientific Reports</i> , 2015 , 5, 10500	4.9	10
204	Experimental verification of the high pressure crystal structures in NH ₃ BH ₃ . <i>Journal of Chemical Physics</i> , 2014 , 140, 244507	3.9	10
203	A novel pressure-induced phase transition in CaZrO ₃ . <i>CrystEngComm</i> , 2014 , 16, 4441	3.3	10
202	The effect of Eu ²⁺ doping concentration on luminescence properties of Sr ₃ B ₂ O ₆ :Eu ²⁺ yellow phosphor. <i>Materials Research Bulletin</i> , 2013 , 48, 3687-3690	5.1	10
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