Yongjun Tian

List of Publications by Year
in descending order

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372	14,779	36203	26548
papers	citations	51 h-index	107 g-index

377	377	377	13746
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Unique Lead Adsorption Behavior of Activated Hydroxyl Group in Two-Dimensional Titanium Carbide. Journal of the American Chemical Society, 2014, 136, 4113-4116.	6.6	1,068
2	Microscopic theory of hardness and design of novel superhard crystals. International Journal of Refractory Metals and Hard Materials, 2012, 33, 93-106.	1.7	900
3	Hardness of Covalent Crystals. Physical Review Letters, 2003, 91, 015502.	2.9	835
4	Ultrahard nanotwinned cubic boron nitride. Nature, 2013, 493, 385-388.	13.7	662
5	Nanotwinned diamond with unprecedented hardness and stability. Nature, 2014, 510, 250-253.	13.7	611
6	Semimetallic Two-Dimensional Boron Allotrope with Massless Dirac Fermions. Physical Review Letters, 2014, 112, .	2.9	497
7	Ab initioinvestigations of optical properties of the high-pressure phases of ZnO. Physical Review B, 2005, 71, .	1.1	363
8	Flexible Allâ€Solidâ€State Supercapacitors based on Liquidâ€Exfoliated Blackâ€Phosphorus Nanoflakes. Advanced Materials, 2016, 28, 3194-3201.	11.1	290
9	Teâ€Doped Black Phosphorus Fieldâ€Effect Transistors. Advanced Materials, 2016, 28, 9408-9415.	11.1	241
10	Peanut shell derived hard carbon as ultralong cycling anodes for lithium and sodium batteries. Electrochimica Acta, 2015, 176, 533-541.	2.6	236
11	Largeâ€Scale Synthesis of Nitrogenâ€Rich Carbon Nitride Microfibers by Using Graphitic Carbon Nitride as Precursor. Advanced Materials, 2008, 20, 1777-1781.	11.1	230
12	Novel Superhard Carbon: C-Centered Orthorhombic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2011, 107, 215502.	2.9	225
13	Ionicities of Boron-Boron Bonds inB12Icosahedra. Physical Review Letters, 2005, 94, 015504.	2.9	207
14	Tetragonal Allotrope of Group 14 Elements. Journal of the American Chemical Society, 2012, 134, 12362-12365.	6.6	170
15	Hardness of covalent compounds: Roles of metallic component and d valence electrons. Journal of Applied Physics, 2008, 104, .	1.1	166
16	Liquidâ€Exfoliated Black Phosphorous Nanosheet Thin Films for Flexible Resistive Random Access Memory Applications. Advanced Functional Materials, 2016, 26, 2016-2024.	7.8	161
17	Hierarchically structured diamond composite with exceptional toughness. Nature, 2020, 582, 370-374.	13.7	141
18	Turbostratic carbon nitride prepared by pyrolysis of melamine. Journal of Materials Science, 2005, 40, 2645-2647.	1.7	130

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19	Ab initiostudy of the formation of transparent carbon under pressure. Physical Review B, 2010, 82, .	1.1	119
20	Recent Advances in Superhard Materials. Annual Review of Materials Research, 2016, 46, 383-406.	4.3	119
21	First-principles study of electronic structure and optical properties of heterodiamondBC2N. Physical Review B, 2006, 73, .	1.1	113
22	Three Dimensional Carbon-Nanotube Polymers. ACS Nano, 2011, 5, 7226-7234.	7.3	110
23	Compressed glassy carbon: An ultrastrong and elastic interpenetrating graphene network. Science Advances, 2017, 3, e1603213.	4.7	110
24	Potential high- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>T</mml:mi><mml:mi>c</mml:mi></mml:msub></mml:ma superconductivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CaYH</mml:mi><mml:mn>12</mml:mn></mml:msub></r under pressure. Physical Review B, 2019, 99, .	1.1	109
25	Temperature dependent elastic constants and ultimate strength of graphene and graphyne. Journal of Chemical Physics, 2012, 137, 194901.	1.2	94
26	Flexible Black-Phosphorus Nanoflake/Carbon Nanotube Composite Paper for High-Performance All-Solid-State Supercapacitors. ACS Applied Materials & Interfaces, 2017, 9, 44478-44484.	4.0	89
27	Calorimetric versus kinetic glass transitions in viscous monohydroxy alcohols. Journal of Chemical Physics, 2008, 128, 084503.	1.2	80
28	Compressed carbon nanotubes: A family of new multifunctional carbon allotropes. Scientific Reports, 2013, 3, 1331.	1.6	80
29	Optical properties of heterodiamond B2CN using first-principles calculations. Applied Physics Letters, 2004, 84, 4544-4546.	1.5	78
30	Body-centered tetragonal B2N2: a novel sp3 bonding boron nitride polymorph. Physical Chemistry Chemical Physics, 2011, 13, 14565.	1.3	77
31	First-principles studies of structural and electronic properties of hexagonalBC5. Physical Review B, 2006, 73, .	1.1	75
32	High-pressure synthesis of phonon-glass electron-crystal featured thermoelectric LixCo4Sb12. Acta Materialia, 2012, 60, 1246-1251.	3.8	73
33	Approaching diamondâ€™s theoretical elasticity and strength limits. Nature Communications, 2019, 10, 5533.	5.8	73
34	Enhanced thermoelectric figure of merit in nanocrystalline Bi2Te3 bulk. Journal of Applied Physics, 2009, 105, .	1.1	71
35	Variable cell nudged elastic band method for studying solidâ€“solid structural phase transitions. Computer Physics Communications, 2013, 184, 2111-2118.	3.0	71
36	Atomically Resolving Polymorphs and Crystal Structures of In₂Se₃. Chemistry of Materials, 2019, 31, 10143-10149.	3.2	71

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37	Peculiar ZnO nanopushpins and nanotubes synthesized via simple thermal evaporation. Applied Physics Letters, 2005, 87, 123111.	1.5	69
38	Crystal structure and physical properties ofOsN2andPtN2in the marcasite phase. Physical Review B, 2007, 75, .	1.1	69
39	Predicting hardness of dense C3N4 polymorphs. Applied Physics Letters, 2006, 88, 101906.	1.5	67
40	Superhard and superconducting structures of BC5. Journal of Applied Physics, 2010, 108, .	1.1	66
41	Prediction of high- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>T</mml:mi><mml:mi>c</mml:mi></mml:msub></mml:ma superconductivity in ternary lanthanum borohydrides. Physical Review B, 2021, 104, .	1.1	66
42	Lateral Bilayer MoS₂â€“WS₂ Heterostructure Photodetectors with High Responsivity and Detectivity. Advanced Optical Materials, 2019, 7, 1900815.	3.6	65
43	Most likely phase of superhard<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi>BC</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi></mml:mrow></mml:math>byab initiocalculations. Physical Review B, 2007, 76, .	1.1	62
44	Two-Dimensional Superlattice: Modulation of Band Gaps in Graphene-Based Monolayer Carbon Superlattices. Journal of Physical Chemistry Letters, 2012, 3, 3373-3378.	2.1	60
45	Superhard materials: recent research progress and prospects. Science China Materials, 2015, 58, 132-142.	3.5	59
46	Mechanical properties of nanocrystalline TiCâ€“ZrC solid solutions fabricated by spark plasma sintering. Ceramics International, 2014, 40, 10517-10522.	2.3	57
47	Regulating Polymerization in Graphitic Carbon Nitride To Improve Photocatalytic Activity. Chemistry of Materials, 2019, 31, 9188-9199.	3.2	57
48	Phase transformation of melamine at high pressure and temperature. Journal of Materials Science, 2008, 43, 689-695.	1.7	55
49	Hardness of cubic spinel Si3N4. Applied Physics Letters, 2004, 85, 5571-5573.	1.5	54
50	Taming the Collapse of Optical Fields. Scientific Reports, 2012, 2, 1007.	1.6	54
51	Exotic Cubic Carbon Allotropes. Journal of Physical Chemistry C, 2012, 116, 24233-24238.	1.5	53
52	First-principles study of O-BN: A sp3-bonding boron nitride allotrope. Journal of Applied Physics, 2012, 112, .	1.1	53
53	High pressure synthesized Ca-filled CoSb3 skutterudites with enhanced thermoelectric properties. Journal of Alloys and Compounds, 2016, 677, 61-65.	2.8	53
54	Discovery of carbon-based strongest and hardest amorphous material. National Science Review, 2022, 9, nwab140.	4.6	49

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55	Orthorhombic B2CN crystal synthesized by high pressure and temperature. Chemical Physics Letters, 2001, 340, 431-436.	1.2	48
56	Prediction of a sandwichlike conducting superhard boron carbide: First-principles calculations. Physical Review B, 2006, 73, .	1.1	48
57	Mechanochemically activated synthesis of zirconium carbide nanoparticles at room temperature: A simple route to prepare nanoparticles of transition metal carbides. Journal of the European Ceramic Society, 2011, 31, 1491-1496.	2.8	48
58	Direct Observation of Room-Temperature Dislocation Plasticity in Diamond. Matter, 2020, 2, 1222-1232.	5.0	48
59	Great thermoelectric power factor enhancement of CoSb3 through the lightest metal element filling. Applied Physics Letters, 2011, 98, .	1.5	47
60	Diffusion-controlled crystal growth in deeply undercooled melt on approaching the glass transition. Physical Review B, 2011, 83, .	1.1	47
61	Superconducting high-pressure phase of platinum hydride from first principles. Physical Review B, 2011, 84, .	1.1	47
62	Application of hard ceramic materials B4C in energy storage: Design B4C@C core-shell nanoparticles as electrodes for flexible all-solid-state micro-supercapacitors with ultrahigh cyclability. Nano Energy, 2020, 75, 104947.	8.2	47
63	Compressive Strength of Diamond from First-Principles Calculation. Journal of Physical Chemistry C, 2010, 114, 17851-17853.	1.5	46
64	Bulk Re₂C: Crystal Structure, Hardness, and Ultra-incompressibility. Crystal Growth and Design, 2010, 10, 5024-5026.	1.4	46
65	Temperature dependent elastic constants for crystals with arbitrary symmetry: Combined first principles and continuum elasticity theory. Journal of Applied Physics, 2012, 111, .	1.1	46
66	Structural Relaxation Dynamics in Binary Glass-Forming Molecular Liquids with Ideal and Complex Mixing Behavior. Journal of Physical Chemistry B, 2010, 114, 3618-3622.	1.2	45
67	Sodium doped polycrystalline SnSe: High pressure synthesis and thermoelectric properties. Journal of Alloys and Compounds, 2017, 727, 1014-1019.	2.8	44
68	First-principles study of wurtzite<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi></mml:mrow></mml:math>. Physical Review B, 2007, 76, .	1.1	43
69	A â€œuniversalâ€•criterion for metallic glass formation. Applied Physics Letters, 2012, 100, 261913.	1.5	43
70	Bond ionicities and hardness ofB13C2-like structuredByXcrystals(X=C,N,O,P,As). Physical Review B, 2006, 73, .	1.1	42
71	Enhanced thermoelectric properties in Co4Sb12â^'xTex alloys prepared by HPHT. Materials Letters, 2009, 63, 2139-2141.	1.3	42
72	Grain-boundary-rich polycrystalline monolayer WS2 film for attomolar-level Hg2+ sensors. Nature Communications, 2021, 12, 3870.	5.8	42

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73	Chalcopyrite polymorph for superhard BC2N. Applied Physics Letters, 2006, 89, 151911.	1.5	41
74	Amorphous silicoboron carbonitride monoliths resistant to flowing air up to 1800 Â°C. Corrosion Science, 2016, 109, 162-173.	3.0	41
75	Semiconducting Superhard Ruthenium Monocarbide. Journal of Physical Chemistry C, 2010, 114, 9961-9964.	1.5	40
76	Dislocation behaviors in nanotwinned diamond. Science Advances, 2018, 4, eaat8195.	4.7	40
77	Crystal structure and stability of magnesium borohydride from first principles. Physical Review B, 2009, 79, .	1.1	39
78	A superhard sp3 microporous carbon with direct bandgap. Chemical Physics Letters, 2017, 689, 68-73.	1.2	39
79	Refined Crystal Structure and Mechanical Properties of Superhard BC₄N Crystal: First-Principles Calculations. Journal of Physical Chemistry C, 2008, 112, 9516-9519.	1.5	38
80	Structure and mechanical properties of osmium carbide: First-principles calculations. Applied Physics Letters, 2008, 93, .	1.5	38
81	Ultrahardness: Measurement and Enhancement. Journal of Physical Chemistry C, 2015, 119, 5633-5638.	1.5	37
82	High pressure synthesis and thermoelectric properties of polycrystalline Bi2Se3. Journal of Alloys and Compounds, 2017, 700, 223-227.	2.8	37
83	Theoretical hardness of the cubic BC2N. Diamond and Related Materials, 2007, 16, 526-530.	1.8	36
84	Degradable magnesiumâ€based implant materials with antiâ€inflammatory activity. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1898-1906.	2.1	36
85	Bulk modulus for polar covalent crystals. Scientific Reports, 2013, 3, 3068.	1.6	35
86	Investigation of skutterudite MgyCo4Sb12: High pressure synthesis and thermoelectric properties. Journal of Applied Physics, 2013, 113, 113703.	1.1	35
87	Synthesis of iodine filled CoSb 3 with extremely low thermal conductivity. Journal of Alloys and Compounds, 2014, 615, 177-180.	2.8	34
88	Prediction of a Three-Dimensional Conductive Superhard Material: Diamond-like BC₂. Journal of Physical Chemistry C, 2010, 114, 22688-22690.	1.5	33
89	Glass Transition in Binary Eutectic Systems: Best Glass-Forming Composition. Journal of Physical Chemistry B, 2010, 114, 12080-12084.	1.2	33
90	Superhard superstrong carbon clathrate. Carbon, 2016, 105, 151-155.	5.4	33

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91	First-principles study of crystal structures and superconductivity of ternary <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>YSH</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LaSH</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math> at high pressures. Physical Review B, 2019, 100, .	1.1	33
92	Mechanical polishing of ultrahard nanotwinned diamond via transition into hard sp2-sp3 amorphous carbon. Carbon, 2020, 161, 1-6.	5.4	33
93	Body-centered superhard<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi></mml:mrow></mml:math>phases from first principles. Physical Review B, 2007, 76, .	1.1	32
94	A tetragonal phase of superhard BC2N. Journal of Applied Physics, 2009, 105, .	1.1	32
95	Enhanced thermoelectric performance of AgSbTe2 synthesized by high pressure and high temperature. Journal of Applied Physics, 2009, 105, 073713.	1.1	32
96	Continuous strengthening in nanotwinned diamond. Npj Computational Materials, 2019, 5, .	3.5	32
97	Porous bismuth antimony telluride alloys with excellent thermoelectric and mechanical properties. Journal of Materials Chemistry A, 2021, 9, 4990-4999.	5.2	32
98	Metallic layered germanium phosphide GeP₅ for high rate flexible all-solid-state supercapacitors. Journal of Materials Chemistry A, 2018, 6, 19409-19416.	5.2	31
99	Direct large-scale fabrication of C-encapsulated B4C nanoparticles with tunable dielectric properties as excellent microwave absorbers. Carbon, 2019, 148, 504-511.	5.4	30
100	On ageing and critical thickness of YBa2Cu3O7 films on Si with CeO2/YSZ buffer layers. Thin Solid Films, 1999, 338, 224-230.	0.8	29
101	Is orthorhombic iron tetraboride superhard?. Journal of Materiomics, 2015, 1, 45-51.	2.8	29
102	Structure and thermoelectric properties of Se- and Se/Te-doped CoSb3 skutterudites synthesized by high-pressure technique. Journal of Alloys and Compounds, 2015, 647, 295-302.	2.8	29
103	Fabrication of multifunctional carbon encapsulated Ni@NiO nanocomposites for oxygen reduction, oxygen evolution and lithium-ion battery anode materials. Science China Materials, 2017, 60, 947-954.	3.5	29
104	Enhanced thermoelectric performance of Na-doped PbTe synthesized under high pressure. Science China Materials, 2018, 61, 1218-1224.	3.5	29
105	Unusual compression behavior of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>TiO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> from first principles. Physical Review B, 2010, 82, .	1.1	28
106	Spark plasma sintering of the nonstoichiometric ultrafine-grained titanium carbides with nano superstructural domains of the ordered carbon vacancies. Materials Chemistry and Physics, 2011, 130, 352-360.	2.0	28
107	Superstructural nanodomains of ordered carbon vacancies in nonstoichiometric ZrC_{0.61}. Journal of Materials Research, 2012, 27, 1230-1236.	1.2	28
108	High-pressure behaviors of carbon nanotubes. Journal of Superhard Materials, 2012, 34, 371-385.	0.5	28

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109	Cubic-C3N4 nanoparticles synthesized in CNx/TiNx multilayer films. Chemical Physics Letters, 2001, 334, 7-11.	1.2	27
110	Tearing, folding and deformation of a carbonâ€“carbon sp2-bonded network. Carbon, 2006, 44, 1544-1547.	5.4	27
111	Structural and thermoelectric characterizations of high pressure sintered nanocrystalline Bi2Te3 bulks. Materials Research Bulletin, 2012, 47, 1432-1437.	2.7	27
112	High-Tc directly coupled direct current SQUID gradiometer with flip-chip flux transformer. Applied Physics Letters, 1999, 74, 1302-1304.	1.5	26
113	Study on hot deformation behavior of 12%Cr ultra-super-critical rotor steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 487, 108-113.	2.6	26
114	Dielectric relaxation of long-chain glass-forming monohydroxy alcohols. Journal of Chemical Physics, 2013, 139, 164504.	1.2	26
115	Predicting the ground-state structure of sodium boride. Physical Review B, 2018, 97, .	1.1	26
116	Enhanced thermoelectric performance of lanthanum filled CoSb 3 synthesized under high pressure. Journal of Alloys and Compounds, 2017, 699, 751-755.	2.8	25
117	Magnetic borophenes from an evolutionary search. Physical Review B, 2019, 99, .	1.1	25
118	Preparation of dense B4C ceramics by spark plasma sintering of high-purity nanoparticles. Journal of the European Ceramic Society, 2021, 41, 3929-3936.	2.8	25
119	Large area, low microwave surface resistance thin films of YBa2Cu3O7 prepared by pulsed laser ablation. Physica C: Superconductivity and Its Applications, 1994, 220, 114-118.	0.6	24
120	Potential superhard cubic spinel CSi2N4: First-principles investigations. Journal of Applied Physics, 2008, 103, .	1.1	24
121	Highly Dense Amorphous Si₂BC₃N Monoliths with Excellent Mechanical Properties Prepared by High Pressure Sintering. Journal of the American Ceramic Society, 2015, 98, 3782-3787.	1.9	24
122	Optically uniaxial left-handed materials. Physical Review B, 2005, 72, .	1.1	23
123	Temperature and pressure dependent geometry optimization and elastic constant calculations for arbitrary symmetry crystals: Applications to MgSiO3 perovskites. Journal of Applied Physics, 2013, 113, .	1.1	23
124	A new phase from compression of carbon nanotubes with anisotropic Dirac fermions. Scientific Reports, 2015, 5, 10713.	1.6	23
125	Large-area YBCO films for device fabrication. Superconductor Science and Technology, 1998, 11, 59-62.	1.8	22
126	First-principles study of B2CN crystals deduced from the diamond structure. Journal of Physics Condensed Matter, 2004, 16, 8131-8138.	0.7	22

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127	First-principles study of atomic oxygen adsorption on boron-substituted graphite. Surface Science, 2008, 602, 37-45.	0.8	22
128	Unbinding force of chemical bonds and tensile strength in strong crystals. Journal of Physics Condensed Matter, 2009, 21, 485405.	0.7	22
129	Magnetic frustration effect in polycrystalline Ga2â˜xFexO3. Journal of Magnetism and Magnetic Materials, 2010, 322, 3595-3600.	1.0	22
130	Effect of backward extrusion on microstructure and mechanical properties of Mgâ€“Gd based alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 532, 443-448.	2.6	22
131	An ab initio study on the transition paths from graphite to diamond under pressure. Journal of Physics Condensed Matter, 2013, 25, 145402.	0.7	22
132	Preparation of large-area high-quality YBCO thin films by pulsed laser deposition with Si heater and composite scanning of laser and target. Journal of Superconductivity and Novel Magnetism, 1993, 6, 335-337.	0.5	21
133	Antiferromagnetic interlayer coupling in Pt/Co multilayers with perpendicular anisotropy. Physical Review B, 2009, 79, .	1.1	21
134	Prediction of a superconductive superhard material: Diamond-like BC7. Journal of Applied Physics, 2011, 110, 013501.	1.1	21
135	Gadolinium filled CoSb3: High pressure synthesis and thermoelectric properties. Materials Letters, 2013, 98, 171-173.	1.3	21
136	Role of plastic deformation in tailoring ultrafine microstructure in nanotwinned diamond for enhanced hardness. Science China Materials, 2017, 60, 178-185.	3.5	21
137	Photoluminescence and Raman Spectra Oscillations Induced by Laser Interference in Annealingâ€Created Monolayer WS₂ Bubbles. Advanced Optical Materials, 2019, 7, 1801373.	3.6	21
138	Predicting three-dimensional icosahedron-based boron <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">B</mml:mi><mml:mn>60</mml:mn></mml:msub></mml:math>. Physical Review B, 2019, 99, .	1.1	21
139	Correlation between distribution of outgrowths and microwave surface resistance for YBa2Cu3O7thin films. Applied Physics Letters, 1994, 65, 2356-2358.	1.5	20
140	Preparation of CNx/TiNy multilayers by ion beam sputtering. Journal of Crystal Growth, 2001, 233, 303-311.	0.7	20
141	Total transmission of electromagnetic waves at interfaces associated with an indefinite medium. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 904.	0.9	20
142	Prediction of Novel SiCN Compounds: First-Principles Calculations. Journal of Physical Chemistry C, 2013, 117, 21943-21948.	1.5	20
143	Intensive suppression of thermal conductivity in Nd0.6Fe2Co2Sb12-xGex through spontaneous precipitates. Journal of Applied Physics, 2013, 114, 083715.	1.1	20
144	Novel three-dimensional boron nitride allotropes from compressed nanotube bundles. Journal of Materials Chemistry C, 2014, 2, 7022.	2.7	20

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145	Discovery of superhard materials via CALYPSO methodology*. Chinese Physics B, 2019, 28, 106104.	0.7	20
146	Intersectional nanotwinned diamond-the hardest polycrystalline diamond by design. Npj Computational Materials, 2020, 6, .	3.5	20
147	Carbonaceous photonic crystals as ultralong cycling anodes for lithium and sodium batteries. Journal of Materials Chemistry A, 2015, 3, 13786-13793.	5.2	19
148	Enhanced Stability of Black Phosphorus Fieldâ€Effect Transistors via Hydrogen Treatment. Advanced Electronic Materials, 2018, 4, 1700455.	2.6	19
149	High-temperature oxidation resistance of dense amorphous boron-rich SiBCN monoliths. Corrosion Science, 2019, 157, 312-323.	3.0	19
150	Magnetic Anisotropy Control with Curie Temperature above 400 K in a van der Waals Ferromagnet for Spintronic Device. Advanced Materials, 2022, 34, e2201209.	11.1	19
151	Lattice, magnetic and transport properties in antiperovskite compounds. Solid State Communications, 2009, 149, 1519-1522.	0.9	18
152	Non-exponentiality of structural relaxations in glass forming metallic liquids. Journal of Alloys and Compounds, 2010, 504, S201-S204.	2.8	18
153	Calorimetric determination of fragility in glass forming liquids: Tf vs. Tg-onset methods. European Physical Journal E, 2014, 37, 7.	0.7	18
154	Narrow-gap, semiconducting, superhard amorphous carbon with high toughness, derived from C60 fullerene. Cell Reports Physical Science, 2021, 2, 100575.	2.8	18
155	Extraordinary high-temperature mechanical properties in binder-free nanopolycrystalline WC ceramic. Journal of Materials Science and Technology, 2022, 97, 169-175.	5.6	18
156	Microstructure and properties of YBa2Cu3O7âˆ'Î´thin films with BaO precipitates. Applied Physics Letters, 1994, 65, 234-236.	1.5	17
157	Microstructure of outgrowths on the surface of laser-ablated YBa2Cu3O7 thin films. Physica C: Superconductivity and Its Applications, 1995, 241, 30-36.	0.6	17
158	Infrared and Raman spectra ofÎ²âˆ'BC2Nfrom first principles calculations. Physical Review B, 2006, 74, .	1.1	17
159	Comment on â€œHardness of Covalent and Ionic Crystals: First-Principle Calculationsâ€• Physical Review Letters, 2007, 98, 109601; discussion 109602.	2.9	17
160	First-principle study of electronic properties of Ti3Si1âˆ'xAlxC2 solid solutions. Journal of Physics and Chemistry of Solids, 2008, 69, 1356-1361.	1.9	17
161	Synthesis of Semimetallic BC3.3N with Orthorhombic Structure at High Pressure and Temperature. Crystal Growth and Design, 2008, 8, 2096-2100.	1.4	17
162	Material removal mechanism of precision grinding of soft-brittle CdZnTe wafers. International Journal of Advanced Manufacturing Technology, 2010, 46, 563-569.	1.5	17

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163	Thermoelectric properties of SmxCo4Sb12 prepared by high pressure and high temperature. Journal of Alloys and Compounds, 2010, 493, 535-538.	2.8	17
164	Formation, structure, and electric property of CaB4 single crystal synthesized under high pressure. Applied Physics Letters, 2010, 96, .	1.5	17
165	Carbon coated face-centered cubic Ruâ€“C nanoalloys. Nanoscale, 2014, 6, 10370-10376.	2.8	17
166	Structural and thermoelectric characterizations of samarium filled CoSb3 skutterudites. Materials Letters, 2015, 143, 41-43.	1.3	17
167	Thermoelectric properties of Sn substituted p-type Nd filled skutterudites. Journal of Alloys and Compounds, 2015, 639, 68-73.	2.8	17
168	High pressure synthesis of Te-doped CoSb3 with enhanced thermoelectric performance. Journal of Materials Science: Materials in Electronics, 2015, 26, 385-391.	1.1	17
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