

List of Publications by Year in
Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

216 papers	6,471 citations	37 h-index	71 g-index
219 ext. papers	7,500 ext. citations	5.9 avg, IF	5.71 L-index

#	Paper	IF	Citations
216	Superconductivity in graphite-diamond hybrid. <i>Materials Today Physics</i> , 2022 , 23, 100630	8	2
215	Extreme dislocation-mediated plasticity of yttria-stabilized zirconia. <i>Materials Today Physics</i> , 2022 , 22, 100588	8	
214	Discovery of carbon-based strongest and hardest amorphous material.. <i>National Science Review</i> , 2022 , 9, nwab140	10.8	16
213	Extraordinary high-temperature mechanical properties in binder-free nanopolycrystalline WC ceramic. <i>Journal of Materials Science and Technology</i> , 2022 , 97, 169-175	9.1	2
212	Novel Boron Nitride Polymorphs with Graphite-Diamond Hybrid Structure. <i>Chinese Physics Letters</i> , 2022 , 39, 036301	1.8	0
211	Nanocrystalline Cubic Silicon Carbide: A Route to Superhardness.. <i>Small</i> , 2022 , e2201212	11	1
210	Nanocrystalline Cubic Silicon Carbide: A Route to Superhardness (Small 22/2022). <i>Small</i> , 2022 , 18, 2270115	11	0
209	Extreme mechanical anisotropy in diamond with preferentially oriented nanotwin bundles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	1
208	Temperature-dependent hardness of zinc-blende structured covalent materials. <i>Science China Materials</i> , 2021 , 64, 2280-2288	7.1	3
207	The rise of plastic deformation in boron nitride ceramics. <i>Science China Materials</i> , 2021 , 64, 46-51	7.1	3
206	Heat-treated glassy carbon under pressure exhibiting superior hardness, strength and elasticity. <i>Journal of Materiomics</i> , 2021 , 7, 177-184	6.7	4
205	Strong amorphous carbon prepared by spark-plasma sintering C60. <i>Journal of the American Ceramic Society</i> , 2021 , 104, 1655-1660	3.8	1
204	Thermoelectric performance of p-type Ca Fe _{1.3} Co _{2.7} Sb ₁₂ skutterudites from high pressure synthesis. <i>Journal of Alloys and Compounds</i> , 2021 , 851, 156928	5.7	1
203	Porous bismuth antimony telluride alloys with excellent thermoelectric and mechanical properties. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 4990-4999	13	8
202	Preparation of dense B ₄ C ceramics by spark plasma sintering of high-purity nanoparticles. <i>Journal of the European Ceramic Society</i> , 2021 , 41, 3929-3936	6	8
201	Design and theoretical study of novel multifunctional 3D-BC ₂ N polymorphs. <i>Chemical Physics Letters</i> , 2021 , 774, 138610	2.5	1
200	Formation of copper boride on Cu(111). <i>Fundamental Research</i> , 2021 , 1, 482-487		2

199	Narrow-gap, semiconducting, superhard amorphous carbon with high toughness, derived from C60 fullerene. <i>Cell Reports Physical Science</i> , 2021 , 2, 100575	6.1	7
198	Structural diversity, large interlayer spacing and switchable electronic properties of graphitic systems. <i>Journal of Materials Science</i> , 2021 , 56, 5509-5519	4.3	1
197	Structural Determination of a Graphite/Hexagonal Boron Nitride Superlattice Observed in the Experiment. <i>Inorganic Chemistry</i> , 2021 , 60, 2598-2603	5.1	1
196	Hierarchically structured diamond composite with exceptional toughness. <i>Nature</i> , 2020 , 582, 370-374	50.4	59
195	Direct Observation of Room-Temperature Dislocation Plasticity in Diamond. <i>Matter</i> , 2020 , 2, 1222-1232	12.7	26
194	Novel superhard boron-rich nitrides under pressure. <i>Science China Materials</i> , 2020 , 63, 2358-2364	7.1	7
193	Synthesis of twin-structured nanodiamond particles. <i>AIP Advances</i> , 2020 , 10, 015240	1.5	3
192	Prediction of superconductivity in pressure-induced new silicon boride phases. <i>Physical Review B</i> , 2020 , 101,	3.3	4
191	First-principles prediction of two-dimensional copper borides. <i>Physical Review Materials</i> , 2020 , 4,	3.2	4
190	High-Pressure Synthesis of cBN Nanoparticles with High-Density Nanotwin Substructures. <i>ACS Omega</i> , 2020 , 5, 650-654	3.9	1
189	Diamond gets harder, tougher, and more deformable. <i>Matter and Radiation at Extremes</i> , 2020 , 5, 068103	4.7	2
188	Intersectional nanotwinned diamond-the hardest polycrystalline diamond by design. <i>Npj Computational Materials</i> , 2020 , 6,	10.9	8
187	One-step solution process toward formation of Li6PS5Cl argyrodite solid electrolyte for all-solid-state lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020 , 812, 152103	5.7	18
186	Photoluminescence and Raman Spectra Oscillations Induced by Laser Interference in Annealing-Created Monolayer WS2 Bubbles. <i>Advanced Optical Materials</i> , 2019 , 7, 1801373	8.1	14
185	Two-dimensional antiferromagnetic boron from first principles. <i>AIP Advances</i> , 2019 , 9, 055211	1.5	2
184	Effect of layer and stacking sequence in simultaneously grown 2H and 3R WS atomic layers. <i>Nanotechnology</i> , 2019 , 30, 345203	3.4	7
183	High-pressure phases of boron arsenide with potential high thermal conductivity. <i>Physical Review B</i> , 2019 , 99,	3.3	11
182	Small onion-like BN leads to ultrafine-twinned cubic BN. <i>Science China Materials</i> , 2019 , 62, 1169-1176	7.1	9

181	Mechanical properties of boron arsenide single crystal. <i>Applied Physics Letters</i> , 2019 , 114, 131903	3.4	15
180	Enhancement of thermoelectric performance of Al doped PbTe-PbSe due to carrier concentration optimization and alloying. <i>Journal of Alloys and Compounds</i> , 2019 , 791, 786-791	5.7	7
179	Thermoelectric performance of single elemental doped n-type PbTe regulated by carrier concentration. <i>Journal of Alloys and Compounds</i> , 2019 , 787, 180-185	5.7	5
178	Evaporation-induced self-assembly of C on SrTiO(110) reconstructed surfaces. <i>Nanotechnology</i> , 2019 , 30, 415605	3.4	
177	Surface Reconstructions of SrTiO ₃ (110) Calibrated with STM and LEED. <i>Physica Status Solidi (B): Basic Research</i> , 2019 , 256, 1900277	1.3	
176	Argyrodite Solid Electrolyte with a Stable Interface and Superior Dendrite Suppression Capability Realized by ZnO Co-Doping. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 40808-40816	9.5	40
175	Continuous strengthening in nanotwinned diamond. <i>Npj Computational Materials</i> , 2019 , 5,	10.9	17
174	Strengthening-softening transition in yield strength of nanotwinned Cu. <i>Scripta Materialia</i> , 2019 , 162, 372-376	5.6	12
173	Enhanced thermoelectric performance of high pressure synthesized Sb-doped Mg ₂ Si. <i>Journal of Alloys and Compounds</i> , 2018 , 741, 1148-1152	5.7	13
172	Synthesis and characterization of argyrodite solid electrolytes for all-solid-state Li-ion batteries. <i>Journal of Alloys and Compounds</i> , 2018 , 747, 227-235	5.7	48
171	Grain wall boundaries in centimeter-scale continuous monolayer WS film grown by chemical vapor deposition. <i>Nanotechnology</i> , 2018 , 29, 255705	3.4	8
170	Synthesis of severe lattice distorted MoS ₂ coupled with hetero-bonds as anode for superior lithium-ion batteries. <i>Electrochimica Acta</i> , 2018 , 262, 162-172	6.7	26
169	Enhanced Stability of Black Phosphorus Field-Effect Transistors via Hydrogen Treatment. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700455	6.4	15
168	Enhanced thermoelectric performance of Na-doped PbTe synthesized under high pressure. <i>Science China Materials</i> , 2018 , 61, 1218-1224	7.1	20
167	Enhanced thermoelectric performance of bismuth-doped magnesium silicide synthesized under high pressure. <i>Journal of Materials Science</i> , 2018 , 53, 9091-9098	4.3	9
166	Two-dimensional boron on Pb (1 1 0) surface. <i>FlatChem</i> , 2018 , 7, 34-41	5.1	5
165	Hard three-dimensional BN framework with one-dimensional metallicity. <i>Journal of Alloys and Compounds</i> , 2018 , 731, 364-368	5.7	19
164	Improvement in ion transport in Na ₃ PSe ₄ /Na ₃ SbSe ₄ by Sb substitution. <i>Journal of Materials Science</i> , 2018 , 53, 1987-1994	4.3	30

163	Interface-Engineered Li La Zr O -Based Garnet Solid Electrolytes with Suppressed Li-Dendrite Formation and Enhanced Electrochemical Performance. <i>ChemSusChem</i> , 2018 , 11, 3774-3782	8.3	42
162	Lithium halide coating as an effective intergrain engineering for garnet-type solid electrolytes avoiding high temperature sintering. <i>Electrochimica Acta</i> , 2018 , 289, 254-263	6.7	21
161	Pressure Impact on the Crystal Structure, Optical, and Transport Properties in Layered Oxychalcogenides BiCuChO (Ch = S, Se). <i>Journal of Physical Chemistry C</i> , 2018 , 122, 15929-15936	3.8	9
160	Multithreaded conductive carbon: 1D conduction in 3D carbon. <i>Carbon</i> , 2017 , 115, 584-588	10.4	13
159	High pressure synthesis and thermoelectric properties of polycrystalline Bi ₂ Se ₃ . <i>Journal of Alloys and Compounds</i> , 2017 , 700, 223-227	5.7	24
158	Role of plastic deformation in tailoring ultrafine microstructure in nanotwinned diamond for enhanced hardness. <i>Science China Materials</i> , 2017 , 60, 178-185	7.1	18
157	Thermoelectric properties of high pressure synthesized lithium and calcium double-filled CoSb ₃ . <i>AIP Advances</i> , 2017 , 7, 015204	1.5	3
156	High pressure synthesis and thermoelectric properties of Ba-filled CoSb ₃ skutterudites. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 8771-8776	2.1	11
155	Superhard three-dimensional B ₃ N ₄ with two-dimensional metallicity. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 5897-5901	7.1	14
154	New hexagonal boron nitride polytypes with triple-layer periodicity. <i>Journal of Applied Physics</i> , 2017 , 121, 165102	2.5	10
153	Strengthening mechanism of β Zr. <i>Computational Materials Science</i> , 2017 , 135, 134-140	3.2	4
152	Compressed glassy carbon: An ultrastrong and elastic interpenetrating graphene network. <i>Science Advances</i> , 2017 , 3, e1603213	14.3	77
151	Deep melting reveals liquid structural memory and anomalous ferromagnetism in bismuth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 3375-3380	11.5	9
150	Enhanced thermoelectric performance of lanthanum filled CoSb ₃ synthesized under high pressure. <i>Journal of Alloys and Compounds</i> , 2017 , 699, 751-755	5.7	18
149	Metastable phases, phase transformation and properties of AlAs based on first-principle study. <i>Computational Materials Science</i> , 2017 , 128, 337-342	3.2	17
148	Superior Blends Solid Polymer Electrolyte with Integrated Hierarchical Architectures for All-Solid-State Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 36886-36896	9.5	78
147	A superhard sp ³ microporous carbon with direct bandgap. <i>Chemical Physics Letters</i> , 2017 , 689, 68-73	2.5	29
146	Sodium doped polycrystalline SnSe: High pressure synthesis and thermoelectric properties. <i>Journal of Alloys and Compounds</i> , 2017 , 727, 1014-1019	5.7	31

145	Strain Release Induced Novel Fluorescence Variation in CVD-Grown Monolayer WS Crystals. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 34071-34077	9.5	13
144	Strengthening in high-pressure quenched Zr. <i>High Pressure Research</i> , 2017 , 37, 278-286	1.6	5
143	Flexible Black-Phosphorus Nanoflake/Carbon Nanotube Composite Paper for High-Performance All-Solid-State Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 44478-44484	9.5	69
142	Enhanced cycling performance of Se-doped SnS carbon nanofibers as negative electrode for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2017 , 695, 1294-1300	5.7	21
141	Thermoelectric Performance of Yb-Doped Ba ₈ Ni _{0.1} Zn _{0.54} Ga _{13.8} Ge _{31.56} Type-I Clathrate Synthesized by High-Pressure Technique. <i>Journal of Electronic Materials</i> , 2017 , 46, 2860-2866	1.9	9
140	High pressure synthesis of nanotwinned ultrahard materials. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2017 , 66, 036201	0.6	9
139	High pressure synthesis of p-type Fe-substituted CoSb ₃ skutterudites. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 6433-6437	2.1	7
138	Recent Advances in Superhard Materials. <i>Annual Review of Materials Research</i> , 2016 , 46, 383-406	12.8	80
137	High Pressure Synthesis of p-Type CeFeCoSb Skutterudites. <i>Materials</i> , 2016 , 9,	3.5	12
136	Flexible All-Solid-State Supercapacitors based on Liquid-Exfoliated Black-Phosphorus Nanoflakes. <i>Advanced Materials</i> , 2016 , 28, 3194-201	24	249
135	Coexistence of multiple metastable polytypes in rhombohedral bismuth. <i>Scientific Reports</i> , 2016 , 6, 20337	4.9	12
134	Dual-buffered SnSe@CNFs as negative electrode with outstanding lithium storage performance. <i>Electrochimica Acta</i> , 2016 , 209, 423-429	6.7	51
133	High pressure synthesized Ca-filled CoSb ₃ skutterudites with enhanced thermoelectric properties. <i>Journal of Alloys and Compounds</i> , 2016 , 677, 61-65	5.7	37
132	Superhard superstrong carbon clathrate. <i>Carbon</i> , 2016 , 105, 151-155	10.4	23
131	Te-Doped Black Phosphorus Field-Effect Transistors. <i>Advanced Materials</i> , 2016 , 28, 9408-9415	24	195
130	Si ₁₀ : A sp ³ Silicon Allotrope with Spirally Connected Si ₅ Tetrahedrons. <i>Chemistry of Materials</i> , 2016 , 28, 6441-6445	9.6	14
129	Vacancy-Contained Tetragonal NaSbS Superionic Conductor. <i>Advanced Science</i> , 2016 , 3, 1600089	13.6	115
128	Superhard materials: recent research progress and prospects. <i>Science China Materials</i> , 2015 , 58, 132-142	7.1	42

127	Ultrahardness: Measurement and Enhancement. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 5633-5638	3.8	31
126	Structure and thermoelectric properties of Se- and Se/Te-doped CoSb ₃ skutterudites synthesized by high-pressure technique. <i>Journal of Alloys and Compounds</i> , 2015 , 647, 295-302	5.7	23
125	Three dimensional graphdiyne polymers with tunable band gaps. <i>Carbon</i> , 2015 , 91, 518-526	10.4	29
124	Prediction of novel hard phases of Si ₃ N ₄ : First-principles calculations. <i>Journal of Solid State Chemistry</i> , 2015 , 228, 20-26	3.3	18
123	Thermoelectric properties of Sn substituted p-type Nd filled skutterudites. <i>Journal of Alloys and Compounds</i> , 2015 , 639, 68-73	5.7	14
122	Three-dimensional sp ² -hybridized carbons consisting of orthogonal nanoribbons of graphene and net C. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 13028-33	3.6	12
121	Chemical Vapor Synthesized WS ₂ -Embedded Polystyrene-derived Porous Carbon as Superior Long-term Cycling Life Anode Material for Li-ion Batteries. <i>Electrochimica Acta</i> , 2015 , 153, 49-54	6.7	27
120	Iodine-filled Fe _x Co _{4-x} Sb ₁₂ polycrystals: Synthesis, structure, and thermoelectric properties. <i>Materials Letters</i> , 2015 , 139, 249-251	3.3	14
119	High pressure synthesis of Te-doped CoSb ₃ with enhanced thermoelectric performance. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 385-391	2.1	13
118	Is orthorhombic iron tetraboride superhard?. <i>Journal of Materiomics</i> , 2015 , 1, 45-51	6.7	23
117	Structural and thermoelectric characterizations of samarium filled CoSb ₃ skutterudites. <i>Materials Letters</i> , 2015 , 143, 41-43	3.3	14
116	Carbon coated face-centered cubic Ru-C nanoalloys. <i>Nanoscale</i> , 2014 , 6, 10370-6	7.7	16
115	A semiconductive superhard FeB ₂ phase from first-principles calculations. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 22008-13	3.6	13
114	Thermoelectric properties of n-type Bi ₂ Te _{2.7} Se _{0.3} with addition of nano-ZnO:Al particles. <i>Materials Research Express</i> , 2014 , 1, 035901	1.7	13
113	Covalent-bonded graphyne polymers with high hardness. <i>Journal of Superhard Materials</i> , 2014 , 36, 257-269	6.9	12
112	Metastable adaptive orthorhombic martensite in zirconia nanoparticles. <i>Journal of Applied Crystallography</i> , 2014 , 47, 684-691	3.8	9
111	Novel three-dimensional boron nitride allotropes from compressed nanotube bundles. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 7022	7.1	17
110	Theoretical two-atom thick semiconducting carbon sheet. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 18118-23	3.6	15

109	Synthesis of iodine filled CoSb ₃ with extremely low thermal conductivity. <i>Journal of Alloys and Compounds</i> , 2014 , 615, 177-180	5.7	24
108	Direct band gap silicon allotropes. <i>Journal of the American Chemical Society</i> , 2014 , 136, 9826-9	16.4	120
107	A metallic carbon consisting of helical carbon triangle chains. <i>Journal of Physics Condensed Matter</i> , 2014 , 26, 235402	1.8	8
106	Superhard and high-strength yne-diamond semimetals. <i>Diamond and Related Materials</i> , 2014 , 46, 15-20	3.5	14
105	Mechanical properties of nanocrystalline TiC _{0.5} ZrC solid solutions fabricated by spark plasma sintering. <i>Ceramics International</i> , 2014 , 40, 10517-10522	5.1	44
104	Nanotwinned diamond with unprecedented hardness and stability. <i>Nature</i> , 2014 , 510, 250-3	50.4	440
103	Prediction of Novel SiCN Compounds: First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 21943-21948	3.8	15
102	Compressed carbon nanotubes: a family of new multifunctional carbon allotropes. <i>Scientific Reports</i> , 2013 , 3, 1331	4.9	73
101	Bulk modulus for polar covalent crystals. <i>Scientific Reports</i> , 2013 , 3, 3068	4.9	28
100	A novel layer-structured PtN ₂ : First-principles calculations. <i>Journal of Superhard Materials</i> , 2013 , 35, 339-349	3.49	2
99	Ultrahard nanotwinned cubic boron nitride. <i>Nature</i> , 2013 , 493, 385-8	50.4	519
98	Gadolinium filled CoSb ₃ : High pressure synthesis and thermoelectric properties. <i>Materials Letters</i> , 2013 , 98, 171-173	3.3	17
97	{111}-specific twinning structures in nonstoichiometric ZrC _{0.6} with ordered carbon vacancies. <i>Journal of Applied Crystallography</i> , 2013 , 46, 43-47	3.8	12
96	Tian et al. reply. <i>Nature</i> , 2013 , 502, E2-3	50.4	10
95	Intensive suppression of thermal conductivity in Nd _{0.6} Fe ₂ Co ₂ Sb _{12-x} Gex through spontaneous precipitates. <i>Journal of Applied Physics</i> , 2013 , 114, 083715	2.5	18
94	Investigation of skutterudite Mg ₂ Co ₄ Sb ₁₂ : High pressure synthesis and thermoelectric properties. <i>Journal of Applied Physics</i> , 2013 , 113, 113703	2.5	32
93	Microscopic theory of hardness and design of novel superhard crystals. <i>International Journal of Refractory Metals and Hard Materials</i> , 2012 , 33, 93-106	4.1	563
92	Structural and thermoelectric characterizations of high pressure sintered nanocrystalline Bi ₂ Te ₃ bulks. <i>Materials Research Bulletin</i> , 2012 , 47, 1432-1437	5.1	18

91	Exotic Cubic Carbon Allotropes. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 24233-24238	3.8	48
90	High-pressure synthesis of phonon-glass electron-crystal featured thermoelectric $\text{Li}_x\text{Co}_4\text{Sb}_{12}$. <i>Acta Materialia</i> , 2012 , 60, 1246-1251	8.4	61
89	Low-temperature diffusion of oxygen through ordered carbon vacancies in $\text{Zr}_2\text{C}(x)$: the formation of ordered $\text{Zr}_2\text{C}(x)\text{O}(y)$. <i>Inorganic Chemistry</i> , 2012 , 51, 5164-72	5.1	12
88	Annealing-Induced {011}-Specific Cyclic Twins in Tetragonal Zirconia Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 21052-21058	3.8	11
87	High-pressure behaviors of carbon nanotubes. <i>Journal of Superhard Materials</i> , 2012 , 34, 371-385	0.9	22
86	Tetragonal allotrope of group 14 elements. <i>Journal of the American Chemical Society</i> , 2012 , 134, 12362-516.4	5.4	146
85	Polymorphism in self-assembled structures of 9-anthracene carboxylic acid on Ag(111). <i>International Journal of Molecular Sciences</i> , 2012 , 13, 6836-48	6.3	7
84	Superstructural nanodomains of ordered carbon vacancies in nonstoichiometric $\text{ZrC}_{0.61}$. <i>Journal of Materials Research</i> , 2012 , 27, 1230-1236	2.5	23
83	Prediction of a superconductive superhard material: Diamond-like BC7. <i>Journal of Applied Physics</i> , 2011 , 110, 013501	2.5	20
82	Three dimensional carbon-nanotube polymers. <i>ACS Nano</i> , 2011 , 5, 7226-34	16.7	94
81	Novel superhard carbon: C-centered orthorhombic C8. <i>Physical Review Letters</i> , 2011 , 107, 215502	7.4	198
80	Universal phase transitions of B1-structured stoichiometric transition metal carbides. <i>Inorganic Chemistry</i> , 2011 , 50, 9266-72	5.1	11
79	Superconducting ultraincompressible hard cubic Re_4C . <i>Computational Materials Science</i> , 2011 , 50, 1592-1596	3.2	12
78	Formation and properties of SrB_6 single crystals synthesized under high pressure and temperature. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 7927-7930	5.7	9
77	Universal Quantification of Chemical Bond Strength and Its Application to Low Dimensional Materials 2011 ,		1
76	Time dependence of interlayer coupling in $\text{Pd}(50\ \text{\AA})/\text{Co}(t\text{Co})/\text{Pd}(54\ \text{\AA})/\text{Co}(t\text{Co})/\text{Pd}(50\ \text{\AA})$ multilayer with perpendicular anisotropy. <i>Journal of Applied Physics</i> , 2011 , 110, 043918	2.5	4
75	Spark plasma sintering of the nonstoichiometric ultrafine-grained titanium carbides with nano superstructural domains of the ordered carbon vacancies. <i>Materials Chemistry and Physics</i> , 2011 , 130, 352-360	4.4	22
74	Properties of CaB_6 single crystals synthesized under high pressure and temperature. <i>Science China: Physics, Mechanics and Astronomy</i> , 2011 , 54, 1791-1795	3.6	6

73	Mechanochemically activated synthesis of zirconium carbide nanoparticles at room temperature: A simple route to prepare nanoparticles of transition metal carbides. <i>Journal of the European Ceramic Society</i> , 2011 , 31, 1491-1496	6	40
72	Structural and magnetic characterization of rhombohedral Ga _{1.2} Fe _{0.8} O ₃ ceramics prepared by high-pressure synthesis. <i>Solid State Communications</i> , 2011 , 151, 33-36	1.6	7
71	Investigations on the interlayer coupling in Co/Pt multilayers with perpendicular anisotropy via the extraordinary Hall effect. <i>Thin Solid Films</i> , 2011 , 519, 1980-1984	2.2	7
70	Effect of a NiO capping layer on the temperature dependence of the interlayer coupling in Co/Pt multilayer with perpendicular anisotropy. <i>Thin Solid Films</i> , 2011 , 519, 5596-5599	2.2	
69	Great thermoelectric power factor enhancement of CoSb ₃ through the lightest metal element filling. <i>Applied Physics Letters</i> , 2011 , 98, 072109	3.4	43
68	Proper scaling of the anomalous Hall effect in the Co/Pt multilayers. <i>Journal of Applied Physics</i> , 2011 , 110, 033921	2.5	9
67	Distinct C60 growth modes on anthracene carboxylic acid templates. <i>Applied Physics Letters</i> , 2010 , 96, 143115	3.4	10
66	Magnetization reversal of the hard stack in antiferromagnetically coupled soft and hard Co/Pt multilayer stacks: Exploring via minor-loop measurements on the soft stack. <i>Journal of Applied Physics</i> , 2010 , 107, 123902	2.5	1
65	Compressive Strength of Diamond from First-Principles Calculation. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 17851-17853	3.8	38
64	Prediction of a Three-Dimensional Conductive Superhard Material: Diamond-like BC ₂ . <i>Journal of Physical Chemistry C</i> , 2010 , 114, 22688-22690	3.8	31
63	C60 on Nanostructured Nb-Doped SrTiO ₃ (001) Surfaces. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 34163-3421	3.4	14
62	Thermoelectric properties of n-type CoSb ₃ fabricated with high pressure sintering. <i>Journal of Alloys and Compounds</i> , 2010 , 503, 490-493	5.7	7
61	First-principle studies of structural and electronic properties of layered B ₃ C ₁₀ N ₃ . <i>Computational Materials Science</i> , 2010 , 47, 621-624	3.2	2
60	Drastic time-dependent decrease in the saturation magnetization observed in Pd/Co/Pd trilayers with perpendicular anisotropy. <i>Journal of Applied Physics</i> , 2010 , 107, 123912	2.5	9
59	Formation, structure, and electric property of CaB ₄ single crystal synthesized under high pressure. <i>Applied Physics Letters</i> , 2010 , 96, 031903	3.4	17
58	Bulk Re ₂ C: Crystal Structure, Hardness, and Ultra-incompressibility. <i>Crystal Growth and Design</i> , 2010 , 10, 5024-5026	3.5	40
57	CaB ₆ single crystals grown under high pressure and hightemperature. <i>Journal of Crystal Growth</i> , 2010 , 313, 47-50	1.6	11
56	Magnetic frustration effect in polycrystalline Ga ₂ Fe _x O ₃ . <i>Journal of Magnetism and Magnetic Materials</i> , 2010 , 322, 3595-3600	2.8	21

55	Mechanism for the metal-conducting behavior of a CaB ₄ single crystal. <i>Solid State Communications</i> , 2010 , 150, 1317-1320	1.6	1
54	Antiferromagnetic interlayer coupling in Pt/Co multilayers with perpendicular anisotropy. <i>Physical Review B</i> , 2009 , 79,	3.3	21
53	Prediction of graphitelike BC ₄ N from first-principles calculations. <i>Journal of Applied Physics</i> , 2009 , 105, 043509	2.5	7
52	Unbinding force of chemical bonds and tensile strength in strong crystals. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 485405	1.8	18
51	Thermally induced antiferromagnetic interlayer coupling and its oscillatory dependence on repetition number in spin-valve Co/Pt multilayers. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 035010	3	9
50	Crystallization of an amorphous B ₁₀ N precursor with a LiB ₁₀ N catalyst at high pressures and temperatures. <i>Materials Characterization</i> , 2009 , 60, 1411-1414	3.9	1
49	First-principle calculation on structures and properties of diamond-like B ₃ C ₁₀ N ₃ compound. <i>Journal of Alloys and Compounds</i> , 2009 , 481, 855-857	5.7	8
48	Crystal structure and stability of magnesium borohydride from first principles. <i>Physical Review B</i> , 2009 , 79,	3.3	37
47	Enhanced thermoelectric figure of merit in nanocrystalline Bi ₂ Te ₃ bulk. <i>Journal of Applied Physics</i> , 2009 , 105, 094303	2.5	62
46	Hardness of B and B ₃ C _n N ₄ (n=0, 1, 2, 3) crystals. <i>Diamond and Related Materials</i> , 2009 , 18, 72-75	3.5	14
45	Hardness of covalent compounds: Roles of metallic component and d valence electrons. <i>Journal of Applied Physics</i> , 2008 , 104, 023503	2.5	140
44	Refined Crystal Structure and Mechanical Properties of Superhard BC ₄ N Crystal: First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 9516-9519	3.8	32
43	Synthesis of Semimetallic BC _{3.3} N with Orthorhombic Structure at High Pressure and Temperature. <i>Crystal Growth and Design</i> , 2008 , 8, 2096-2100	3.5	16
42	Thermal behavior of the interlayer coupling in a spin-valve Co/Pt multilayer with perpendicular anisotropy. <i>Journal of Applied Physics</i> , 2008 , 104, 113903	2.5	11
41	Effect of magnetic field on domain-wall structures in two antiferromagnetically coupled Co/Pt multilayers. <i>Applied Physics Letters</i> , 2008 , 93, 032502	3.4	8
40	Oscillatory antiferromagnetic interlayer coupling in Co(4)Pt(tPt)[Co(4)Pt(6)Pt(4)]NiO(20) multilayers with perpendicular anisotropy. <i>Physical Review B</i> , 2008 , 77,	3.3	13
39	Structure and mechanical properties of osmium carbide: First-principles calculations. <i>Applied Physics Letters</i> , 2008 , 93, 041904	3.4	36
38	Phase transformation of melamine at high pressure and temperature. <i>Journal of Materials Science</i> , 2008 , 43, 689-695	4.3	35

37	Synthesis and oxidation behavior of boron-substituted carbon powders by hot filament chemical vapor deposition. <i>Science in China Series D: Earth Sciences</i> , 2008 , 51, 1464-1469		4
36	First-principles study of atomic oxygen adsorption on boron-substituted graphite. <i>Surface Science</i> , 2008 , 602, 37-45	1.8	20
35	Different approaches to adjusting band offsets at intermolecular interfaces. <i>Applied Surface Science</i> , 2008 , 254, 4238-4244	6.7	14
34	Isonicotinic Acid Molecular Films on Ag(111): I. XPS and STM Studies of Orientational Domains. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 2102-2106	3.8	13
33	First-Principles Investigation of Dense B ₄ C ₃ . <i>Journal of Physical Chemistry C</i> , 2007 , 111, 13679-13683	3.8	11
32	First-principles study of wurtzite BC ₂ N. <i>Physical Review B</i> , 2007 , 76,	3.3	40
31	Effect of cooling field on the antiferromagnetic interlayer coupling and exchange biasing in two antiferromagnetically coupled Co/Bt multilayers. <i>Journal of Applied Physics</i> , 2007 , 102, 073904	2.5	1
30	Body-centered superhard BC ₂ N phases from first principles. <i>Physical Review B</i> , 2007 , 76,	3.3	28
29	Morphology selected molecular architecture: acridine carboxylic acid monolayers on Ag (111). <i>Journal of Physical Chemistry B</i> , 2006 , 110, 1271-6	3.4	14
28	Fermi level alignment in self-assembled molecular layers: the effect of coupling chemistry. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 17138-44	3.4	36
27	Coverage dependent supramolecular structures: C ₆₀ :ACA monolayers on Ag(111). <i>Journal of the American Chemical Society</i> , 2006 , 128, 8493-9	16.4	60
26	Chiral symmetry breaking in two-dimensional C ₆₀ -ACA intermixed systems. <i>Nano Letters</i> , 2005 , 5, 2207-11.5	11.5	52
25	Influence of nitrogen growth pressure on the ferromagnetic properties of Cr-doped AlN thin films. <i>Applied Physics Letters</i> , 2005 , 86, 212504	3.4	58
24	Surface photovoltage effects on the isomeric semiconductors of boron-carbide. <i>Applied Physics Letters</i> , 2004 , 84, 1302-1304	3.4	29
23	Interface composition and electronic properties of chromium (III, IV) oxides junctions. <i>Materials Letters</i> , 2004 , 58, 2016-2018	3.3	6
22	Interfaces with vapor-evaporated polyaniline thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2003 , 77, 155-158	2.6	3
21	The adsorption of orthocarborane on cobalt. <i>Thin Solid Films</i> , 2003 , 428, 253-256	2.2	15
20	Comparison of Adsorbed Orthocarborane and Metacarborane on Metal Surfaces. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 9620-9623	3.4	34

19	The surface phases of the La _{0.65} Pb _{0.35} MnO ₃ manganese perovskite surface. <i>Surface Science</i> , 2002 , 512, L346-L352	1.8	37
18	Band filling and depletion through the doping of polyaniline thin films. <i>Applied Physics Letters</i> , 2002 , 80, 4342-4344	3.4	37
17	Heterojunction diode fabrication from polyaniline and a ferroelectric polymer. <i>Applied Physics Letters</i> , 2002 , 81, 4281-4283	3.4	27
16	Oxidation of metals at the chromium oxide interface. <i>Applied Physics Letters</i> , 2002 , 81, 2109-2111	3.4	39
15	Preferential orientation of short chain vapor deposited polyaniline thin films on gold. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2002 , 20, 741-743	2.9	3
14	Band structure and orientation of molecular adsorbates on surfaces by angle-resolved electron spectroscopies 2002 , 61-114		8
13	Zero-bias anomaly in CrO ₂ junctions. <i>Europhysics Letters</i> , 2002 , 58, 448-454	1.6	18
12	Spin blockade effects in chromium oxide intergrain magnetoresistance. <i>Journal of Applied Physics</i> , 2002 , 91, 8801	2.5	8
11	Comparison of the π -conjugated ring orientations in polyaniline and polypyrrole. <i>Chemical Physics Letters</i> , 2001 , 343, 193-200	2.5	30
10	FABRICATION OF 2- AND 3-DIMENSIONAL NANOSTRUCTURES. <i>International Journal of Modern Physics B</i> , 2001 , 15, 3207-3213	1.1	15
9	Characterization of the native Cr ₂ O ₃ oxide surface of CrO ₂ . <i>Applied Physics Letters</i> , 2001 , 79, 3122-3124	3.4	88
8	Comparison of aluminum and sodium doped poly(vinylidene fluoride-trifluoroethylene) copolymers by x-ray photoemission spectroscopy. <i>Applied Physics Letters</i> , 2001 , 78, 448-450	3.4	11
7	Aluminum doping of poly(vinylidene fluoride with trifluoroethylene) copolymer. <i>Journal of Chemical Physics</i> , 2001 , 114, 1866-1869	3.9	13
6	Electronic-structure modifications induced by surface segregation in La _{0.65} Pb _{0.35} MnO ₃ thin films. <i>Europhysics Letters</i> , 2001 , 56, 722-728	1.6	16
5	Investigation of High Pressure Induced Orientational Phase Transition in C ₆₀ Single Crystal. <i>Physica Status Solidi (B): Basic Research</i> , 1998 , 207, 243-248	1.3	1
4	Orientational phase transition in C ₆₀ single crystal under high pressure. <i>Science Bulletin</i> , 1998 , 43, 1341-1344		
3	The orbital symmetry of carbon monoxide on a Cs-precovered Ru(1010) surface. <i>Journal of Physics Condensed Matter</i> , 1998 , 10, 9635-9639	1.8	
2	Optimization on the crystal growth of fullerenes. <i>Journal of Crystal Growth</i> , 1997 , 182, 375-378	1.6	10

- 1 Heterogeneous Diamond-cBN Composites with Superb Toughness and Hardness. *Nano Letters*, 11.5 0