

Yongjun Tian

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4595067/yongjun-tian-publications-by-year.pdf>

Version: 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

368
papers

11,414
citations

44
h-index

95
g-index

377
ext. papers

13,038
ext. citations

5.4
avg, IF

6.17
L-index

#	Paper	IF	Citations
368	Tunable electrical properties of C ₆₀ m-xylene and the formation of semiconducting ordered amorphous carbon clusters under pressure. <i>Nano Research</i> , 2022 , 15, 3788	10	1
367	Superconductivity in graphite-diamond hybrid. <i>Materials Today Physics</i> , 2022 , 23, 100630	8	2
366	Extreme dislocation-mediated plasticity of yttria-stabilized zirconia. <i>Materials Today Physics</i> , 2022 , 22, 100588	8	
365	Discovery of carbon-based strongest and hardest amorphous material.. <i>National Science Review</i> , 2022 , 9, nwab140	10.8	16
364	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
363	Novel Boron Nitride Polymorphs with Graphite-Diamond Hybrid Structure. <i>Chinese Physics Letters</i> , 2022 , 39, 036301	1.8	0
362	Nanocrystalline Cubic Silicon Carbide: A Route to Superhardness.. <i>Small</i> , 2022 , e2201212	11	1
361	Magnetic Anisotropy Control with Curie Temperature above 400 K in a van der Waals Ferromagnet for Spintronic Device.. <i>Advanced Materials</i> , 2022 , e2201209	24	3
360	Nanocrystalline Cubic Silicon Carbide: A Route to Superhardness (Small 22/2022). <i>Small</i> , 2022 , 18, 2270115		0
359	Ultrasensitive biochemical sensors based on controllably grown films of high-density edge-rich multilayer WS ₂ islands. <i>Sensors and Actuators B: Chemical</i> , 2021 , 131081	8.5	0
358	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
357	Prediction of high-T _c superconductivity in ternary lanthanum borohydrides. <i>Physical Review B</i> , 2021 , 104,	3.3	13
356	Temperature-dependent hardness of zinc-blende structured covalent materials. <i>Science China Materials</i> , 2021 , 64, 2280-2288	7.1	3
355	Phase transitions of alkaline-earth metal sulfides under pressure. <i>Materials Research Express</i> , 2021 , 8, 065902	1.7	
354	Grain-boundary-rich polycrystalline monolayer WS film for attomolar-level Hg sensors. <i>Nature Communications</i> , 2021 , 12, 3870	17.4	11
353	The rise of plastic deformation in boron nitride ceramics. <i>Science China Materials</i> , 2021 , 64, 46-51	7.1	3
352	Heat-treated glassy carbon under pressure exhibiting superior hardness, strength and elasticity. <i>Journal of Materiomics</i> , 2021 , 7, 177-184	6.7	4

351	Strong amorphous carbon prepared by spark-plasma sintering C60. <i>Journal of the American Ceramic Society</i> , 2021 , 104, 1655-1660	3.8	1
350	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
349	Porous bismuth antimony telluride alloys with excellent thermoelectric and mechanical properties. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 4990-4999	13	8
348	Design of a Series of Metallic BN with Tunable Mechanical Properties. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 1979-1984	6.4	0
347	Helium-nitrogen mixtures at high pressure. <i>Physical Review B</i> , 2021 , 103,	3.3	3
346	Design of a Class of New sp ² & sp ³ Carbons Constructed by Graphite and Diamond Building Blocks. <i>Chinese Physics Letters</i> , 2021 , 38, 028102	1.8	6
345	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
344	Formation of copper boride on Cu(111). <i>Fundamental Research</i> , 2021 , 1, 482-487		2
343	Nanotwinned diamond cutting tool processed by femtosecond pulsed laser milling with trochoidal trajectory. <i>Journal of Materials Processing Technology</i> , 2021 , 294, 117115	5.3	1
342	Unprecedented pressure-driven metallization and topological charge transport in an anion radical salt. <i>Materials Today Physics</i> , 2021 , 20, 100467	8	
341	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
340	In Situ Grown Ultrafine RuO Nanoparticles on GeP Nanosheets as the Electrode Material for Flexible Planar Micro-Supercapacitors with High Specific Capacitance and Cyclability. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 47560-47571	9.5	1
339	High-sensitivity and versatile plasmonic biosensor based on grain boundaries in polycrystalline 1L WS films. <i>Biosensors and Bioelectronics</i> , 2021 , 194, 113596	11.8	2
338	Application of hard ceramic materials B ₄ C in energy storage: Design B ₄ C@C core-shell nanoparticles as electrodes for flexible all-solid-state micro-supercapacitors with ultrahigh cyclability. <i>Nano Energy</i> , 2020 , 75, 104947	17.1	21
337	Hierarchically structured diamond composite with exceptional toughness. <i>Nature</i> , 2020 , 582, 370-374	50.4	59
336	Direct Observation of Room-Temperature Dislocation Plasticity in Diamond. <i>Matter</i> , 2020 , 2, 1222-1232	12.7	26
335	Atomic-scale observation of the deformation and failure of diamonds by in-situ double-tilt mechanical testing transmission electron microscope holder. <i>Science China Materials</i> , 2020 , 63, 2335-2343	7.1	3
334	Novel superhard boron-rich nitrides under pressure. <i>Science China Materials</i> , 2020 , 63, 2358-2364	7.1	7

333	Synthesis of twin-structured nanodiamond particles. <i>AIP Advances</i> , 2020 , 10, 015240	1.5	3
332	Mechanical polishing of ultrahard nanotwinned diamond via transition into hard sp ² -sp ³ amorphous carbon. <i>Carbon</i> , 2020 , 161, 1-6	10.4	15
331	Influence of van der Waals epitaxy on phase transformation behaviors in 2D heterostructure. <i>Applied Physics Letters</i> , 2020 , 116, 021602	3.4	4
330	Prediction of superconductivity in pressure-induced new silicon boride phases. <i>Physical Review B</i> , 2020 , 101,	3.3	4
329	First-principles prediction of two-dimensional copper borides. <i>Physical Review Materials</i> , 2020 , 4,	3.2	4
328	Room-temperature electric field modulation of magnetization in a helimagnet. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 025001	3	4
327	High-Pressure Synthesis of cBN Nanoparticles with High-Density Nanotwin Substructures. <i>ACS Omega</i> , 2020 , 5, 650-654	3.9	1
326	Diamond gets harder, tougher, and more deformable. <i>Matter and Radiation at Extremes</i> , 2020 , 5, 0681034.7	4.7	2
325	Lithium Cluster Segregation in Coherent Contraction Twin Boundaries of Magnesium Alloys. <i>Acta Materialia</i> , 2020 , 201, 477-487	8.4	6
324	Pressure Effect on Order-Disorder Ferroelectric Transition in a Hydrogen-Bonded Metal-Organic Framework. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 9566-9571	6.4	3
323	Intersectional nanotwinned diamond-the hardest polycrystalline diamond by design. <i>Npj Computational Materials</i> , 2020 , 6,	10.9	8
322	High-Performance Broadband Photodetectors of Heterogeneous 2D Inorganic Molecular Sb ₂ O ₃ /Monolayer MoS ₂ Crystals Grown via Chemical Vapor Deposition. <i>Advanced Optical Materials</i> , 2020 , 8, 2000168	8.1	4
321	Photoluminescence and Raman Spectra Oscillations Induced by Laser Interference in Annealing-Created Monolayer WS ₂ Bubbles. <i>Advanced Optical Materials</i> , 2019 , 7, 1801373	8.1	14
320	Effect of layer and stacking sequence in simultaneously grown 2H and 3R WS atomic layers. <i>Nanotechnology</i> , 2019 , 30, 345203	3.4	7
319	Predicting three-dimensional icosahedron-based boron B ₆₀ . <i>Physical Review B</i> , 2019 , 99,	3.3	15
318	High-temperature oxidation resistance of dense amorphous boron-rich SiBCN monoliths. <i>Corrosion Science</i> , 2019 , 157, 312-323	6.8	10
317	One-Step Growth of Spatially Graded MoW S Monolayers with a Wide Span in Composition (from x = 0 to 1) at a Large Scale. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 20979-20986	9.5	7
316	Magnetic borophenes from an evolutionary search. <i>Physical Review B</i> , 2019 , 99,	3.3	15

315	Direct large-scale fabrication of C-encapsulated B ₄ C nanoparticles with tunable dielectric properties as excellent microwave absorbers. <i>Carbon</i> , 2019 , 148, 504-511	10.4	16
314	Accelerated Degradation of CrCl ₃ Nanoflakes Induced by Metal Electrodes: Implications for Remediation in Nanodevice Fabrication. <i>ACS Applied Nano Materials</i> , 2019 , 2, 1597-1603	5.6	7
313	Potential high-T _c superconductivity in CaYH ₁₂ under pressure. <i>Physical Review B</i> , 2019 , 99,	3.3	53
312	Small onion-like BN leads to ultrafine-twinned cubic BN. <i>Science China Materials</i> , 2019 , 62, 1169-1176	7.1	9
311	Preparation of bulk metallic glasses by modifying local structure of icosahedral quasicrystals. <i>Intermetallics</i> , 2019 , 109, 97-104	3.5	5
310	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
309	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
308	Layered porous materials indium triphosphide InP ₃ for high-performance flexible all-solid-state supercapacitors. <i>Journal of Power Sources</i> , 2019 , 438, 227010	8.9	10
307	Evaporation-induced self-assembly of C on SrTiO(110) reconstructed surfaces. <i>Nanotechnology</i> , 2019 , 30, 415605	3.4	
306	Lateral Bilayer MoS ₂ /WS ₂ Heterostructure Photodetectors with High Responsivity and Detectivity. <i>Advanced Optical Materials</i> , 2019 , 7, 1900815	8.1	39
305	Surface Reconstructions of SrTiO ₃ (110) Calibrated with STM and LEED. <i>Physica Status Solidi (B): Basic Research</i> , 2019 , 256, 1900277	1.3	
304	Discovery of superhard materials via CALYPSO methodology. <i>Chinese Physics B</i> , 2019 , 28, 106104	1.2	9
303	Regulating Polymerization in Graphitic Carbon Nitride To Improve Photocatalytic Activity. <i>Chemistry of Materials</i> , 2019 , 31, 9188-9199	9.6	28
302	First-principles study of crystal structures and superconductivity of ternary YSH ₆ and LaSH ₆ at high pressures. <i>Physical Review B</i> , 2019 , 100,	3.3	16
301	Continuous strengthening in nanotwinned diamond. <i>Npj Computational Materials</i> , 2019 , 5,	10.9	17
300	Atomically Resolving Polymorphs and Crystal Structures of In ₂ Se ₃ . <i>Chemistry of Materials</i> , 2019 , 31, 101436-101449	9.3	149
299	Approaching diamond's theoretical elasticity and strength limits. <i>Nature Communications</i> , 2019 , 10, 55331-7.4	17.4	43
298	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

297	Grain wall boundaries in centimeter-scale continuous monolayer WS film grown by chemical vapor deposition. <i>Nanotechnology</i> , 2018 , 29, 255705	3.4	8
296	Low-energy 3D sp carbons with versatile properties beyond graphite and graphene. <i>Dalton Transactions</i> , 2018 , 47, 6233-6239	4.3	6
295	Novel carbon polymorphs with cumulative double bonds in three-dimensional sp-sp hybrid framework. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 15022-15029	3.6	6
294	Role of boron addition on phase composition, microstructural evolution and mechanical properties of nanocrystalline SiBCN monoliths. <i>Journal of the European Ceramic Society</i> , 2018 , 38, 1179-1189	6	10
293	Rise of correlated dislocations in nanotwinned metals against fatigue. <i>Science China Materials</i> , 2018 , 61, 127-128	7.1	2
292	Boron-dependent microstructural evolution, thermal stability, and crystallization of mechanical alloying derived SiBCN. <i>Journal of the American Ceramic Society</i> , 2018 , 101, 3205-3221	3.8	7
291	Enhanced Stability of Black Phosphorus Field-Effect Transistors via Hydrogen Treatment. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700455	6.4	15
290	Enhanced thermoelectric performance of Na-doped PbTe synthesized under high pressure. <i>Science China Materials</i> , 2018 , 61, 1218-1224	7.1	20
289	Effects of high pressure on the low-temperature sintering of dense amorphous SiBCN monoliths. <i>Journal of the European Ceramic Society</i> , 2018 , 38, 3777-3786	6	9
288	Predicting the ground-state structure of sodium boride. <i>Physical Review B</i> , 2018 , 97,	3.3	16
287	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
286	Two-dimensional boron on Pb (1 1 0) surface. <i>FlatChem</i> , 2018 , 7, 34-41	5.1	5
285	Carbon-content-dependent phase composition, microstructural evolution, and mechanical properties of SiBCN monoliths. <i>Journal of the American Ceramic Society</i> , 2018 , 101, 2137-2154	3.8	2
284	Carbon content-dependent microstructures, surface characteristics and thermal stability of mechanical alloying derived SiBCN powders. <i>Ceramics International</i> , 2018 , 44, 3614-3624	5.1	4
283	Dislocation behaviors in nanotwinned diamond. <i>Science Advances</i> , 2018 , 4, eaat8195	14.3	24
282	Metallic layered germanium phosphide GeP ₅ for high rate flexible all-solid-state supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 19409-19416	13	21
281	The hardest transition metal nitride predicted from machine learning. <i>Science Bulletin</i> , 2018 , 63, 947-948	10.6	1
280	Multithreaded conductive carbon: 1D conduction in 3D carbon. <i>Carbon</i> , 2017 , 115, 584-588	10.4	13

279	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
278	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
277	Thermoelectric properties of high pressure synthesized lithium and calcium double-filled CoSb ₃ . <i>AIP Advances</i> , 2017 , 7, 015204	1.5	3
276	Glass formation in narrow band-gap SnTe-based chalcogenide systems. <i>Materials Letters</i> , 2017 , 194, 149-151	3.5	8
275	Direct evidence of entropy driven fluid-like to glass-like transition in microgel suspensions. <i>Applied Physics Letters</i> , 2017 , 110, 071902	3.4	1
274	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
273	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
272	New hexagonal boron nitride polytypes with triple-layer periodicity. <i>Journal of Applied Physics</i> , 2017 , 121, 165102	2.5	10
271	Strengthening mechanism of β Zr. <i>Computational Materials Science</i> , 2017 , 135, 134-140	3.2	4
270	Compressed glassy carbon: An ultrastrong and elastic interpenetrating graphene network. <i>Science Advances</i> , 2017 , 3, e1603213	14.3	77
269	Communication: Enthalpy relaxation in a metal-organic zeolite imidazole framework (ZIF-4) glass-former. <i>Journal of Chemical Physics</i> , 2017 , 146, 121101	3.9	9
268	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
267	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
266	A superhard sp ³ microporous carbon with direct bandgap. <i>Chemical Physics Letters</i> , 2017 , 689, 68-73	2.5	29
265	Sodium doped polycrystalline SnSe: High pressure synthesis and thermoelectric properties. <i>Journal of Alloys and Compounds</i> , 2017 , 727, 1014-1019	5.7	31
264	Synthesis, Thermal Properties and Application of Nanodiamond 2017 , 85-112		2
263	Strain Release Induced Novel Fluorescence Variation in CVD-Grown Monolayer WS ₂ Crystals. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 34071-34077	9.5	13
262	Strengthening in high-pressure quenched Zr. <i>High Pressure Research</i> , 2017 , 37, 278-286	1.6	5

261	Superhard and superconducting B6C. <i>Materials Today Physics</i> , 2017 , 3, 76-84	8	9
260	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
259	Fabrication of multifunctional carbon encapsulated Ni@NiO nanocomposites for oxygen reduction, oxygen evolution and lithium-ion battery anode materials. <i>Science China Materials</i> , 2017 , 60, 947-954	7.1	24
258	Preparation of pure β -phase titanium alloys with low moduli via high pressure solution treatment. <i>Journal of Alloys and Compounds</i> , 2017 , 695, 45-51	5.7	12
257	High pressure synthesis of nanotwinned ultrahard materials. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2017 , 66, 036201	0.6	9
256	Amorphous silicoboron carbonitride monoliths resistant to flowing air up to 1800 °C. <i>Corrosion Science</i> , 2016 , 109, 162-173	6.8	24
255	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
254	Liquid-Exfoliated Black Phosphorous Nanosheet Thin Films for Flexible Resistive Random Access Memory Applications. <i>Advanced Functional Materials</i> , 2016 , 26, 2016-2024	15.6	137
253	Recent Advances in Superhard Materials. <i>Annual Review of Materials Research</i> , 2016 , 46, 383-406	12.8	80
252	Anomalous melting behavior of polycrystalline bismuth quenched at high temperature and high pressure. <i>Materials Letters</i> , 2016 , 168, 36-39	3.3	2
251	High Pressure Synthesis of p-Type CeFeCoSb Skutterudites. <i>Materials</i> , 2016 , 9,	3.5	12
250	Flexible All-Solid-State Supercapacitors based on Liquid-Exfoliated Black-Phosphorus Nanoflakes. <i>Advanced Materials</i> , 2016 , 28, 3194-201	24	249
249	Development of an ultrahard nanotwinned cBN micro tool for cutting hardened steel. <i>Science China Technological Sciences</i> , 2016 , 59, 876-881	3.5	7
248	Coexistence of multiple metastable polytypes in rhombohedral bismuth. <i>Scientific Reports</i> , 2016 , 6, 20337.9	3.9	12
247	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
246	Superhard superstrong carbon clathrate. <i>Carbon</i> , 2016 , 105, 151-155	10.4	23
245	Te-Doped Black Phosphorus Field-Effect Transistors. <i>Advanced Materials</i> , 2016 , 28, 9408-9415	24	195
244	Si10: A sp ³ Silicon Allotrope with Spirally Connected Si ₅ Tetrahedrons. <i>Chemistry of Materials</i> , 2016 , 28, 6441-6445	9.6	14

243	Unveiling the dependence of glass transitions on mixing thermodynamics in miscible systems. <i>Scientific Reports</i> , 2015 , 5, 8500	4.9	9
242	Superhard materials: recent research progress and prospects. <i>Science China Materials</i> , 2015 , 58, 132-142	7.1	42
241	Ultrahardness: Measurement and Enhancement. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 5633-5638	3.8	31
240	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
239	A new phase from compression of carbon nanotubes with anisotropic Dirac fermions. <i>Scientific Reports</i> , 2015 , 5, 10713	4.9	19
238	Peanut shell derived hard carbon as ultralong cycling anodes for lithium and sodium batteries. <i>Electrochimica Acta</i> , 2015 , 176, 533-541	6.7	186
237	Thermoelectric properties of Sn substituted p-type Nd filled skutterudites. <i>Journal of Alloys and Compounds</i> , 2015 , 639, 68-73	5.7	14
236	Anomaly in dielectric relaxation dispersion of glass-forming alkoxy alcohols. <i>Journal of Chemical Physics</i> , 2015 , 142, 214505	3.9	11
235	Secondary relaxation dynamics in rigid glass-forming molecular liquids with related structures. <i>Journal of Chemical Physics</i> , 2015 , 143, 104505	3.9	11
234	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
233	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
232	Highly Dense Amorphous Si ₂ BC ₃ N Monoliths with Excellent Mechanical Properties Prepared by High Pressure Sintering. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 3782-3787	3.8	17
231	Crystallization Behavior of Amorphous Si ₂ BC ₃ N Ceramic Monolith Subjected to High Pressure. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 3788-3796	3.8	13
230	Selected Reactive Sites Tuned by High Pressure: Oligomerization of Solid-State Cyanamide. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 12801-12807	3.8	6
229	Is orthorhombic iron tetraboride superhard?. <i>Journal of Materiomics</i> , 2015 , 1, 45-51	6.7	23
228	Carbonaceous photonic crystals as ultralong cycling anodes for lithium and sodium batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 13786-13793	13	17
227	Structural and thermoelectric characterizations of samarium filled CoSb ₃ skutterudites. <i>Materials Letters</i> , 2015 , 143, 41-43	3.3	14
226	Semimetallic Two-Dimensional Boron Allotrope with Massless Dirac Fermions. <i>Physical Review Letters</i> , 2014 , 112,	7.4	397

225	Carbon coated face-centered cubic Ru-C nanoalloys. <i>Nanoscale</i> , 2014 , 6, 10370-6	7.7	16
224	Glass transition and mixing thermodynamics of a binary eutectic system. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 3586-92	3.6	15
223	Covalent-bonded graphyne polymers with high hardness. <i>Journal of Superhard Materials</i> , 2014 , 36, 257-269		12
222	Metastable adaptive orthorhombic martensite in zirconia nanoparticles. <i>Journal of Applied Crystallography</i> , 2014 , 47, 684-691	3.8	9
221	Novel three-dimensional boron nitride allotropes from compressed nanotube bundles. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 7022	7.1	17
220	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
219	Calorimetric determination of fragility in glass forming liquids: T(f) vs. T(g-onset) methods. <i>European Physical Journal E</i> , 2014 , 37, 7	1.5	18
218	Unique lead adsorption behavior of activated hydroxyl group in two-dimensional titanium carbide. <i>Journal of the American Chemical Society</i> , 2014 , 136, 4113-6	16.4	813
217	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
216	Nanotwinned diamond with unprecedented hardness and stability. <i>Nature</i> , 2014 , 510, 250-3	50.4	440
215	An ab initio study on the transition paths from graphite to diamond under pressure. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 145402	1.8	13
214	Variable cell nudged elastic band method for studying solid-solid structural phase transitions. <i>Computer Physics Communications</i> , 2013 , 184, 2111-2118	4.2	56
213	Prediction of Novel SiCN Compounds: First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 21943-21948	3.8	15
212	Compressed carbon nanotubes: a family of new multifunctional carbon allotropes. <i>Scientific Reports</i> , 2013 , 3, 1331	4.9	73
211	Bulk modulus for polar covalent crystals. <i>Scientific Reports</i> , 2013 , 3, 3068	4.9	28
210	Ultra-hard nanotwinned cubic boron nitride. <i>Nature</i> , 2013 , 493, 385-8	50.4	519
209	Spherical strengthening precipitate in a Mg-10wt%Y alloy with superhigh pressure aging. <i>Materials Letters</i> , 2013 , 96, 16-19	3.3	6
208	Gadolinium filled CoSb ₃ : High pressure synthesis and thermoelectric properties. <i>Materials Letters</i> , 2013 , 98, 171-173	3.3	17

207	Effects of cerium on microstructures, recovery behavior and mechanical properties of backward extruded Mg _{0.5} Mn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 564, 310-316	5.3	7
206	{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
205	Temperature and pressure dependent geometry optimization and elastic constant calculations for arbitrary symmetry crystals: Applications to MgSiO ₃ perovskites. <i>Journal of Applied Physics</i> , 2013 , 113, 103501	2.5	17
204	Microstructures, aging behaviour and mechanical properties in hydrogen and chloride media of backward extruded Mg-Y based biomaterials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013 , 17, 176-85	4.1	11
203	Tian et al. reply. <i>Nature</i> , 2013 , 502, E2-3	50.4	10
202	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
201	Investigation of skutterudite Mg _y Co ₄ Sb ₁₂ : High pressure synthesis and thermoelectric properties. <i>Journal of Applied Physics</i> , 2013 , 113, 113703	2.5	32
200	Dielectric relaxation of long-chain glass-forming monohydroxy alcohols. <i>Journal of Chemical Physics</i> , 2013 , 139, 164504	3.9	23
199	Degradable magnesium-based implant materials with anti-inflammatory activity. <i>Journal of Biomedical Materials Research - Part A</i> , 2013 , 101, 1898-906	5.4	26
198	Debye-type dielectric relaxation in glass-forming 3-methylthio-1-hexanol. <i>Journal of Chemical Physics</i> , 2013 , 139, 024503	3.9	11
197	Carbon Vacancy Ordered Non-Stoichiometric ZrC _{0.6} 2013 , 478-508		1
196	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
195	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
194	Effect of backward extrusion on microstructure and mechanical properties of Mg ₉₂ Y ₈ based alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 532, 443-448	5.3	20
193	Two-Dimensional Superlattice: Modulation of Band Gaps in Graphene-Based Monolayer Carbon Superlattices. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 3373-3378	6.4	52
192	Fast preparation and thermoelectric properties of Zn ₄ Sb ₃ by HPHT. <i>Materials Science-Poland</i> , 2012 , 30, 355-358	0.6	0
191	Exotic Cubic Carbon Allotropes. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 24233-24238	3.8	48
190	High-pressure synthesis of phonon-glass electron-crystal featured thermoelectric Li _x Co ₄ Sb ₁₂ . <i>Acta Materialia</i> , 2012 , 60, 1246-1251	8.4	61

189	Relaxation dynamics in glass forming liquids with related molecular structures. <i>Chemical Physics Letters</i> , 2012 , 551, 81-85	2.5	5
188	Low-temperature diffusion of oxygen through ordered carbon vacancies in Zr ₂ C(x): the formation of ordered Zr ₂ C(x)O(y). <i>Inorganic Chemistry</i> , 2012 , 51, 5164-72	5.1	12
187	Annealing-Induced {011}-Specific Cyclic Twins in Tetragonal Zirconia Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 21052-21058	3.8	11
186	High-pressure behaviors of carbon nanotubes. <i>Journal of Superhard Materials</i> , 2012 , 34, 371-385	0.9	22
185	Metastable C-centered orthorhombic Si ₈ and Ge ₈ . <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 405803.8	3.8	4
184	First-principles study of O-BN: A sp ³ -bonding boron nitride allotrope. <i>Journal of Applied Physics</i> , 2012 , 112, 053518	2.5	44
183	Unusual dielectric strength of Debye relaxation in monohydroxy alcohols upon mixing. <i>Journal of Physical Chemistry B</i> , 2012 , 116, 11482-7	3.4	12
182	Tetragonal allotrope of group 14 elements. <i>Journal of the American Chemical Society</i> , 2012 , 134, 12362-516.4	5.6	146
181	Temperature dependent elastic constants for crystals with arbitrary symmetry: Combined first principles and continuum elasticity theory. <i>Journal of Applied Physics</i> , 2012 , 111, 083525	2.5	37
180	Development of Degradable Mg-RE Based Biomaterials. <i>Advanced Materials Research</i> , 2012 , 509, 36-39	0.5	3
179	High-pressure phases of NaAlH ₄ from first principles. <i>Applied Physics Letters</i> , 2012 , 100, 061905	3.4	8
178	A Universal Criterion for metallic glass formation. <i>Applied Physics Letters</i> , 2012 , 100, 261913	3.4	36
177	Temperature dependent elastic constants and ultimate strength of graphene and graphyne. <i>Journal of Chemical Physics</i> , 2012 , 137, 194901	3.9	76
176	Superstructural nanodomains of ordered carbon vacancies in nonstoichiometric ZrC _{0.61} . <i>Journal of Materials Research</i> , 2012 , 27, 1230-1236	2.5	23
175	Taming the collapse of optical fields. <i>Scientific Reports</i> , 2012 , 2, 1007	4.9	45
174	Prediction of a superconductive superhard material: Diamond-like BC ₇ . <i>Journal of Applied Physics</i> , 2011 , 110, 013501	2.5	20
173	Three dimensional carbon-nanotube polymers. <i>ACS Nano</i> , 2011 , 5, 7226-34	16.7	94
172	Body-centered tetragonal B ₂ N ₂ : a novel sp ³ bonding boron nitride polymorph. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 14565-70	3.6	65

171	Superhard B ₂ C ₂ N ₂ compounds from first-principles calculations. <i>Journal of Applied Physics</i> , 2011 , 109, 023516	2.5	2
170	Novel superhard carbon: C-centered orthorhombic C ₈ . <i>Physical Review Letters</i> , 2011 , 107, 215502	7.4	198
169	Universal phase transitions of B1-structured stoichiometric transition metal carbides. <i>Inorganic Chemistry</i> , 2011 , 50, 9266-72	5.1	11
168	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
167	Time dependence of interlayer coupling in Pd(50 $\%$)/Co(tCo $\%$)/Pd(54 $\%$)/Co(tCo $\%$)/Pd(50 $\%$) multilayer with perpendicular anisotropy. <i>Journal of Applied Physics</i> , 2011 , 110, 043918	2.5	4
166	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
165	Large shear strength enhancement of gamma-boron by normal compression. <i>Journal of Superhard Materials</i> , 2011 , 33, 401-408	0.9	9
164	Kinetic fragility of binary and ternary glass forming liquid mixtures. <i>European Physical Journal E</i> , 2011 , 34, 86	1.5	12
163	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
162	Study on Raman Spectroscopy and Purification of B-C-N Compound. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 2527-2529	2.3	1
161	Electrical properties of polycrystalline CaB ₆ under high pressure and low temperature. <i>Physica Status Solidi (B): Basic Research</i> , 2011 , 248, 1162-1165	1.3	6
160	Novel High-Pressure Phase of RhB: First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 19910-19915	3.8	16
159	Component dynamics in miscible mixtures of water and methanol. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 8242-8	3.4	13
158	Anomalous component dynamics of a binary mixture of associating glass-forming liquids. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 719-24	3.4	14
157	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
156	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
155	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
154	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	

153	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
152	Diffusion-controlled crystal growth in deeply undercooled melt on approaching the glass transition. <i>Physical Review B</i> , 2011 , 83,	3.3	40
151	Superconducting high-pressure phase of platinum hydride from first principles. <i>Physical Review B</i> , 2011 , 84,	3.3	43
150	Proper scaling of the anomalous Hall effect in the Co/Pt multilayers. <i>Journal of Applied Physics</i> , 2011 , 110, 033921	2.5	9
149	Distinct C60 growth modes on anthracene carboxylic acid templates. <i>Applied Physics Letters</i> , 2010 , 96, 143115	3.4	10
148	Dependence of glass forming ability on liquid fragility: Thermodynamics versus kinetics. <i>Applied Physics Letters</i> , 2010 , 97, 181901	3.4	13
147	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
146	Unusual compression behavior of TiO ₂ polymorphs from first principles. <i>Physical Review B</i> , 2010 , 82,	3.3	27
145	Compressive Strength of Diamond from First-Principles Calculation. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 17851-17853	3.8	38
144	Semiconducting Superhard Ruthenium Monocarbide. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 9961-9964	3.8	36
143	Superhard and superconducting structures of BC ₅ . <i>Journal of Applied Physics</i> , 2010 , 108, 023507	2.5	60
142	Ab initio study of the formation of transparent carbon under pressure. <i>Physical Review B</i> , 2010 , 82,	3.3	108
141	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
140	Dielectric relaxation dynamics in glass-forming mixtures of propanediol isomers. <i>Physical Review E</i> , 2010 , 82, 062502	2.4	10
139	Structural relaxation dynamics in binary glass-forming molecular liquids with ideal and complex mixing behavior. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 3618-22	3.4	42
138	C60 on Nanostructured Nb-Doped SrTiO ₃ (001) Surfaces. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 3416-3421	3.4	14
137	Thermoelectric properties of Sm _x Co ₄ Sb ₁₂ prepared by high pressure and high temperature. <i>Journal of Alloys and Compounds</i> , 2010 , 493, 535-538	5.7	15
136	Non-exponentiality of structural relaxations in glass forming metallic liquids. <i>Journal of Alloys and Compounds</i> , 2010 , 504, S201-S204	5.7	16

135	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
134	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
133	Glass transition in binary eutectic systems: best glass-forming composition. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 12080-4	3.4	27
132	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
131	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
130	Bulk Re ₂ C: Crystal Structure, Hardness, and Ultra-incompressibility. <i>Crystal Growth and Design</i> , 2010 , 10, 5024-5026	3.5	40
129	Prediction of a conducting hard ductile cubic IrC. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010 , 4, 230-232	2.5	7
128	Material removal mechanism of precision grinding of soft-brittle CdZnTe wafers. <i>International Journal of Advanced Manufacturing Technology</i> , 2010 , 46, 563-569	3.2	16
127	CaB ₆ single crystals grown under high pressure and hightemperature. <i>Journal of Crystal Growth</i> , 2010 , 313, 47-50	1.6	11
126	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
125	Mechanism for the metal-conducting behavior of a CaB ₄ single crystal. <i>Solid State Communications</i> , 2010 , 150, 1317-1320	1.6	1
124	HPHT synthesis and electrical transport properties of Sm _x Co ₄ Sb ₁₂ . <i>Journal of Rare Earths</i> , 2010 , 28, 407-410	3.7	4
123	Antiferromagnetic interlayer coupling in Pt/Co multilayers with perpendicular anisotropy. <i>Physical Review B</i> , 2009 , 79,	3.3	21
122	A tetragonal phase of superhard BC ₂ N. <i>Journal of Applied Physics</i> , 2009 , 105, 093521	2.5	28
121	Prediction of graphitelike BC ₄ N from first-principles calculations. <i>Journal of Applied Physics</i> , 2009 , 105, 043509	2.5	7
120	Unbinding force of chemical bonds and tensile strength in strong crystals. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 485405	1.8	18
119	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
118	Thermal oxidation behavior of hexagonal BC ₂ N. <i>Materials Characterization</i> , 2009 , 60, 56-59	3.9	5

117	Crystallization of an amorphous B ₁₀ C precursor with a LiB ₁₀ C catalyst at high pressures and temperatures. <i>Materials Characterization</i> , 2009 , 60, 1411-1414	3.9	1
116	Enhanced thermoelectric properties in Co ₄ Sb ₁₂ Te ₈ alloys prepared by HPHT. <i>Materials Letters</i> , 2009 , 63, 2139-2141	3.3	41
115	Lattice, magnetic and transport properties in antiperovskite compounds. <i>Solid State Communications</i> , 2009 , 149, 1519-1522	1.6	16
114	Study of structural stabilities and optical properties of HgTe under high pressure. <i>Journal of Physics and Chemistry of Solids</i> , 2009 , 70, 433-438	3.9	5
113	Interfacial structure of oxidized inner pores in precursor-derived Si ₃ N ₄ ceramics. <i>Journal of Non-Crystalline Solids</i> , 2009 , 355, 2390-2395	3.9	2
112	HPHT synthesis and thermoelectric properties of CoSb ₃ and Fe _{0.6} Co _{3.4} Sb ₁₂ skutterudites. <i>Journal of Alloys and Compounds</i> , 2009 , 480, 882-884	5.7	15
111	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
110	Crystal structure and stability of magnesium borohydride from first principles. <i>Physical Review B</i> , 2009 , 79,	3.3	37
109	Enhanced thermoelectric figure of merit in nanocrystalline Bi ₂ Te ₃ bulk. <i>Journal of Applied Physics</i> , 2009 , 105, 094303	2.5	62
108	Enhanced thermoelectric performance of AgSbTe ₂ synthesized by high pressure and high temperature. <i>Journal of Applied Physics</i> , 2009 , 105, 073713	2.5	29
107	Hardness of B ₁₀ C and B ₁₀ C _{1-x} N _x (n=0, 1, 2, 3) crystals. <i>Diamond and Related Materials</i> , 2009 , 18, 72-75	3.5	14
106	Study of the phase diagram and continuous cooling transformation of 12%Cr ultra-super-critical rotor steel. <i>Materials Characterization</i> , 2008 , 59, 1133-1136	3.9	7
105	Solvent-free synthesis of crystalline carbon nitride compounds. <i>Journal of Alloys and Compounds</i> , 2008 , 455, 303-307	5.7	7
104	Hardness of covalent compounds: Roles of metallic component and d valence electrons. <i>Journal of Applied Physics</i> , 2008 , 104, 023503	2.5	140
103	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
102	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
101	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
100	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

99	Negative refractive index of energy flow in Veselago materials. <i>Europhysics Letters</i> , 2008 , 83, 67007	1.6	3
98	Oscillatory antiferromagnetic interlayer coupling in Co(4)/Pt(tPt)/[Co(4)/Pt(6)] ₄ /NiO(20) multilayers with perpendicular anisotropy. <i>Physical Review B</i> , 2008 , 77,	3.3	13
97	Structure and mechanical properties of osmium carbide: First-principles calculations. <i>Applied Physics Letters</i> , 2008 , 93, 041904	3.4	36
96	Calorimetric versus kinetic glass transitions in viscous monohydroxy alcohols. <i>Journal of Chemical Physics</i> , 2008 , 128, 084503	3.9	76
95	Potential superhard cubic spinel CSi ₂ N ₄ : First-principles investigations. <i>Journal of Applied Physics</i> , 2008 , 103, 083533	2.5	21
94	Phase transformation of melamine at high pressure and temperature. <i>Journal of Materials Science</i> , 2008 , 43, 689-695	4.3	35
93	Large-Scale Synthesis of Nitrogen-Rich Carbon Nitride Microfibers by Using Graphitic Carbon Nitride as Precursor. <i>Advanced Materials</i> , 2008 , 20, 1777-1781	24	195
92	First-principle study of electronic properties of Ti ₃ Si _{1-x} Al _x C ₂ solid solutions. <i>Journal of Physics and Chemistry of Solids</i> , 2008 , 69, 1356-1361	3.9	14
91	First-principles study of atomic oxygen adsorption on boron-substituted graphite. <i>Surface Science</i> , 2008 , 602, 37-45	1.8	20
90	Study on hot deformation behavior of 12%Cr ultra-super-critical rotor steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 487, 108-113	5.3	25
89	First-Principles Investigation of Dense B ₄ C ₃ . <i>Journal of Physical Chemistry C</i> , 2007 , 111, 13679-13683	3.8	11
88	Crystal structure and physical properties of OsN ₂ and PtN ₂ in the marcasite phase. <i>Physical Review B</i> , 2007 , 75,	3.3	69
87	Most likely phase of superhard BC ₂ N by ab initio calculations. <i>Physical Review B</i> , 2007 , 76,	3.3	54
86	Phase-constituent control and superconducting properties of MgB ₂ films in situ grown by hot-filament chemical-vapor deposition. <i>Journal of Crystal Growth</i> , 2007 , 299, 82-85	1.6	
85	Comment on "Hardness of covalent and ionic crystals: first-principle calculations". <i>Physical Review Letters</i> , 2007 , 98, 109601; discussion 109602	7.4	17
84	Noncollinear interlayer coupling and its effect on exchange bias in Co(32)/NiO(tNiO)/[Co(4)/Pt(6)] ₄ /Pt(50) multilayers. <i>Journal of Magnetism and Magnetic Materials</i> , 2007 , 309, 176-182	2.8	7
83	Structural and superconducting properties of Ca-doped MgB ₂ superconductors. <i>Superconductor Science and Technology</i> , 2007 , 20, 261-266	3.1	10
82	First-principles study of wurtzite BC ₂ N. <i>Physical Review B</i> , 2007 , 76,	3.3	40

81	Nonradiative transition mechanism on the surface of nanocrystalline La _{0.8} Sr _{0.2} FeO ₃ probed by photoacoustic and surface photovoltaic techniques. <i>Physical Review B</i> , 2007 , 75,	3-3	5
80	Decrease of T _c and persistent two gaps upon enhancement of the Ca doping in MgB ₂ superconductor. <i>Applied Physics Letters</i> , 2007 , 90, 052507	3-4	9
79	Effect of cooling field on the antiferromagnetic interlayer coupling and exchange biasing in two antiferromagnetically coupled CoBt multilayers. <i>Journal of Applied Physics</i> , 2007 , 102, 073904	2-5	1
78	Conductivity of AgI under high pressure. <i>Journal of Applied Physics</i> , 2007 , 101, 053701	2-5	14
77	Body-centered superhard BC ₂ N phases from first principles. <i>Physical Review B</i> , 2007 , 76,	3-3	28
76	A study of the electrical properties of HgS under high pressure. <i>Journal of Physics Condensed Matter</i> , 2007 , 19, 425222	1-8	15
75	Carbon-rich boron carbide in the eutectic product synthesized by resistance heating of B ₂ CN in graphite. <i>Journal of Alloys and Compounds</i> , 2007 , 437, 238-246	5-7	16
74	Diamond-like BC ₃ as a superhard conductor identified by ideal strength calculations. <i>Journal of Physics Condensed Matter</i> , 2007 , 19, 346223	1-8	9
73	Theoretical hardness of the cubic BC ₂ N. <i>Diamond and Related Materials</i> , 2007 , 16, 526-530	3-5	33
72	Ground-state properties and hardness of high density BC ₆ N phases originating from diamond structure. <i>Journal of Applied Physics</i> , 2007 , 101, 083505	2-5	12
71	The thermal expansion of a highly crystalline hexagonal BC ₂ N compound synthesized under high temperature and pressure. <i>Journal of Physics Condensed Matter</i> , 2006 , 18, 9519-9524	1-8	10
70	Magnetic reversal in two antiferromagnetically coupled CoBt multilayers with perpendicular anisotropy: Effect of competing interlayer coupling and interfacial biasing. <i>Physical Review B</i> , 2006 , 74,	3-3	4
69	Nonmonotonic ferromagnetic thickness dependence of out-of-plane interlayer coupling between two CoBt multilayers across a 11 Å NiO spacer. <i>Applied Physics Letters</i> , 2006 , 88, 022504	3-4	1
68	Infrared and Raman spectra of BC ₂ N from first principles calculations. <i>Physical Review B</i> , 2006 , 74,	3-3	15
67	Chalcopyrite polymorph for superhard BC ₂ N. <i>Applied Physics Letters</i> , 2006 , 89, 151911	3-4	37
66	First-principles study of electronic structure and optical properties of heterodiamond BC ₂ N. <i>Physical Review B</i> , 2006 , 73,	3-3	91
65	Predicting hardness of dense C ₃ N ₄ polymorphs. <i>Applied Physics Letters</i> , 2006 , 88, 101906	3-4	64
64	Bond ionicities and hardness of B ₁₃ C ₂ -like structured B _y X crystals (X=C,N,O,P,As). <i>Physical Review B</i> , 2006 , 73,	3-3	37

63	Solvothermal synthesis of hexagonal B ₁₀ C ₁₀ compound at low temperature conditions. <i>Diamond and Related Materials</i> , 2006 , 15, 1659-1662	3.5	2
62	First-principles studies of structural and electronic properties of hexagonal BC ₅ . <i>Physical Review B</i> , 2006 , 73,	3.3	70
61	Total transmission of electromagnetic waves at interfaces associated with an indefinite medium. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2006 , 23, 904	1.7	16
60	Tearing, folding and deformation of a carbon-carbon sp ² -bonded network. <i>Carbon</i> , 2006 , 44, 1544-1547	10.4	21
59	Prediction of a sandwichlike conducting superhard boron carbide: First-principles calculations. <i>Physical Review B</i> , 2006 , 73,	3.3	47
58	Synthesis of B ₁₀ C ₁₀ nanocrystalline particle by mechanical alloying and spark plasma sintering. <i>Journal of Materials Science</i> , 2006 , 41, 8352-8355	4.3	8
57	Field emission from lotiform-like ZnO nanostructures synthesized via thermal evaporation method. <i>Applied Physics A: Materials Science and Processing</i> , 2006 , 84, 165-169	2.6	4
56	Structural evolution of turbostratic carbon nitride after being treated with a pulse discharge. <i>Diamond and Related Materials</i> , 2005 , 14, 1700-1704	3.5	13
55	Optically uniaxial left-handed materials. <i>Physical Review B</i> , 2005 , 72,	3.3	19
54	Peculiar ZnO nanopushpins and nanotubes synthesized via simple thermal evaporation. <i>Applied Physics Letters</i> , 2005 , 87, 123111	3.4	62
53	Ab initio investigations of optical properties of the high-pressure phases of ZnO. <i>Physical Review B</i> , 2005 , 71,	3.3	303
52	A washer type high temperature superconducting dc-SQUID magnetometer with bicrystal junctions on SrTiO ₃ substrate. <i>Physica C: Superconductivity and Its Applications</i> , 2005 , 418, 23-27	1.3	2
51	Turbostratic carbon nitride prepared by pyrolysis of melamine. <i>Journal of Materials Science</i> , 2005 , 40, 2645-2647	4.3	108
50	Ionicities of boron-boron bonds in B(12) icosahedra. <i>Physical Review Letters</i> , 2005 , 94, 015504	7.4	192
49	Hardness of cubic spinel Si ₃ N ₄ . <i>Applied Physics Letters</i> , 2004 , 85, 5571-5573	3.4	50
48	First-principles study of B ₂ CN crystals deduced from the diamond structure. <i>Journal of Physics Condensed Matter</i> , 2004 , 16, 8131-8138	1.8	21
47	Specific heat and related thermodynamic properties of an undercooled germanium melt. <i>Applied Physics Letters</i> , 2004 , 85, 558-560	3.4	13
46	Optical properties of heterodiamond B ₂ CN using first-principles calculations. <i>Applied Physics Letters</i> , 2004 , 84, 4544-4546	3.4	64

45	High-Tc dc-SQUID magnetometer and its application in eddy current non-destructive evaluation. <i>Cryogenics</i> , 2004 , 44, 695-699	1.8	6
44	CNx/TiNy films prepared by ion-beam sputtering. <i>Journal of Materials Science</i> , 2003 , 38, 1471-1477	4.3	
43	Formation and orientation control of Y2O3 inclusions in pulsed laser deposited YBa2Cu3O7-x films by using a melt-textured target. <i>Journal of Crystal Growth</i> , 2003 , 252, 560-564	1.6	
42	Spark discharge and high-speed impact treatment of turbostratic CNx powder. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 350, 190-194	5.3	5
41	Hardness of covalent crystals. <i>Physical Review Letters</i> , 2003 , 91, 015502	7.4	74 ²
40	Chemical bond properties and Mössbauer spectroscopy in REBa2Cu3O7 (RE=Eu, Y). <i>Physica C: Superconductivity and Its Applications</i> , 2002 , 371, 151-155	1.3	8
39	Evaluation of YBa2Cu3O7- δ thin films ablated from melt-textured-growth YBa2Cu3O7- δ target by electron microscopy. <i>Journal Physics D: Applied Physics</i> , 2002 , 35, 2180-2182	3.2	2
38	Experimental observation of local heteroepitaxy between cubic-C3N4 and Ti2N in CNx/TiNy bilayers prepared by ion beam sputtering. <i>Journal of Crystal Growth</i> , 2001 , 225, 67-72	1.6	6
37	Preparation of CNx/TiNy multilayers by ion beam sputtering. <i>Journal of Crystal Growth</i> , 2001 , 233, 303-311	3.6	18
36	Cubic-C3N4 nanoparticles synthesized in CNx/TiNx multilayer films. <i>Chemical Physics Letters</i> , 2001 , 334, 7-11	2.5	25
35	Orthorhombic B2CN crystal synthesized by high pressure and temperature. <i>Chemical Physics Letters</i> , 2001 , 340, 431-436	2.5	44
34	High-Tc SQUID magnetometer and planar gradiometer and their applications in non-destructive evaluation. <i>Physica C: Superconductivity and Its Applications</i> , 2000 , 341-348, 2709-2710	1.3	2
33	Synthesis of graphite-C3N4 crystal by ion beam sputtering. <i>Journal of Materials Science Letters</i> , 2000 , 19, 553-556		11
32	Chemical synthesis of crystalline hexagonal B-C-N compound. <i>Journal of Materials Science Letters</i> , 2000 , 19, 2061-2063		8
31	Flip-chip-type high-T c gradiometer for biomagnetic measurements in unshielded environment. <i>Science in China Series A: Mathematics</i> , 2000 , 43, 82-87		1
30	Atomic Force Microscopy of Surface Reconstructed SrTiO3 Vicinal Substrates for Epitaxial Growth of YBa2Cu3O7-x Thin Films. <i>Chinese Physics Letters</i> , 1999 , 16, 853-855	1.8	5
29	High-Tc directly coupled direct current SQUID gradiometer with flip-chip flux transformer. <i>Applied Physics Letters</i> , 1999 , 74, 1302-1304	3.4	25
28	On ageing and critical thickness of YBa2Cu3O7 films on Si with CeO2/YSZ buffer layers. <i>Thin Solid Films</i> , 1999 , 338, 224-230	2.2	23

27	High-Quality YBa ₂ Cu ₃ O _{7-x} Films with CeO ₂ /YSZ Buffer Layers on 2-Inch Si Wafers Deposited by Pulsed Laser. <i>Journal of Superconductivity and Novel Magnetism</i> , 1998 , 11, 713-717			5
26	Large-area YBCO films for device fabrication. <i>Superconductor Science and Technology</i> , 1998 , 11, 59-62	3.1		20
25	High-temperature superconducting devices on buffered silicon substrates 1998 ,			2
24	Application of silicon substrates for high-T _c Josephson junctions and SQUIDs. <i>European Physical Journal Special Topics</i> , 1998 , 08, Pr3-297-Pr3-300			2
23	Scanning tunneling microscopy of laser-deposited YBa ₂ Cu ₃ O ₇ thin films on Y-stabilized zirconia substrate. <i>Journal of Superconductivity and Novel Magnetism</i> , 1995 , 8, 103-108			2
22	Dependence of microwave surface resistance on the structure of laser-deposited YBa ₂ Cu ₃ O _{7-x} thin films. <i>Journal of Superconductivity and Novel Magnetism</i> , 1995 , 8, 287-291			2
21	Surface structural study of YBa ₂ Cu ₃ O _{7-x} thin films grown by pulsed laser ablation. <i>Journal of Materials Science Letters</i> , 1995 , 14, 91-93			1
20	Microstructure of outgrowths on the surface of laser-ablated YBa ₂ Cu ₃ O ₇ thin films. <i>Physica C: Superconductivity and Its Applications</i> , 1995 , 241, 30-36	1.3		16
19	Microstructural features at the interface between laser ablated YBa ₂ Cu ₃ O ₇ films and LaAlO ₃ substrates. <i>Applied Physics Letters</i> , 1995 , 66, 3356-3358	3.4		8
18	Effect of structure and morphology on resistive loss at 10 GHz of the large-area laser-deposited YBa ₂ Cu ₃ O ₇ thin films. <i>Journal of Applied Physics</i> , 1995 , 77, 1165-1170	2.5		12
17	Characteristics of Short Cast Iron Fibres and Their Application for Diamond Cutting Wheels. <i>Powder Metallurgy</i> , 1995 , 38, 109-112	1.9		1
16	The effect of laser energy density and target-substrate distance on the quality of YBa ₂ Cu ₃ O _{7-x} thin films. <i>Superconductor Science and Technology</i> , 1994 , 7, 435-437	3.1		8
15	YBa ₂ Cu ₃ O _{7-x} Superconducting Thin Films Grown on CaNdAlO ₄ (100) Substrates. <i>Chinese Physics Letters</i> , 1994 , 11, 301-303	1.8		
14	Correlation between distribution of outgrowths and microwave surface resistance for YBa ₂ Cu ₃ O ₇ thin films. <i>Applied Physics Letters</i> , 1994 , 65, 2356-2358	3.4		17
13	Microstructure and properties of YBa ₂ Cu ₃ O _{7-x} thin films with BaO precipitates. <i>Applied Physics Letters</i> , 1994 , 65, 234-236	3.4		17
12	Preparation and properties of YBa ₂ Cu ₃ O ₇ thin films on sapphire with Yttria-stabilized zirconia buffer layer. <i>Journal of Superconductivity and Novel Magnetism</i> , 1994 , 7, 693-696			3
11	Superconducting behavior of high-T _c YBa ₂ Cu ₃ O ₇ thin films with BaO impurity produced by pulsed laser deposition. <i>Journal of Superconductivity and Novel Magnetism</i> , 1994 , 7, 709-713			
10	Large area, low microwave surface resistance thin films of YBa ₂ Cu ₃ O ₇ prepared by pulsed laser ablation. <i>Physica C: Superconductivity and Its Applications</i> , 1994 , 220, 114-118	1.3		21

9	Superconductivity, microstructure of large area YBa ₂ Cu ₃ O ₇ thin films prepared by pulsed laser ablation (PLA). <i>Physica C: Superconductivity and Its Applications</i> , 1994 , 235-240, 635-636	1.3	
8	IMPROVEMENT OF THE SURFACE ROUGHNESS OF LaAlO ₃ SUBSTRATE BY DEPOSITING ANOTHER LAYER OF LaAlO ₃ . <i>Modern Physics Letters B</i> , 1993 , 07, 743-746	1.6	
7	Preparation of large-area high-quality YBCO thin films by pulsed laser deposition with Si heater and composite scanning of laser and target. <i>Journal of Superconductivity and Novel Magnetism</i> , 1993 , 6, 335-337	21	
6	IN-SITU PREPARATION OF YBa ₂ Cu ₃ O ₇ SUPERCONDUCTING THIN FILMS BY PULSED Nd:YAG LASER DEPOSITION. <i>Modern Physics Letters B</i> , 1992 , 06, 477-483	1.6	3
5	Broadband light absorption and photoresponse enhancement in monolayer WSe ₂ crystal coupled to Sb ₂ O ₃ microresonators. <i>Nano Research</i> , 1	10	1
4	Controllable growth of multilayered XSe ₂ (X=W and Mo) for nonlinear optical and optoelectronic applications. <i>2D Materials</i> ,	5.9	1
3	Carbon Vacancy Ordered Non-Stoichiometric ZrC _{0.6667} -689		
2	Dehydro-Diels-Alder reaction and diamondization of bowl-shaped clusters C ₁₈ Te ₃ Br ₄ (Bu-O) ₆ . <i>Nano Research</i> , 1	10	0
1	Heterogeneous Diamond-cBN Composites with Superb Toughness and Hardness. <i>Nano Letters</i> ,	11.5	0