

Yoshiyuki Kawazoe

List of Publications by Year in descending order

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288
papers

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citations

34016

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293
all docs

293
docs citations

293
times ranked

17849
citing authors

#	ARTICLE	IF	CITATIONS
1	First-Principles Determination of the Soft Mode in CubicZrO ₂ . Physical Review Letters, 1997, 78, 4063-4066.	2.9	2,341
2	Novel Electronic and Magnetic Properties of Two-Dimensional Transition Metal Carbides and Nitrides. Advanced Functional Materials, 2013, 23, 2185-2192.	7.8	1,418
3	Highly controlled acetylene accommodation in a metal-organic microporous material. Nature, 2005, 436, 238-241.	13.7	1,386
4	Penta-graphene: A new carbon allotrope. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2372-2377.	3.3	1,114
5	Ferromagnetism in Semihydrogenated Graphene Sheet. Nano Letters, 2009, 9, 3867-3870.	4.5	771
6	Clustering of Ti on a C ₆₀ Surface and Its Effect on Hydrogen Storage. Journal of the American Chemical Society, 2005, 127, 14582-14583.	6.6	675
7	Topological node-line semimetal in three-dimensional graphene networks. Physical Review B, 2015, 92, .	1.1	619
8	Ultra-stable nanoparticles of CdSe revealed from mass spectrometry. Nature Materials, 2004, 3, 99-102.	13.3	469
9	Structures and Phase Transition of a MoS ₂ Monolayer. Journal of Physical Chemistry C, 2014, 118, 1515-1522.	1.5	432
10	Exfoliating biocompatible ferromagnetic Cr-trihalide monolayers. Physical Chemistry Chemical Physics, 2016, 18, 8777-8784.	1.3	273
11	Low-Temperature Phase Transformation from Graphite to Orthorhombic Carbon. Physical Review Letters, 2011, 106, 075501.	2.9	259
12	A theoretical study on the interaction of aromatic amino acids with graphene and single walled carbon nanotube. Journal of Chemical Physics, 2009, 130, 124911.	1.2	251
13	Intramolecular structures ofC ₆₀ molecules adsorbed on the Cu(111)-(1Å ⁻¹) surface. Physical Review Letters, 1993, 71, 2959-2962.	2.9	241
14	Large-gap two-dimensional topological insulator in oxygen functionalized MXene. Physical Review B, 2015, 92, .	1.1	229
15	The Intrinsic Ferromagnetism in a MnO ₂ Monolayer. Journal of Physical Chemistry Letters, 2013, 4, 3382-3386.	2.1	171
16	Body-Centered Orthorhombic C ₁₆ A Novel Topological Node-Line Semimetal. Physical Review Letters, 2016, 116, 195501.	2.9	170
17	Modulating Interfacial Charge Density of NiP ₂ FeP ₂ via Coupling with Metallic Cu for Accelerating Alkaline Hydrogen Evolution. ACS Energy Letters, 2021, 6, 354-363.	8.8	146
18	Three-Dimensional Metallic Boron Nitride. Journal of the American Chemical Society, 2013, 135, 18216-18221.	6.6	145

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19	Theoretical Study of Hydrogen Storage in Ca-Coated Fullerenes. <i>Journal of Chemical Theory and Computation</i> , 2009, 5, 374-379.	2.3	130
20	Synergistic Effects of Nitrogen Doping on MXene for Enhancement of Hydrogen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 16879-16888.	3.2	130
21	Magnetism in two-dimensional materials beyond graphene. <i>Materials Today</i> , 2019, 27, 107-122.	8.3	127
22	Lattice thermal conductivity of penta-graphene. <i>Carbon</i> , 2016, 105, 424-429.	5.4	120
23	New Metallic Carbon Crystal. <i>Physical Review Letters</i> , 2009, 102, 055703.	2.9	119
24	Insertion of Be Atoms in C ₆₀ Fullerene Cages: Be@C ₆₀ . <i>Physical Review Letters</i> , 1996, 77, 3522-3524.	2.9	118
25	Facile and green production of aqueous graphene dispersions for biomedical applications. <i>Nanoscale</i> , 2015, 7, 6436-6443.	2.8	114
26	Native point defects in few-layer phosphorene. <i>Physical Review B</i> , 2015, 91, .	1.1	104
27	Insertion of Xe and Kr Atoms into C ₆₀ and C ₇₀ Fullerenes and the Formation of Dimers. <i>Physical Review Letters</i> , 1998, 81, 967-970.	2.9	102
28	Engineering of Band Gap in Metal-Organic Frameworks by Functionalizing Organic Linker: A Systematic Density Functional Theory Investigation. <i>Journal of Physical Chemistry C</i> , 2014, 118, 4567-4577.	1.5	97
29	Topological Nodal-Net Semimetal in a Graphene Network Structure. <i>Physical Review Letters</i> , 2018, 120, 026402.	2.9	93
30	Cucurbit[7]uril encapsulated cisplatin overcomes cisplatin resistance via a pharmacokinetic effect. <i>Metallomics</i> , 2012, 4, 561.	1.0	90
31	Ab Initio Molecular Dynamics Simulations for Collision between C ₆₀ ⁺ and Alkali-Metal Ions: A Possibility of Li@C ₆₀ . <i>Physical Review Letters</i> , 1996, 76, 3590-3593.	2.9	85
32	Theoretical prediction of two-dimensional functionalized MXene nitrides as topological insulators. <i>Physical Review B</i> , 2017, 96, .	1.1	83
33	Orthorhombic carbon allotrope of compressed graphite: Ab initio calculations. <i>Physical Review B</i> , 2012, 85, .	1.1	80
34	Exceptional Thermoelectric Properties of Layered GeAs ₂ . <i>Chemistry of Materials</i> , 2017, 29, 9300-9307.	3.2	80
35	Penta-BCN: A New Ternary Pentagonal Monolayer with Intrinsic Piezoelectricity. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3501-3506.	2.1	80
36	A New Carbon Allotrope with Six-Fold Helical Chains in all-sp ² Bonding Networks. <i>Scientific Reports</i> , 2014, 4, 4339.	1.6	77

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37	Exploring new two-dimensional monolayers: pentagonal transition metal borides/carbides (penta-TMB/Cs). <i>Journal of Materials Chemistry A</i> , 2018, 6, 10226-10232.	5.2	77
38	Lithium-doped triazine-based graphitic C ₃ N ₄ sheet for hydrogen storage at ambient temperature. <i>Computational Materials Science</i> , 2014, 81, 275-279.	1.4	75
39	A New Silicon Phase with Direct Band Gap and Novel Optoelectronic Properties. <i>Scientific Reports</i> , 2015, 5, 14342.	1.6	74
40	Microwave-assisted synthesis of nano Hf- and Zr-based metal-organic frameworks for enhancement of curcumin adsorption. <i>Microporous and Mesoporous Materials</i> , 2020, 298, 110064.	2.2	74
41	Intermolecular interaction in nucleobases and dimethyl sulfoxide/water molecules: A DFT, NBO, AIM and NCI analysis. <i>Journal of Molecular Graphics and Modelling</i> , 2017, 78, 48-60.	1.3	73
42	Anion-Cation Double Substitution in Transition Metal Dichalcogenide to Accelerate Water Dissociation Kinetic for Electrocatalysis. <i>Advanced Energy Materials</i> , 2018, 8, 1702139.	10.2	70
43	Modular, Homo-chiral, Porous Coordination Polymers: Rational Design, Enantioselective Guest Exchange Sorption and Ab Initio Calculations of Host-Guest Interactions. <i>Chemistry - A European Journal</i> , 2010, 16, 10348-10356.	1.7	67
44	Body-Centered Tetragonal C ₁₆ : A Novel Topological Node-Line Semimetallic Carbon Composed of Tetrarings. <i>Small</i> , 2017, 13, 1602894.	5.2	65
45	Phase stability, elastic and electronic properties of Cu-Zr binary system intermetallic compounds: A first-principles study. <i>Journal of Alloys and Compounds</i> , 2014, 588, 96-102.	2.8	64
46	First-principles studies on structural, mechanical, thermodynamic and electronic properties of Ni-Zr intermetallic compounds. <i>Intermetallics</i> , 2014, 54, 110-119.	1.8	64
47	Vibrational modes and IR analysis of neutral photopolymerized C ₆₀ dimers. <i>Physical Review B</i> , 1998, 57, 223-229.	1.1	62
48	Physical and Chemical Properties of Gas Hydrates: Theoretical Aspects of Energy Storage Application. <i>Materials Transactions</i> , 2007, 48, 704-710.	0.4	59
49	Ferromagnetic and Half-Metallic FeC ₂ Monolayer Containing C ₂ Dimers. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26207-26212.	4.0	58
50	Multiple unpinned Dirac points in group-Va single-layers with phosphorene structure. <i>Npj Computational Materials</i> , 2016, 2, .	3.5	57
51	Electrically Tunable In-Plane Anisotropic Magnetoresistance in Topological Insulator BiSbTeSe ₂ Nanodevices. <i>Nano Letters</i> , 2015, 15, 2061-2066.	4.5	56
52	Theoretical insights into the formation, structure, and electronic properties of anticancer oxaliplatin drug and cucurbit[n]urils n=5 to 8. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2010, 66, 213-218.	1.6	54
53	Strain-Induced Spin Crossover in Phthalocyanine-Based Organometallic Sheets. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 3109-3114.	2.1	54
54	New Carbon Allotropes with Helical Chains of Complementary Chirality Connected by Ethene-type π -Conjugation. <i>Scientific Reports</i> , 2013, 3, 3077.	1.6	52

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55	Unravelling the nature of binding of cubane and substituted cubanes within cucurbiturils: A DFT and NCI study. <i>Journal of Molecular Liquids</i> , 2018, 260, 18-29.	2.3	52
56	Negatively curved cubic carbon crystals with octahedral symmetry. <i>Carbon</i> , 2014, 76, 266-274.	5.4	48
57	Ab initio GW quasiparticle energies of small sodium clusters by an all-electron mixed-basis approach. <i>Physical Review B</i> , 2001, 63, .	1.1	46
58	Ab initio GW quasiparticle calculation of small alkali-metal clusters. <i>Physical Review B</i> , 2002, 65, .	1.1	46
59	Temperature dependent elastic constants for crystals with arbitrary symmetry: Combined first principles and continuum elasticity theory. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	46
60	Proposed design principle of fluoride-based materials for deep ultraviolet light emitting devices. <i>Optical Materials</i> , 2007, 30, 15-17.	1.7	45
61	Ab Initio study of dopant insertion into carbon nanotubes. <i>Journal of Chemical Physics</i> , 1999, 111, 2164-2168.	1.2	44
62	Accurate description of phase diagram of clathrate hydrates at the molecular level. <i>Journal of Chemical Physics</i> , 2009, 131, 244510.	1.2	44
63	Kinetic Origin of Divergent Decompression Pathways in Silicon and Germanium. <i>Physical Review Letters</i> , 2013, 110, 165503.	2.9	44
64	CO Oxidation Prefers the Eley-Rideal or Langmuir-Hinshelwood Pathway: Monolayer vs Thin Film of SiC. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 5290-5299.	4.0	44
65	A new 3D Dirac nodal-line semi-metallic graphene monolith for lithium ion battery anode materials. <i>Journal of Materials Chemistry A</i> , 2018, 6, 13816-13824.	5.2	44
66	Ab initio study of phonons in hexagonal GaN. <i>Physical Review B</i> , 1999, 60, 15511-15514.	1.1	43
67	Theoretical study of phase transitions in Kr and Ar clathrate hydrates from structure II to structure I under pressure. <i>Journal of Chemical Physics</i> , 2009, 131, 114507.	1.2	43
68	Ab Initio Study of Hydrogen Storage in Hydrogen Hydrate Clathrates. <i>Materials Transactions</i> , 2004, 45, 1452-1454.	0.4	42
69	Theoretical Prediction of the Complexation Behaviors of Antitumor Platinum Drugs with Cucurbiturils. <i>Journal of Physical Chemistry B</i> , 2012, 116, 14029-14039.	1.2	42
70	Hydrogen storage capacity of C ₆₀ (OM) ₁₂ (M=Li and Na) clusters. <i>Journal of Chemical Physics</i> , 2009, 131, 214505.	1.2	41
71	Gamma (γ)-ray irradiated multi-walled carbon nanotubes (MWCNTs) for hydrogen storage. <i>Applied Surface Science</i> , 2017, 418, 49-55.	3.1	41
72	Design of tetracene-based metallic 2D carbon materials for Na- and K-Ion batteries. <i>Applied Surface Science</i> , 2020, 521, 146456.	3.1	40

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73	Dynamics and equation of state of hydrogen clathrate hydrate as a function of cage occupation. <i>Computational Materials Science</i> , 2006, 36, 229-233.	1.4	39
74	Theoretical investigation on the alkali-metal doped BN fullerene as a material for hydrogen storage. <i>Chemical Physics</i> , 2010, 377, 54-59.	0.9	39
75	Three Dimensional Metallic Carbon from Distorting $\langle i \rangle \langle sup \rangle 3 \langle /sup \rangle$ -Bond. <i>Crystal Growth and Design</i> , 2016, 16, 1360-1365.	1.4	39
76	Hydrogen hydrates: Equation of state and self-preservation effect. <i>Fluid Phase Equilibria</i> , 2016, 413, 220-228.	1.4	39
77	Boosting Electrocatalytic HER Activity of 3D Interconnected CoSP via Metal Doping: Active and Stable Electrocatalysts for pH-Universal Hydrogen Generation. <i>Chemistry of Materials</i> , 2020, 32, 9591-9601.	3.2	39
78	Formation of As- and Ge-doped heterofullerenes. <i>Physical Review B</i> , 1999, 60, 1531-1534.	1.1	38
79	The role of Li and Ni metals in the adsorbate complex and their effect on the hydrogen storage capacity of single walled carbon nanotubes coated with metal hydrides, LiH and NiH ₂ . <i>International Journal of Hydrogen Energy</i> , 2010, 35, 2368-2376.	3.8	38
80	Phase conversion from graphite toward a simple monoclinic $\langle i \rangle \langle sp \rangle 3 \langle /i \rangle$ -carbon allotrope. <i>Journal of Chemical Physics</i> , 2012, 137, 024502.	1.2	38
81	Role of Interlayer Coupling on the Evolution of Band Edges in Few-Layer Phosphorene. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 4876-4883.	2.1	38
82	Tuning Electronic Structure of Graphene: A First-Principles Study. <i>IEEE Nanotechnology Magazine</i> , 2012, 11, 534-541.	1.1	37
83	New Phosphorene Allotropes Containing Ridges with 2- and 4-Coordination. <i>Journal of Physical Chemistry C</i> , 2015, 119, 24674-24680.	1.5	37
84	Ozone storage capacity in clathrate hydrates formed by O ₃ + O ₂ + N ₂ + CO ₂ gas mixtures. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 12637-12641.	1.3	37
85	Activation of CO and CO ₂ on homonuclear boron bonds of fullerene-like BN cages: first principles study. <i>Scientific Reports</i> , 2015, 5, 17460.	1.6	36
86	Novel three dimensional topological nodal line semimetallic carbon. <i>Carbon</i> , 2016, 98, 468-473.	5.4	36
87	Tuning electronic and magnetic properties of silicene with magnetic superhalogens. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 22979-22986.	1.3	35
88	Tunable Band Gaps of In _x Ga _{1-x} N Alloys: From Bulk to Two-Dimensional Limit. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6930-6942.	1.5	35
89	Mechanism for direct conversion of graphite to diamond. <i>Physical Review B</i> , 2011, 84, .	1.1	34
90	First-principles study of intrinsic defect properties in hexagonal BN bilayer and monolayer. <i>Solid State Communications</i> , 2012, 152, 816-820.	0.9	34

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91	Determining characteristic principal clusters in the "cluster-plus-gluon" model. <i>Acta Materialia</i> , 2014, 75, 113-121.	3.8	34
92	Influence of N ₂ on Formation Conditions and Guest Distribution of Mixed CO ₂ + CH ₄ Gas Hydrates. <i>Molecules</i> , 2018, 23, 3336.	1.7	34
93	Calcium-decorated graphene for hydrogen storage: A van der Waals density functional study. <i>Computational Materials Science</i> , 2012, 55, 180-185.	1.4	33
94	Band gap engineering of silicene zigzag nanoribbons with perpendicular electric fields: a theoretical study. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 455302.	0.7	33
95	New carbon allotropes in sp + sp ³ bonding networks consisting of C ₈ cubes. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 7962-7967.	1.3	33
96	Direct numerical simulation of oscillatory Marangoni convection in cylindrical liquid bridges. <i>Journal of Crystal Growth</i> , 1999, 204, 395-404.	0.7	32
97	Monoclinic C16: sp-sp hybridized nodal-line semimetal protected by PT-symmetry. <i>Carbon</i> , 2018, 127, 527-532.	5.4	32
98	Design of novel pentagonal 2D transitional-metal sulphide monolayers for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 16201-16209.	3.8	32
99	Phase stability of carbon clathrates at high pressure. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	31
100	First-principles calculations of hyperfine parameters with the all-electron mixed-basis method. <i>Physical Review B</i> , 2006, 73, .	1.1	30
101	New cubic carbon phase via graphitic sheet rumpling. <i>Physical Review B</i> , 2012, 85, .	1.1	30
102	Cluster characteristics and physical properties of binary Al-Zr intermetallic compounds from first principles studies. <i>Computational Materials Science</i> , 2015, 103, 170-178.	1.4	30
103	Density functional theory study on the dihydrogen bond cooperativity in the growth behavior of dimethyl sulfoxide clusters. <i>Journal of Molecular Liquids</i> , 2018, 249, 454-462.	2.3	30
104	Selective gas adsorption in microporous metal-organic frameworks incorporating urotropine basic sites: an experimental and theoretical study. <i>Chemical Communications</i> , 2015, 51, 13918-13921.	2.2	29
105	Three-Dimensional Carbon Allotropes Comprising Phenyl Rings and Acetylenic Chains in sp+sp ² Hybrid Networks. <i>Scientific Reports</i> , 2016, 6, 24665.	1.6	29
106	Global minimum of two-dimensional FeB ₆ and an oxidation induced negative Poisson's ratio: a new stable allotrope. <i>Journal of Materials Chemistry C</i> , 2016, 4, 9613-9621.	2.7	29
107	Topological nodal line semimetal in an orthorhombic graphene network structure. <i>Physical Review B</i> , 2018, 97, .	1.1	29
108	N-doped peanut-shaped carbon nanotubes for efficient CO ₂ electrocatalytic reduction. <i>Carbon</i> , 2019, 152, 241-246.	5.4	29

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109	TOMBO: All-electron mixed-basis approach to condensed matter physics. Computer Physics Communications, 2015, 189, 20-30.	3.0	28
110	Stability and properties of 2D porous nanosheets based on tetraoxa[8]circulene analogues. Nanoscale, 2014, 6, 14962-14970.	2.8	27
111	Stability and Composition of Helium Hydrates Based on Ices I _h and II at Low Temperatures. Journal of Physical Chemistry C, 2014, 118, 2587-2593.	1.5	27
112	Oriented Attachment Revisited: Does a Chemical Reaction Occur?. Matter, 2019, 1, 690-704.	5.0	27
113	Zr and Hf-metal-organic frameworks: Efficient and recyclable heterogeneous catalysts for the synthesis of 2-arylbenzoxazole via ring open pathway acylation reaction. Journal of Catalysis, 2019, 374, 110-117.	3.1	27
114	Pentagonal transition-metal (group X) chalcogenide monolayers: Intrinsic semiconductors for photocatalysis. International Journal of Hydrogen Energy, 2021, 46, 9371-9379.	3.8	27
115	Breakdown of time-reversal symmetry of photoemission and its inverse in small silicon clusters. Physical Review B, 2003, 68, .	1.1	26
116	Hydrogen storage in TiO ₂ functionalized (10, 10) single walled carbon nanotube (SWCNT) – First principles study. International Journal of Hydrogen Energy, 2014, 39, 4973-4980.	3.8	26
117	Two-dimensional pentagonal CrX (X = S, Se or Te) monolayers: antiferromagnetic semiconductors for spintronics and photocatalysts. Physical Chemistry Chemical Physics, 2018, 20, 18348-18354.	1.3	26
118	Three-dimensional oscillatory thermocapillary convection in liquid bridge under microgravity. International Journal of Heat and Mass Transfer, 2001, 44, 3765-3774.	2.5	25
119	Dirac cone move and bandgap on/off switching of graphene superlattice. Scientific Reports, 2016, 6, 18869.	1.6	24
120	Fabrication of poly(ethylene glycol) hydrogels containing vertically and horizontally aligned graphene using dielectrophoresis: An experimental and modeling study. Carbon, 2017, 123, 460-470.	5.4	24
121	First-principles study of the structural, electronic, and elastic properties of Rh_3Bx		

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127	Investigation on the crystallization mechanism difference between FINEMET [®] and NANOMET [®] type Fe-based soft magnetic amorphous alloys. Journal of Applied Physics, 2016, 120, 145102.	1.1	22
128	Room-temperature ferromagnetism in carbon-doped MXenes: Novel electrocatalysts for hydrogen production and nitrogen reduction. Catalysis Today, 2021, 370, 2-13.	1.1	22
129	Band Gap on/off Switching of Silicene Superlattice. Journal of Physical Chemistry C, 2015, 119, 20747-20754.	2.2	22
130	Modulation of nearly free electron states in hydroxyl-functionalized MXenes: a first-principles study. Journal of Materials Chemistry C, 2020, 8, 5211-5221.	1.5	21
131	Graphdiyne-Based Monolayers as Promising Anchoring Materials for Lithium-Sulfur Batteries: A Theoretical Study. Advanced Theory and Simulations, 2020, 3, 1900236.	2.7	21
132	Exploration of glassy state in Prussian blue analogues. Nature Communications, 2022, 13, .	1.3	21
133	Theoretical modelling of the phase diagrams of clathrate hydrates for hydrogen storage applications. Molecular Simulation, 2012, 38, 773-780.	5.8	21
134	Weak interlayer dependence of lattice thermal conductivity on stacking thickness of penta-graphene. Applied Physics Letters, 2017, 111, .	0.9	20
135	Thermal transport properties of penta-graphene with grain boundaries. Carbon, 2019, 145, 445-451.	1.5	20
136	Noncovalent and covalent functionalization of a (5, 0) single-walled carbon nanotube with alanine and alanine radicals. Journal of Molecular Modeling, 2012, 18, 771-781.	5.4	20
137	Giant magnetocrystalline anisotropy of 5d transition metal-based phthalocyanine sheet. Physical Chemistry Chemical Physics, 2015, 17, 17182-17189.	0.8	19
138	First-principles calculations of electronic and optical properties of LiCaAlF ₆ and LiSrAlF ₆ crystals as VUV to UV solid-state laser materials. Optical Materials, 2017, 65, 15-20.	1.3	19
139	A superhard orthorhombic carbon with all six-membered-ring in sp ³ bonding networks. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2809-2812.	1.7	19
140	Prediction of new ground-state crystal structures of CaMgSi_2 . Physical Review Materials, 2018, 2, .	0.9	19
141	Simulation of ripples in single layer graphene sheets and study of their vibrational and elastic properties. Computational Materials Science, 2012, 51, 96-102.	0.9	19
142	Simulation of ripples in single layer graphene sheets and study of their vibrational and elastic properties. Computational Materials Science, 2012, 51, 96-102.	1.4	18
143	An effective method of tuning conducting properties: First-principles studies on electronic structures of graphene nanomeshes. Carbon, 2014, 79, 646-653.	5.4	18
144	A stable metallic 3D porous BPC ₂ as a universal anode material for Li, Na, and K ion batteries with high performance. Journal of Materials Chemistry A, 2020, 8, 25824-25830.	5.2	18

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145	Improved Thermoelectric Performance of $\text{Cu}_{12}\text{Sb}_4\text{S}_{13}$ through Cd-Substitution Induced Enhancement of Electronic Density of States and Phonon Scattering. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 25092-25101.	4.0	18
146	First-principles study of LaB_3N_3 cage. <i>Physica B: Condensed Matter</i> , 2003, 339, 105-109.	1.3	17
147	Stoichiometric and ultra-stable nanoparticles of II-VI compound semiconductors. <i>European Physical Journal D</i> , 2005, 34, 39-41.	0.6	17
148	Nano-crystallization and magnetic mechanisms of $\text{Fe}_{85}\text{Si}_2\text{B}_8\text{P}_4\text{Cu}_1$ amorphous alloy by <i>ab initio</i> molecular dynamics simulation. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	17
149	Interaction of VOCs with pyrene tetratopic ligands layered on ZnO nanorods under visible light. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2016, 324, 62-69.	2.0	17
150	Bipolar Magnetic Materials Based on 2D $\text{Ni}[\text{TCNE}]$ Metal-Organic Coordination Networks. <i>Advanced Electronic Materials</i> , 2018, 4, 1700323.	2.6	17
151	Role of Methane as a Second Guest Component in Thermodynamic Stability and Isomer Selectivity of Butane Clathrate Hydrates. <i>Journal of Physical Chemistry C</i> , 2020, 124, 18474-18481.	1.5	17
152	Electron-capture decay rate of B^{7-} first-principles calculations based on density functional theory. <i>Physical Review B</i> , 2008, 78, .	1.1	16
153	Solvation Mechanism of Task-Specific Ionic Liquids in Water: A Combined Investigation Using Classical Molecular Dynamics and Density Functional Theory. <i>Journal of Physical Chemistry B</i> , 2015, 119, 12894-12904.	1.2	16
154	Intrinsic quantum spin Hall and anomalous Hall effects in h-Sb/Bi epitaxial growth on a ferromagnetic MnO_2 thin film. <i>Nanoscale</i> , 2016, 8, 11202-11209.	2.8	16
155	Simulation on Thermocapillary-Driven Drop Coalescence by Hybrid Lattice Boltzmann Method. <i>Microgravity Science and Technology</i> , 2016, 28, 67-77.	0.7	16
156	Effect of surface doping on the band structure of graphene: a DFT study. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 2728-2740.	1.1	16
157	Adsorption of water on fluorinated graphene. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 124, 54-59.	1.9	16
158	Degenerate Perturbation in Band-Gap Opening of Graphene Superlattice. <i>Journal of Physical Chemistry C</i> , 2014, 118, 8174-8180.	1.5	15
159	The selectivity and activity of catalyst for CO hydrogenation to methanol and hydrocarbon: A comparative study on Cu, Co and Ni surfaces. <i>Surface Science</i> , 2016, 645, 30-40.	0.8	15
160	High pressure band gap modification of LiCaAlF_6 . <i>Applied Physics Letters</i> , 2017, 110, .	1.5	15
161	Reticular control of interpenetration in a complex metal-organic framework. <i>Materials Chemistry Frontiers</i> , 2018, 2, 2063-2069.	3.2	15
162	Uncovering the Role of Counteranions in Ligand Exchange of WSe_2 : Tuning the d-Band Center toward Improved Hydrogen Desorption. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 11403-11413.	4.0	15

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163	Nanostructures of C ₆₀ "Metal" Graphene (Metal = Ti, Cr, Mn, Fe, or Ni): A Spin-Polarized Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21057-21065.	1.5	14
164	An alternative second order scheme for curved boundary condition in lattice Boltzmann method. <i>Computers and Fluids</i> , 2015, 114, 193-202.	1.3	14
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