

Kai Ming Ho

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8475272/publications.pdf>

Version: 2024-02-01

227
papers

8,034
citations

71004

43
h-index

66518

82
g-index

240
all docs

240
docs citations

240
times ranked

8493
citing authors

#	ARTICLE	IF	CITATIONS
1	A three-dimensional photonic crystal operating at infrared wavelengths. <i>Nature</i> , 1998, 394, 251-253.	13.7	1,034
2	Structures of medium-sized silicon clusters. <i>Nature</i> , 1998, 392, 582-585.	13.7	622
3	Melting line of aluminum from simulations of coexisting phases. <i>Physical Review B</i> , 1994, 49, 3109-3115.	1.1	438
4	On-the-fly machine-learning for high-throughput experiments: search for rare-earth-free permanent magnets. <i>Scientific Reports</i> , 2014, 4, 6367.	1.6	212
5	Experimental and theoretical results for a two-dimensional metal photonic band-gap cavity. <i>Applied Physics Letters</i> , 1994, 65, 645-647.	1.5	171
6	Bonding and charge transfer by metal adatom adsorption on graphene. <i>Physical Review B</i> , 2011, 83, .	1.1	167
7	The geometry of small fullerene cages: C ₂₀ to C ₇₀ . <i>Journal of Chemical Physics</i> , 1992, 97, 5007-5011.	1.2	145
8	Metals on Graphene: Interactions, Growth Morphology, and Thermal Stability. <i>Crystals</i> , 2013, 3, 79-111.	1.0	135
9	Modeling ionic mobilities by scattering on electronic density isosurfaces: Application to silicon cluster anions. <i>Journal of Chemical Physics</i> , 2000, 112, 4517-4526.	1.2	131
10	Broadband optical absorption by tunable Mie resonances in silicon nanocone arrays. <i>Scientific Reports</i> , 2015, 5, 7810.	1.6	126
11	Structures of Germanium Clusters: Where the Growth Patterns of Silicon and Germanium Clusters Diverge. <i>Physical Review Letters</i> , 1999, 83, 2167-2170.	2.9	123
12	Atomistic cluster alignment method for local order mining in liquids and glasses. <i>Physical Review B</i> , 2010, 82, .	1.1	120
13	An adaptive genetic algorithm for crystal structure prediction. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 035402.	0.7	120
14	The geometry of large fullerene cages: C ₇₂ to C ₁₀₂ . <i>Journal of Chemical Physics</i> , 1993, 98, 3095-3102.	1.2	105
15	Core energy and Peierls stress of a screw dislocation in bcc molybdenum: A periodic-cell tight-binding study. <i>Physical Review B</i> , 2004, 70, .	1.1	105
16	Zero-Strain Na ₂ FeSiO ₄ as Novel Cathode Material for Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 17233-17238.	4.0	101
17	Prediction of a {112} hcp stacking fault using a modified generalized stacking-fault calculation. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1997, 76, 1065-1077.	0.8	100
18	Exploring the Structural Complexity of Intermetallic Compounds by an Adaptive Genetic Algorithm. <i>Physical Review Letters</i> , 2014, 112, 045502.	2.9	97

#	ARTICLE	IF	CITATIONS
19	Structures and Fragmentations of Small Silicon Oxide Clusters by ab Initio Calculations. Journal of Physical Chemistry A, 2003, 107, 6936-6943.	1.1	94
20	Spectroscopic Evidence for the Tricapped Trigonal Prism Structure of Semiconductor Clusters. Physical Review Letters, 2000, 85, 1666-1669.	2.9	91
21	Quasiatomic orbitals for <i>ab initio</i> tight-binding analysis. Physical Review B, 2008, 78, .	1.1	90
22	Vacancy defects and the formation of local haeckelite structures in graphene from tight-binding molecular dynamics. Physical Review B, 2006, 74, .	1.1	81
23	Infrared filters using metallic photonic band gap structures on flexible substrates. Applied Physics Letters, 1997, 71, 2412-2414.	1.5	77
24	Lattice symmetry applied in transfer-matrix methods for photonic crystals. Journal of Applied Physics, 2003, 94, 811-821.	1.1	77
25	Search for the ground state structure of C ₈₄ . Journal of Chemical Physics, 1992, 96, 7183-7185.	1.2	72
26	Ultrahigh-pressure phases of H ₂ O ice predicted using an adaptive genetic algorithm. Physical Review B, 2011, 84, .	1.1	72
27	Dissociation Energies of Silicon Clusters: A Depth Gauge for the Global Minimum on the Potential Energy Surface. Physical Review Letters, 1998, 81, 4616-4619.	2.9	71
28	Phase Diagram and Electronic Structure of Praseodymium and Plutonium. Physical Review X, 2015, 5, .	2.8	67
29	Adsorption and growth morphology of rare-earth metals on graphene studied by <i>ab initio</i> calculations and scanning tunneling microscopy. Physical Review B, 2010, 82, .	1.1	66
30	Representation of electronic structures in crystals in terms of highly localized quasiatomic minimal basis orbitals. Physical Review B, 2004, 70, .	1.1	63
31	Adaptive Variational Quantum Dynamics Simulations. PRX Quantum, 2021, 2, .	3.5	57
32	Dipole antennas on photonic band-gap crystals? Experiment and simulation. Microwave and Optical Technology Letters, 1997, 15, 153-158.	0.9	56
33	Atomic size and chemical effects on the local order of Zr_2	1.1	55
34	Reconstruction and evaporation at graphene nanoribbon edges. Physical Review B, 2010, 81, .	1.1	55
35	“Crystal Genes”™ in Metallic Liquids and Glasses. Scientific Reports, 2016, 6, 23734.	1.6	52
36	Effects of sub-Tg annealing on Cu _{64.5} Zr _{35.5} glasses: A molecular dynamics study. Applied Physics Letters, 2014, 104, .	1.5	51

#	ARTICLE	IF	CITATIONS
37	Melting of small Sn clusters by ab initio molecular dynamics simulations. Physical Review B, 2004, 69, .	1.1	50
38	Evaluation of Ionic Mobilities by Coupling the Scattering on Atoms and on Electron Density. Journal of Physical Chemistry A, 2000, 104, 6152-6157.	1.1	49
39	$\frac{1}{Zr} \frac{d}{dt} \left(\frac{1}{Zr} \right)$ Ferromagnetic Quantum Critical Point Avoided by the Appearance of Another Magnetic Phase in $LaCrGe$. Physical Review Letters, 2016, 117, 037207.	1.1	48
40	Identification of post-pyrite phase transitions in SiO_2 by ab initio molecular dynamics simulations. Physical Review Letters, 2011, 106, 055701.	2.9	47
41	Overcoming the Time Limitation in Molecular Dynamics Simulation of Crystal Nucleation: A Persistent-Embryo Approach. Physical Review Letters, 2018, 120, 085703.	1.1	46
42	Short- and medium-range order in a $Zr_{11}Mg_{73}Cu_{16}$ metallic glass. Experimental and simulation studies. Physical Review B, 2008, 78, .	2.9	46
43	Fundamental Link between \hat{I}^2 Relaxation, Excess Wings, and Cage-Breaking in Metallic Glasses. Journal of Physical Chemistry Letters, 2018, 9, 5877-5883.	2.1	44
44	Impedance of photonic crystals and photonic crystal waveguides. Applied Physics Letters, 2004, 84, 1254-1256.	1.5	43
45	Cooling rate dependence of structural order in $Al_{90}Sm_{10}$ metallic glass. Journal of Applied Physics, 2016, 120, .	1.1	43
46	Efficient Step-Merged Quantum Imaginary Time Evolution Algorithm for Quantum Chemistry. Journal of Chemical Theory and Computation, 2020, 16, 6256-6266.	2.3	42
47	Highly localized quasiatomic minimal basis orbitals for Mo from ab initio calculations. Physical Review B, 2007, 76, .	1.1	41
48	Interface Structure Prediction from First-Principles. Journal of Physical Chemistry C, 2014, 118, 9524-9530.	1.5	39
49	Development of a deep machine learning interatomic potential for metalloid-containing Pd-Si compounds. Physical Review B, 2019, 100, .	1.1	39
50	Short- and medium-range order in amorphous $Zr_{11}Mg_{73}Cu_{16}$ alloy. Physical Review B, 2010, 81, .	1.1	38
51	Growth morphology and thermal stability of metal islands on graphene. Physical Review B, 2012, 86, .	1.1	38
52	Evolution of short- and medium-range order in the melt-quenching amorphization of $Ge_{22}Sb_{22}Te_{55}$. Journal of Materials Chemistry C, 2018, 6, 5001-5011.	2.7	38
53	Waveguide bends in three-dimensional layer-by-layer photonic bandgap materials. Microwave and Optical Technology Letters, 1999, 23, 56-59.	0.9	36

#	ARTICLE	IF	CITATIONS
55	Predicting Complex Relaxation Processes in Metallic Glass. <i>Physical Review Letters</i> , 2019, 123, 105701.	2.9	36
56	Interface mobility and the liquid-glass transition in a one-component system described by an embedded atom method potential. <i>Physical Review B</i> , 2006, 74, .	1.1	34
57	High Efficiency GaN Light-Emitting Diodes With Two Dimensional Photonic Crystal Structures of Deep-Hole Square Lattices. <i>IEEE Journal of Quantum Electronics</i> , 2010, 46, 116-120.	1.0	34
58	The formation of pentagon-heptagon pair defect by the reconstruction of vacancy defects in carbon nanotube. <i>Applied Physics Letters</i> , 2008, 92, 043104.	1.5	33
59	Formation of carbon nanotube semiconductor-metal intramolecular junctions by self-assembly of vacancy defects. <i>Physical Review B</i> , 2007, 76, .	1.1	32
60	Design of midinfrared photodetectors enhanced by resonant cavities with subwavelength metallic gratings. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	32
61	Adaptive Variational Quantum Imaginary Time Evolution Approach for Ground State Preparation. <i>Advanced Quantum Technologies</i> , 2021, 4, 2100114.	1.8	32
62	Formation and development of dislocation in graphene. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	31
63	Waveguide networks in three-dimensional layer-by-layer photonic crystals. <i>Applied Physics Letters</i> , 2004, 84, 4605-4607.	1.5	30
64	Effects of Nanometer-Scale Photonic Crystal Structures on the Light Extraction From GaN Light-Emitting Diodes. <i>IEEE Journal of Quantum Electronics</i> , 2010, 46, 1375-1380.	1.0	30
65	Structural and dynamical properties of liquid $\text{Cu}_{80}\text{Si}_{20}$ alloys studied experimentally and by ab initio calculations . <i>Physical Review B</i> , 2011, 84, .	2.9	29
66	Unique Dynamic Appearance of a Ge-Si Ad-dimer on Si(001). <i>Physical Review Letters</i> , 2000, 85, 5603-5606.	2.9	28
67	Structures and magnetic properties of Fe clusters on graphene. <i>Physical Review B</i> , 2014, 90, .	1.1	28
68	Metastable cobalt nitride structures with high magnetic anisotropy for rare-earth free magnets. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 31680-31690.	1.3	28
69	Understanding CrGeTe_3 : an abnormal phase change material with inverse resistance and density contrast. <i>Journal of Materials Chemistry C</i> , 2019, 7, 9025-9030.	2.7	28
70	Development of interatomic potential for Al-Tb alloys using a deep neural network learning method. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 18467-18479.	1.3	28
71	Topochemical Deintercalation of Li from Layered LiNiB: toward 2D MBene. <i>Journal of the American Chemical Society</i> , 2021, 143, 4213-4223.	6.6	28
72	Transferability of the Slater-Koster tight-binding scheme from an environment-dependent minimal-basis perspective. <i>Physical Review B</i> , 2005, 72, .	1.1	27

#	ARTICLE	IF	CITATIONS
73	Exploration of tetrahedral structures in silicate cathodes using a motif-network scheme. Scientific Reports, 2015, 5, 15555.	1.6	27
74	Fe ²⁺ -Si networks in Na ₂ FeSiO ₄ cathode materials. Physical Chemistry Chemical Physics, 2016, 18, 23916-23922.	1.3	27
75	Local structure order in Pd ₇₈ Cu ₆ Si ₁₆ liquid. Scientific Reports, 2015, 5, 8277.	1.6	26
76	Structures and energies of compression twin boundaries in hcp Ti and Zr. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1995, 72, 751-763.	0.8	25
77	Light coupling with multimode photonic crystal waveguides. Applied Physics Letters, 2004, 84, 4699-4701.	1.5	25
78	Improved surface wettability of polyurethane films by ultraviolet ozone treatment. Journal of Applied Polymer Science, 2010, 118, 3024-3033.	1.3	25
79	Structural characterization of thin film photonic crystals. Physical Review B, 2001, 63, .	1.1	24
80	Competition between fcc and icosahedral short-range orders in pure and samarium-doped liquid aluminum from first principles. Physical Review B, 2011, 83, .	1.1	24
81	Computationally Driven Discovery of a Family of Layered LiNiB Polymorphs. Angewandte Chemie - International Edition, 2019, 58, 15855-15862.	7.2	24
82	Fe-Fe adatom interaction and growth morphology on graphene. Physical Review B, 2011, 84, .	1.1	23
83	Nature of the Insulating Ground State of the CaIrO_3 Perovskite $\frac{5}{2} \text{CaIrO}_3$ Physical Review Letters, 2015, 115, 096401.	2.9	22
84	A first-principles study of Group IV dimer chains on Si(100). Physical Review B, 2005, 72, .	1.1	21
85	Gutzwiller hybrid quantum-classical computing approach for correlated materials. Physical Review Research, 2021, 3, .	1.3	21
86	Visible Frequency Thin Film Photonic Crystals from Colloidal Systems of Nanocrystalline Titania and Polystyrene Microspheres. Journal of the American Ceramic Society, 2002, 85, 1383-1386.	1.9	20
87	Honeycomb chain structure of the Au-Si(111)-(5 \times 2) surface reconstruction: A first-principles study. Physical Review B, 2008, 77, .	1.1	20
88	Structures and stabilities of alkaline earth metal peroxides XO ₂ (X = Ca, Be, Mg) studied by a genetic algorithm. RSC Advances, 2013, 3, 22135.	1.7	20
89	Interplay of spin-orbit and entropic effects in cerium. Physical Review B, 2014, 90, .	1.1	20
90	Local structure origin of ultrafast crystallization driven by high-fidelity octahedral clusters in amorphous Sc _{0.2} Sb ₂ Te ₃ . Applied Physics Letters, 2019, 114, .	1.5	20

#	ARTICLE	IF	CITATIONS
91	Model reconstructions for the Si(337) orientation. Journal of Applied Physics, 2005, 98, 073507.	1.1	19
92	Tailored Plasmons in Pentacene/Graphene Heterostructures with Interlayer Electron Transfer. Nano Letters, 2019, 19, 6058-6064.	4.5	19
93	From NaZn ₄ Sb ₃ to Na _{1-x} Zn ₄ Sb ₃ : Panoramic Hydride Synthesis, Structural Diversity, and Thermoelectric Properties. Chemistry of Materials, 2019, 31, 8695-8707.	3.2	19
94	Tight-Binding Molecular Dynamics Studies of Covalent Systems. Advances in Chemical Physics, 2007, , 651-702.	0.3	18
95	Effects of Oxygen Impurities on Glass-Formation Ability in Zr ₂ Cu Alloy. Journal of Physical Chemistry B, 2016, 120, 9223-9229.	1.2	18
96	Material simulations with tight-binding molecular dynamics. Journal of Phase Equilibria and Diffusion, 1997, 18, 516-529.	0.3	17
97	Double icosahedron-based motif of Ni _n ($n = 20 \sim 30$). International Journal of Quantum Chemistry, 2012, 112, 1717-1724.	1.0	17
98	Three-center tight-binding potential model for C and Si. Physical Review B, 2015, 92, .	1.1	17
99	Temperature dependence of the solid-liquid interface free energy of Ni and Al from molecular dynamics simulation of nucleation. Journal of Chemical Physics, 2018, 149, 174501.	1.2	17
100	A first-principles study of compression twins in h.c.p. zirconium. Philosophical Magazine Letters, 1994, 69, 189-195.	0.5	16
101	Fluctuation between icosahedral and body-centered-cube short-range orders in undercooled Zr liquid. Journal of Applied Physics, 2011, 110, .	1.1	16
102	Topological states in A15 superconductors. Physical Review B, 2019, 99, .	1.1	16
103	The role of pentagon-heptagon pair defect in carbon nanotube: The center of vacancy reconstruction. Applied Physics Letters, 2010, 97, 093106.	1.5	15
104	Nonclassical "Explosive" Nucleation in Pb/Si(111) at Low Temperatures. Physical Review Letters, 2014, 113, 236101.	2.9	15
105	Unraveling the structural and bonding nature of antimony sesquichalcogenide glass for electronic and photonic applications. Journal of Materials Chemistry C, 0, , .	2.7	15
106	Third time's the charm: intricate non-centrosymmetric polymorphism in Ln ₃ SiP ₃ (Ln = La and Ce) induced by distortions of phosphorus square layers. Dalton Transactions, 2021, 50, 6463-6476.	1.6	15
107	Melting of carbon cages. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1993, 26, 285-287.	1.0	14
108	Evolution of optical properties of tin film from solid to liquid studied by spectroscopic ellipsometry and ab initio calculation. Applied Physics Letters, 2014, 104, 121907.	1.5	14

#	ARTICLE	IF	CITATIONS
109	Structures and stability of metal-doped GenM (n = 9, 10) clusters. AIP Advances, 2015, 5, .	0.6	14
110	Correlation Matrix Renormalization Theory: Improving Accuracy with Two-Electron Density-Matrix Sum Rules. Journal of Chemical Theory and Computation, 2016, 12, 4806-4811.	2.3	14
111	Polyamorphism in K ₂ Sb ₈ Se ₁₃ for multi-level phase-change memory. Journal of Materials Chemistry C, 2020, 8, 6364-6369.	2.7	14
112	Structural hierarchy as a key to complex phase selection in Al-Sm. Physical Review Materials, 2017, 1, .	0.9	14
113	Two-step nucleation of the Earth's inner core. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	14
114	Medium-range icosahedral order in quasicrystal-forming Zr ₂ Pd binary metallic glass. Applied Physics Letters, 2011, 98, .	1.5	13
115	Impact of deformation on the atomic structures and dynamics of a Cu-Zr metallic glass: A molecular dynamics study. Physical Review B, 2014, 90, .	1.1	13
116	Synergistic computational and experimental discovery of novel magnetic materials. Molecular Systems Design and Engineering, 2020, 5, 1098-1117.	1.7	13
117	Competition between area and height evolution of Pb islands on a Si(111) surface. Physical Review B, 2009, 79, .	1.1	12
118	Structural features of chalcogenide glass SiTe: An ovonic threshold switching material. APL Materials, 2021, 9, .	2.2	12
119	Achieving a photonic band edge near visible wavelengths by metallic coatings. Journal of Applied Physics, 2006, 99, 083104.	1.1	11
120	Analysis of photon recycling using metallic photonic crystal. Journal of Applied Physics, 2007, 102, 063107.	1.1	11
121	Efficient and accurate treatment of electron correlations with Correlation Matrix Renormalization theory. Scientific Reports, 2015, 5, 13478.	1.6	11
122	A computational study of diffusion in a glass-forming metallic liquid. Scientific Reports, 2015, 5, 10956.	1.6	11
123	Manipulation of electronic property of epitaxial graphene on SiC substrate by Pb intercalation. Physical Review B, 2021, 103, .	1.1	11
124	Discovering rare-earth-free magnetic materials through the development of a database. Physical Review Materials, 2020, 4, .	0.9	11
125	Structures of Si ₇ H ₂ m(m=1-7) clusters by global optimization. Physical Review B, 2006, 74, .	1.1	10
126	Theoretical Prediction of Si ₂ -Si ₃₃ Absorption Spectra. Journal of Physical Chemistry A, 2017, 121, 6388-6397.	1.1	10

#	ARTICLE	IF	CITATIONS
127	Effects of dopants on the glass forming ability in Al-based metallic alloy. <i>Physical Review Materials</i> , 2019, 3, .	0.9	10
128	Integrated horns for improved side coupling into in-plane three-dimensional photonic crystal waveguides. <i>Applied Physics Letters</i> , 2004, 85, 707-709.	1.5	9
129	Tight-binding Hamiltonian from first-principles calculations. <i>Scientific Modeling and Simulation SMNS</i> , 2008, 15, 81-95.	0.8	9
130	Global Optimization of 2-Dimensional Nanoscale Structures: A Brief Review. <i>Materials and Manufacturing Processes</i> , 2009, 24, 109-118.	2.7	9
131	Charge oscillations and interaction between potassium adatoms on graphene studied by first-principles calculations. <i>Physical Review B</i> , 2015, 91, .	1.1	9
132	Electronic structure of CeMn_2 . A two-dimensional heavy-fermion system studied by angle-resolved photoemission spectroscopy. <i>Physical Review B</i> , 2015, 91, .	1.1	9
133	A scheme for the generation of Fe-P networks to search for low-energy LiFePO_4 crystal structures. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14611-14618.	5.2	9
134	Theoretical search for possible Au-Si crystal structures using a genetic algorithm. <i>Physical Review B</i> , 2017, 95, .	1.1	9
135	Phase Diagram and Structure Map of Binary Nanoparticle Superlattices from a Lennard-Jones Model. <i>ACS Nano</i> , 2020, 14, 6795-6802.	7.3	9
136	Molecular dynamics simulation of metallic Al-Ce liquids using a neural network machine learning interatomic potential. <i>Journal of Chemical Physics</i> , 2021, 155, 194503.	1.2	9
137	Atomic and electronic structures of $\text{Ag}_x\text{Si}_{1-x}$. A first-principles study. <i>Physical Review B</i> , 2008, 78, .	1.1	9
138	Thermodynamic limits of crystallization and the prediction of glass formation tendency. <i>Physical Review B</i> , 2010, 81, .	1.1	8
139	Quantum confinement induced oscillatory electric field on a stepped Pb(111) film and its influence on surface reactivity. <i>Physical Review B</i> , 2014, 89, .	1.1	8
140	Structure and magnetism of new rare-earth-free intermetallic compounds: $\text{Fe}_{3+x}\text{Co}_3\text{Ti}_2$ ($0 \leq x \leq 3$). <i>APL Materials</i> , 2016, 4, .	2.2	8
141	Structures, phase transitions, and magnetic properties of Co_3Si from first-principles calculations. <i>Physical Review B</i> , 2017, 96, .	1.1	8
142	Spatial decomposition of magnetic anisotropy in magnets: Application to doped Fe_{16}N_2 . <i>Physical Review B</i> , 2020, 102, .	1.1	8
143	Stabilizing the crystal structures of NaFePO_4 with Li substitutions. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 13975-13980.	1.3	8
144	Theoretical search for possible Li-Ni-B crystal structures using an adaptive genetic algorithm. <i>Journal of Applied Physics</i> , 2020, 127, .	1.1	8

#	ARTICLE	IF	CITATIONS
145	Electronic Structure of Double-Layer Epitaxial Graphene on SiC(0001) Modified by Gd Intercalation. Journal of Physical Chemistry C, 2020, 124, 28132-28138.	1.5	8
146	Deep machine learning potential for atomistic simulation of Fe-Si-O systems under Earth's outer core conditions. Physical Review Materials, 2022, 6, .	0.9	8
147	Tight-binding molecular dynamics for materials simulations. Journal of Computer-Aided Materials Design, 1996, 3, 139-148.	0.7	7
148	Cluster expansion modeling and Monte Carlo simulation of alnico 5 permanent magnets. Journal of Applied Physics, 2015, 117, .	1.1	7
149	Metal intercalation-induced selective adatom mass transport on graphene. Nano Research, 2016, 9, 1434-1441.	5.8	7
150	Cluster-Expansion Model for Complex Quinary Alloys: Application to Alnico Permanent Magnets. Physical Review Applied, 2017, 8, .	1.5	7
151	Crystallization of the $P_{3\text{Sn}_4}$ Phase upon Cooling $P_{2\text{Sn}_5}$ Liquid by Molecular Dynamics Simulation Using a Machine Learning Interatomic Potential. Journal of Physical Chemistry C, 2021, 125, 3127-3133.	1.5	7
152	Lithium nickel borides: evolution of [NiB] layers driven by Li pressure. Inorganic Chemistry Frontiers, 2021, 8, 1675-1685.	3.0	7
153	Characterizations of electronic and optical properties of Sb-based phase-change material stabilized by alloying Cr. Applied Physics Letters, 2021, 118, .	1.5	7
154	Nonequilibrium phonon tuning and mapping in few-layer graphene with infrared nanoscopy. Physical Review B, 2021, 103, .	1.1	7
155	Influence of nitrogen dopants on the magnetization of Co_3N clusters. Physical Review Materials, 2018, 2, .	0.9	7
156	Environment-Dependent Tight-Binding Potential Model. Materials Research Society Symposia Proceedings, 1997, 491, 211.	0.1	6
157	Stochastic coarsening model for Pb islands on a Si(111) surface. Physical Review B, 2010, 82, .	1.1	6
158	Atomic Structure and Magnetic Properties of HfCo_7 Alloy. IEEE Transactions on Magnetics, 2013, 49, 3281-3283.	1.2	6
159	Structure of $\text{Cu}_{64.5}\text{Zr}_{35.5}$ metallic glass by reverse Monte Carlo simulations. Journal of Applied Physics, 2014, 115, 053522.	1.1	6
160	Using first-principles calculations to screen for fragile magnetism: Case study of LaCrGe_3 and LaCrSb_3 . Physical Review B, 2018, 97, .	1.1	6
161	Structures and magnetic properties of iron silicide from adaptive genetic algorithm and first-principles calculations. Journal of Applied Physics, 2018, 124, .	1.1	6
162	Competitive B2 and B33 Nucleation during Solidification of Ni50Zr50 Alloy: Molecular Dynamics Simulation and Classical Nucleation Theory. Journal of Physical Chemistry C, 2019, 123, 6685-6692.	1.5	6

#	ARTICLE	IF	CITATIONS
163	Defect Interaction and Deformation in Graphene. <i>Journal of Physical Chemistry C</i> , 2020, 124, 2370-2378.	1.5	6
164	First-principles calculation of excited states of diatomic molecules: a benchmark for the Gutzwiller conjugate gradient minimisation method. <i>Molecular Physics</i> , 2020, 118, .	0.8	6
165	Ternary Zinc Antimonides Unlocked Using Hydride Synthesis. <i>Inorganic Chemistry</i> , 2021, 60, 10686-10697.	1.9	6
166	Role of Coulomb interaction in the phase formation of fcc Ce: Correlation matrix renormalization theory. <i>Physical Review B</i> , 2021, 104, .	1.1	6
167	Neural network potential for Zr-Rh system by machine learning. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 075402.	0.7	6
168	Structural and electronic properties of large fullerenes. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1993, 26, 264-266.	1.0	5
169	Structural Trends in Amorphous Carbon. <i>Materials Research Society Symposia Proceedings</i> , 1997, 498, 3.	0.1	5
170	Ab initio molecular dynamics simulation of liquid Al _x Ge _{1-x} alloys. <i>Physical Review B</i> , 2004, 70, .	1.1	5
171	Modeling of three-dimensional photonic crystal lasers in a frequency domain: A scattering matrix solution. <i>Physical Review B</i> , 2008, 77, .	1.1	5
172	Effects of defect permittivity on resonant frequency and mode shape in the three-dimensional woodpile photonic crystal. <i>Journal of Applied Physics</i> , 2009, 105, 103109.	1.1	5
173	Semicrystalline woodpile photonic crystals without complicated alignment via soft lithography. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	5
174	The benchmark of Gutzwiller density functional theory in hydrogen systems. <i>International Journal of Quantum Chemistry</i> , 2012, 112, 240-246.	1.0	5
175	New Be-intercalated hexagonal boron layer structure of BeB ₂ . <i>RSC Advances</i> , 2014, 4, 15061-15065.	1.7	5
176	Stabilities and defect-mediated lithium-ion conduction in a ground state cubic Li ₃ N structure. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 4185-4190.	1.3	5
177	Hybrid silicon-carbon nanostructures for broadband optical absorption. <i>RSC Advances</i> , 2017, 7, 8070-8076.	1.7	5
178	Unveiling the medium-range order in glass models and its role in glass formation. <i>Physical Review B</i> , 2020, 101, .	1.1	5
179	Ground state wave functions for single-band Hubbard models from the Gutzwiller conjugate gradient minimisation theory. <i>Molecular Physics</i> , 2021, 119, e1797917.	0.8	5
180	Pressure-induced superconductivity in the hydrogen-rich pseudobinary CaB _n compounds. <i>Physical Review B</i> , 2021, 104, .	1.1	5

#	ARTICLE	IF	CITATIONS
181	Straintronic Effect on Phonon-Mediated Superconductivity of Nb ₂ CT ₂ (T = O,) Tj ETQq1 1.0.784314 rgBT /Ov	1.5	5
182	Atomistic simulation studies of complex carbon and silicon systems using environment-dependent tight-binding potentials. Scientific Modeling and Simulation SMNS, 2008, 15, 97-121.	0.8	4
183	Interfacial disorder and optoelectronic properties of diamond nanocrystals. Physical Review B, 2009, 80, .	1.1	4
184	Gutzwiller renormalization group. Physical Review B, 2016, 93, .	1.1	4
185	Fe-Cluster Compounds of Chalcogenides: Candidates for Rare-Earth-Free Permanent Magnet and Magnetic Nodal-Line Topological Material. Inorganic Chemistry, 2017, 56, 14577-14583.	1.9	4
186	Ternary Bismuthide SrPtBi ₂ : Computation and Experiment in Synergism to Explore Solid-State Materials. Journal of Physical Chemistry C, 2018, 122, 5057-5063.	1.5	4
187	Theoretical prediction of a highly responsive material: Spin fluctuations and superconductivity in FeNiB2 system. Applied Physics Letters, 2019, 115, 182601.	1.5	4
188	Observation of \hat{I} -Al41Sm5 reveals motif-aware structural evolution in Al-Sm alloys. Scientific Reports, 2019, 9, 6692.	1.6	4
189	Quantum phase transition and ferromagnetism in C_{m}^{m} and C_{m}^{m} Physical Review B, 2019, 99, .	1.1	4
190	Characterization of three phases of liquid carbon by tight-binding molecular dynamics simulations. Physical Chemistry Chemical Physics, 2020, 22, 14630-14636.	1.3	4
191	How to Look for Compounds: Predictive Screening and in situ Studies in Na ⁺ Zn ²⁺ Bi System. Chemistry - A European Journal, 2021, 27, 15954-15966.	1.7	4
192	Magnetocrystalline anisotropy in YCo_5 and $ZrCo_5$ compounds from first-principles real-space pseudopotentials calculations. Physical Review Materials, 2018, 2, .	0.9	4
193	HOT Graphene and HOT Graphene Nanotubes: New Low Dimensional Semimetals and Semiconductors. Nanoscale Research Letters, 2020, 15, 56.	3.1	4
194	The Gutzwiller conjugate gradient minimization method for correlated electron systems. Journal of Physics Condensed Matter, 2022, 34, 243001.	0.7	4
195	A Tight-Binding Model Beyond Two-Center Approximation. Materials Research Society Symposia Proceedings, 1995, 408, 37.	0.1	3
196	Ultrafast Bulk Diffusion of AlH ₄ in High-Entropy Dehydrogenation Intermediates of NaAlH ₄ . Journal of Physical Chemistry C, 2014, 118, 18356-18361.	1.5	3
197	An efficient random-sampling method for calculating double occupancy of Gutzwiller wave function in single-band 1D and 2D lattices. Molecular Physics, 2021, 119, e1812745.	0.8	3
198	Evidence for a large Rashba splitting in PtPb4 from angle-resolved photoemission spectroscopy. Physical Review B, 2021, 103, .	1.1	3

#	ARTICLE	IF	CITATIONS
199	Unveiling the mechanism of phase and morphology selections during the devitrification of Al-Sm amorphous ribbon. <i>Physical Review Materials</i> , 2021, 5, .	0.9	3
200	Correlation matrix renormalization theory in multi-band lattice systems. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 095902.	0.7	3
201	Microstructure evolution during near- T _g annealing and its effect on shear banding in model alloys. <i>Physical Review Materials</i> , 2019, 3, .	0.9	3
202	Unconventional iron-magnesium compounds at terapascal pressures. <i>Physical Review B</i> , 2021, 104, .	1.1	3
203	Predicting magnetic anisotropy energies using site-specific spin-orbit coupling energies and machine learning: Application to iron-cobalt nitrides. <i>Physical Review Materials</i> , 2022, 6, .	0.9	3
204	Lithium Diffusion in Silicon Encapsulated with Graphene. <i>Nanomaterials</i> , 2021, 11, 3397.	1.9	3
205	Path Less Traveled: A Contemporary Twist on Synthesis and Traditional Structure Solution of Metastable LiNi ₁₂ B ₈ . <i>ACS Materials Au</i> , 0, , .	2.6	3
206	Summary Abstract: First principles calculation of surface phonons on Al surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1987, 5, 462-463.	0.9	2
207	Tight-Binding Molecular Dynamics Study of Structures and Dynamics of Carbon Fullerenes. , 1999, , 74-111.		2
208	Dimer-flipping-assisted diffusion on a Si(001) surface. <i>Applied Physics Letters</i> , 2000, 77, 4184-4186.	1.5	2
209	Influence of oriented topological defects on the mechanical properties of carbon nanotube heterojunctions. <i>Journal of Applied Physics</i> , 2013, 114, 144306.	1.1	2
210	Dynamics and Diffusion Mechanism of Low-Density Liquid Silicon. <i>Journal of Physical Chemistry B</i> , 2015, 119, 14945-14951.	1.2	2
211	Interplay between surface and surface resonance states on height selective stability of fcc Dy(111) film at nanoscale. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 31238-31243.	1.3	2
212	A comparative study of Sm networks in Al-10 at.%Sm glass and associated crystalline phases. <i>Philosophical Magazine Letters</i> , 2018, 98, 27-37.	0.5	2
213	Localized electronic and vibrational states in amorphous diamond. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 4835-4840.	1.3	2
214	Cryogenic spatial&temporal imaging of surface photocarrier dynamics in MAPbI ₃ films at the single grain level. <i>AIP Advances</i> , 2020, 10, .	0.6	2
215	Tight-Binding Molecular Dynamics Study of Liquid and Amorphous Carbon. <i>Materials Research Society Symposia Proceedings</i> , 1992, 291, 177.	0.1	1
216	Structure and Electronic Properties of Diamond-Like Amorphous Carbon. <i>Materials Research Society Symposia Proceedings</i> , 1994, 349, 483.	0.1	1

#	ARTICLE	IF	CITATIONS
217	A Tight-Binding Model for Molecular Dynamics of Carbon-Hydrogen Systems. Materials Research Society Symposia Proceedings, 1994, 358, 73.	0.1	1
218	ATOMISTIC SIMULATION OF LASER ABLATION OF DIAMOND AND SILICON (111) SURFACE. Surface Review and Letters, 1999, 06, 1025-1030.	0.5	1
219	Structure and dynamics at the Pt(100) surface. Annalen Der Physik, 1996, 508, 215-223.	0.9	1
220	Strong optical absorption of a metallic film to induce a lensing effect in the visible region. Scientific Reports, 2019, 9, 12434.	1.6	1
221	Structure and motifs of iron oxides from 1 to 3 TPa. Physical Review Materials, 2022, 6, .	0.9	1
222	Textured substrate based organic solar cell for higher absorption and improved performance. Materials Research Society Symposia Proceedings, 2009, 1210, 1.	0.1	0
223	The benchmark of gutzwiller density functional theory in hydrogen systems. International Journal of Quantum Chemistry, 2012, 112, 2766-2766.	1.0	0
224	The Genetic Algorithm in Real-Space Representation. , 2013, , 11-35.		0
225	Simulations of enhance broadband optical absorption by tuning mie resonance in silicon nanocone arrays. , 2016, , .		0
226	Growth and characterization of BaZnGa. Philosophical Magazine, 2017, 97, 3317-3324.	0.7	0
227	Reversible motions and disordered structure of soft particles in amorphous solids. Physical Review B, 2022, 105, .	1.1	0