

Su-Huai Wei

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7929600/publications.pdf>

Version: 2024-02-01

570
papers

56,511
citations

867

120
h-index

1680

220
g-index

578
all docs

578
docs citations

578
times ranked

44122
citing authors

#	ARTICLE	IF	CITATIONS
1	Band gap anomaly in cuprous halides. Computational Materials Science, 2022, 203, 111157.	1.4	7
2	Energetic Cocrystallization as the Most Significant Crystal Engineering Way to Create New Energetic Materials. Crystal Growth and Design, 2022, 22, 954-970.	1.4	20
3	Clarification of the relative magnitude of exciton binding energies in ZnO and SnO ₂ . Applied Physics Letters, 2022, 120, .	1.5	8
4	General Model for Defect Dynamics in Ionizing $\hat{\epsilon}$ rradiated SiO ₂ $\hat{\epsilon}$ Structures. Small, 2022, 18, e2107516.	5.2	10
5	Designing Ultra-flat Bands in Twisted Bilayer Materials at Large Twist Angles: Theory and Application to Two-Dimensional Indium Selenide. Journal of the American Chemical Society, 2022, 144, 3949-3956.	6.6	19
6	Temperature effect on charge-state transition levels of defects in semiconductors. Physical Review B, 2022, 105, .	1.1	7
7	Origin of Efficiency Enhancement by Lattice Expansion in Hybrid-Perovskite Solar Cells. Physical Review Letters, 2022, 128, 136401.	2.9	28
8	Comment on "Wide $\hat{\epsilon}$ Range $\hat{\epsilon}$ Tunable <i>p</i> - $\hat{\epsilon}$ Type Conductivity of Transparent Cu _{1-x} Br _x Alloy". Advanced Functional Materials, 2022, 32, .	7.8	4
9	Inverse design of stable spinel compounds with high optical absorption <i>via</i> materials genome engineering. Journal of Materials Chemistry A, 2022, 10, 12503-12509.	5.2	3
10	Hydrogenated Cs ₂ AgBiBr ₆ for significantly improved efficiency of lead-free inorganic double perovskite solar cell. Nature Communications, 2022, 13, .	5.8	109
11	Phase transition behavior of heterostructural alloys: Effects of size mismatch and site preference. Physical Review B, 2022, 105, .	1.1	0
12	Chemical trends in the high thermoelectric performance of the pyrite-type dichalcogenides ZnS_2 , and $CdSe_2$. Physical Review B, 2022, 105, .	1.1	6
13	First-principles study of defect control in thin-film solar cell materials. Science China: Physics, Mechanics and Astronomy, 2021, 64, 1.	2.0	17
14	Enhanced performance of Se-alloyed CdTe solar cells: The role of Se-segregation on the grain boundaries. Journal of Applied Physics, 2021, 129, .	1.1	8
15	Approach to achieving a <i>p</i> -type transparent conducting oxide: Doping of bismuth-alloyed Ga_2O_3 with a strongly correlated band edge state. Physical Review B, 2021, 103, .	1.1	24
16	Interface Engineering of Cu(In,Ga)Se ₂ Solar Cells by Optimizing Cd- and Zn-Chalcogenide Alloys as the Buffer Layer. ACS Applied Materials & Interfaces, 2021, 13, 15237-15245.	4.0	13
17	Polymorph-Dependent Initial Thermal Decay Mechanism of Energetic Materials: A Case of 1,3,5,7-Tetranitro-1,3,5,7-Tetrazocane. Journal of Physical Chemistry C, 2021, 125, 10057-10067.	1.5	10
18	Electron donation of non-oxide supports boosts O ₂ activation on nano-platinum catalysts. Nature Communications, 2021, 12, 2741.	5.8	72

#	ARTICLE	IF	CITATIONS
19	Optimization of Doping $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Cd} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{Te} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$	1.5	11
20	Enhancing Magnetic Dipole Emission in Eu-Doped $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Sr} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{M} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ (T_j)	1.1	4
21	Origin of the Improved Performance of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" \rangle \langle \text{mml:mi} \rangle \text{Cu} \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle$		



#	ARTICLE	IF	CITATIONS
37	Designing Dirac semimetals with a honeycomb Na ₃ Bi-lattice <i>via</i> isovalent cation substitution. <i>Journal of Materials Chemistry C</i> , 2020, 8, 1257-1264.	2.7	4
38	Gamma-ray irradiation-induced oxidation and disproportionation at the amorphous SiO ₂ /Si interfaces. <i>Journal of Materials Chemistry C</i> , 2020, 8, 17065-17073.	2.7	5
39	Origin of Irradiation Synergistic Effects in Silicon Bipolar Transistors. <i>ACS Applied Electronic Materials</i> , 2020, 2, 3783-3793.	2.0	10
40	Self-Catalyzed Sensitization of CuO Nanowires via a Solvent-free Click Reaction. <i>Langmuir</i> , 2020, 36, 14539-14545.	1.6	6
41	Searching for stable perovskite solar cell materials using materials genome techniques and high-throughput calculations. <i>Journal of Materials Chemistry C</i> , 2020, 8, 12012-12035.	2.7	22
42	Review of the Intermolecular Interactions in Energetic Molecular Cocrystals. <i>Crystal Growth and Design</i> , 2020, 20, 7065-7079.	1.4	64
43	Design of Multifunctional Quaternary Metal-Halide Perovskite Compounds Based on Cation-Anion Co-Ordering. <i>Chemistry of Materials</i> , 2020, 32, 5949-5957.	3.2	10
44	Defect Dynamic Model of the Synergistic Effect in Neutron- and β -Ray-Irradiated Silicon NPN Transistors. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 29993-29998.	4.0	5
45	Unconventional deformation potential and half-metallicity in zigzag nanoribbons of 2D-Xenes. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 7294-7299.	1.3	4
46	Band-Structure Engineering of $Zn_xCd_{1-x}S_ySe_{1-y}$. <i>Physical Review Applied</i> , 2020, 13, .		
47	Formation of Bloch Flat Bands in Polar Twisted Bilayers without Magic Angles. <i>Physical Review Letters</i> , 2020, 124, 086401.	2.9	52
48	First-principles study of electronic and diffusion properties of intrinsic defects in 4H-SiC. <i>Journal of Applied Physics</i> , 2020, 127, .	1.1	32
49	Strain induced spin-splitting and half-metallicity in antiferromagnetic bilayer silicene under bending. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 11567-11571.	1.3	6
50	Chemical trend of a Cu impurity in Zn chalcogenides. <i>Physical Review B</i> , 2020, 101, .	1.1	2
51	Realistic dimension-independent approach for charged-defect calculations in semiconductors. <i>Physical Review B</i> , 2020, 101, .	1.1	30
52	Functionalizing Two-Dimensional Materials for Energy Applications. , 2020, , 567-603.		2
53	ToF-SIMS Investigation of the Initial Stages of MeCpPt(CH ₃) ₃ Adsorption and Decomposition on Nickel Oxide Surfaces: Exploring the Role and Location of the Ligands. <i>Organometallics</i> , 2020, 39, 1024-1034.	1.1	5
54	Theoretical investigation of halide perovskites for solar cell and optoelectronic applications*. <i>Chinese Physics B</i> , 2020, 29, 108401.	0.7	15

#	ARTICLE	IF	CITATIONS
55	Accurate and effective computation of the multi-phonon nonradiative transition. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	2.0	0
56	First-principles study of the order-disorder transition and its effects on the optoelectronic property of ABiS ₂ (A=Na, K). Physical Review Materials, 2020, 4, .	0.9	1
57	The 2019 materials by design roadmap. Journal Physics D: Applied Physics, 2019, 52, 013001.	1.3	236
58	Transition from Positive to Negative Photoconductance in Doped Hybrid Perovskite Semiconductors. Advanced Optical Materials, 2019, 7, 1900865.	3.6	47
59	First-principles study of the band gap tuning and doping control in CdSe _x Te _{1-x} alloy for high efficiency solar cell*. Chinese Physics B, 2019, 28, 086106.	0.7	50
60	Revisit of the band gaps of rutile SnO ₂ and TiO ₂ : a first-principles study. Journal of Semiconductors, 2019, 40, 092101.	2.0	24
61	Nanowire Quantum Dot Surface Engineering for High Temperature Single Photon Emission. ACS Nano, 2019, 13, 13492-13500.	7.3	22
62	Achieving High Volumetric Lithium Storage Capacity in Compact Carbon Materials with Controllable Nitrogen Doping. Advanced Functional Materials, 2019, 29, 1807441.	7.8	39
63	Origin of High- <i>T_C</i> Ferromagnetism in Isovalent-Doped <i>III-V</i> Semiconductors. Physical Review Applied, 2019, 11, .	1.5	10
64	UV-ozone induced surface passivation to enhance the performance of Cu ₂ ZnSnS ₄ solar cells. Solar Energy Materials and Solar Cells, 2019, 200, 109892.	3.0	13
65	Alloy-induced phase transition and enhanced photovoltaic performance: the case of Cs ₃ Bi ₂ Cl ₉ Br _x perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 8818-8825.	5.2	87
66	Mechanism of Synergistic Effects of Neutron- and Gamma-Ray-Radiated PNP Bipolar Transistors. ACS Applied Electronic Materials, 2019, 1, 538-547.	2.0	13
67	Origin of Deep Be Acceptor Levels in Nitride Semiconductors: The Roles of Chemical and Strain Effects. Physical Review Applied, 2019, 11, .	1.5	17
68	Formation of DY center as n-type limiting defects in octahedral semiconductors: the case of Bi-doped hybrid halide perovskites. Journal of Materials Chemistry C, 2019, 7, 4230-4234.	2.7	41
69	Materials Design of Solar Cell Absorbers Beyond Perovskites and Conventional Semiconductors via Combining Tetrahedral and Octahedral Coordination. Advanced Materials, 2019, 31, e1806593.	11.1	48
70	Origin of the anomalous trends in band alignment of GaX/ZnGeX ₂ (X = N, P, As, Sb) heterojunctions. Journal of Semiconductors, 2019, 40, 042102.	2.0	10
71	Hole-Induced Spontaneous Mutual Annihilation of Dislocation Pairs. Journal of Physical Chemistry Letters, 2019, 10, 7421-7425.	2.1	0
72	A systematic study of the negative thermal expansion in zinc-blende and diamond-like semiconductors. New Journal of Physics, 2019, 21, 123015.	1.2	10

#	ARTICLE	IF	CITATIONS
73	Stable Bandgap-Tunable Hybrid Perovskites with Alloyed Pb ²⁺ /Ba Cations for High-Performance Photovoltaic Applications. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 59-66.	2.1	44
74	The Coulomb interaction in van der Waals heterostructures. <i>Science China: Physics, Mechanics and Astronomy</i> , 2019, 62, 1.	2.0	25
75	Effective and Noneffective Recombination Center Defects in Cu ₂ ZnSnS ₄ : Significant Difference in Carrier Capture Cross Sections. <i>Chemistry of Materials</i> , 2019, 31, 826-833.	3.2	72
76	Enabling visible-light absorption and p-type doping in In_2O_3 by adding Bi. <i>Physical Review Materials</i> , 2019, 3, .	0.9	7
77	Design of p-type transparent conductors from inverted band structure: The case of inorganic metal halide perovskites. <i>Physical Review Materials</i> , 2019, 3, .	0.9	20
78	Ab-initio assessment of new sulfo-iodide compounds as candidate top-cell materials for silicon-based multi-junction tandem solar cells. , 2019, , .		0
79	Intrinsic Instability of the Hybrid Halide Perovskite Semiconductor CH ₃ NH ₃ PbI ₃ . <i>Chinese Physics Letters</i> , 2018, 35, 036104.	1.3	154
80	Modulation of electronic and magnetic properties of edge hydrogenated armchair phosphorene nanoribbons by transition metal adsorption. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 12916-12922.	1.3	10
81	Tuning the optical bandgap in multi-cation compound transparent conducting-oxides: The examples of In ₂ ZnO ₄ and In ₄ Sn ₃ O ₁₂ . <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	3
82	Design of n-Type Transparent Conducting Oxides: The Case of Transition Metal Doping in In ₂ O ₃ . <i>Advanced Electronic Materials</i> , 2018, 4, 1700553.	2.6	58
83	Comment on "Fundamental Resolution of Difficulties in the Theory of Charged Point Defects in Semiconductors". <i>Physical Review Letters</i> , 2018, 120, 039601.	2.9	7
84	Manipulation of cation combinations and configurations of halide double perovskites for solar cell absorbers. <i>Journal of Materials Chemistry A</i> , 2018, 6, 1809-1815.	5.2	85
85	CsCu ₅ Se ₃ : A Copper-Rich Ternary Chalcogenide Semiconductor with Nearly Direct Band Gap for Photovoltaic Application. <i>Chemistry of Materials</i> , 2018, 30, 1121-1126.	3.2	30
86	First-principles study of alloying effects on fluorine incorporation in Al _x Ga _{1-x} N alloys. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 065108.	1.3	10
87	Origin of charge compensation and its effect on the stability of oxide cathodes for Li-ion batteries: The case of orthosilicates. <i>Electrochimica Acta</i> , 2018, 270, 409-416.	2.6	10
88	Band Structure Engineering of Cs ₂ AgBiBr ₆ Perovskite through Order-Disordered Transition: A First-Principle Study. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 31-35.	2.1	121
89	Highly-anisotropic optical and electrical properties in layered SnSe. <i>Nano Research</i> , 2018, 11, 554-564.	5.8	114
90	Magnetic origin of phase stability in cubic $\text{I}^3\text{-MoN}$. <i>Applied Physics Letters</i> , 2018, 113, 221901.	1.5	6

#	ARTICLE	IF	CITATIONS
91	Band structure engineering and defect control of oxides for energy applications. Chinese Physics B, 2018, 27, 117104.	0.7	17
92	Unified theory of direct or indirect band-gap nature of conventional semiconductors. Physical Review B, 2018, 98, .	1.1	60
93	Photocorrosion-Limited Maximum Efficiency of Solar Photoelectrochemical Water Splitting. Physical Review Applied, 2018, 10, .	1.5	44
94	Functionalizing Two-Dimensional Materials for Energy Applications. , 2018, , 1-37.		0
95	Distinct Excitonic Circular Dichroism between Wurtzite and Zinblende CdSe Nanoplatelets. Nano Letters, 2018, 18, 6665-6671.	4.5	68
96	Atomic-Ordering-Induced Quantum Phase Transition between Topological Crystalline Insulator and Z 2 Topological Insulator. Chinese Physics Letters, 2018, 35, 057301.	1.3	6
97	High-throughput screening of chalcogenide single perovskites by first-principles calculations for photovoltaics. Journal Physics D: Applied Physics, 2018, 51, 474003.	1.3	50
98	Preface for Special Topic: Earth abundant materials in solar cells. APL Materials, 2018, 6, .	2.2	2
99	Origin of the stability of two-dimensional perovskites: a first-principles study. Journal of Materials Chemistry A, 2018, 6, 14949-14955.	5.2	79
100	Interface Engineering of Graphene/CH ₃ NH ₃ PbI ₃ Heterostructure for Novel Structural Perovskites Solar Cells. Journal of Physical Chemistry C, 2018, 122, 17228-17237.	1.5	22
101	Influence of defects on the thermoelectricity in SnSe: A comprehensive theoretical study. Physical Review B, 2018, 97, .	1.1	53
102	The stabilization mechanism and size effect of nonpolar-to-polar crystallography facet tailored ZnO nano/micro rods via a top-down strategy. Physical Chemistry Chemical Physics, 2018, 20, 18455-18462.	1.3	3
103	Design of Lead-Free Inorganic Halide Perovskites for Solar Cells via Cation-Transmutation. Journal of the American Chemical Society, 2017, 139, 2630-2638.	6.6	714
104	High Performance Electrocatalytic Reaction of Hydrogen and Oxygen on Ruthenium Nanoclusters. ACS Applied Materials & Interfaces, 2017, 9, 3785-3791.	4.0	108
105	Optical and fundamental band gaps disparity in transparent conducting oxides: new findings for the In_2O_3 and SnO_2 systems. Journal of Physics Condensed Matter, 2017, 29, 085501.	0.7	9
106	Antimony Diffusion in CdTe. IEEE Journal of Photovoltaics, 2017, 7, 870-873.	1.5	11
107	Gas sensing in 2D materials. Applied Physics Reviews, 2017, 4, .	5.5	600
108	Earth-Abundant and Non-Toxic SiX (X = S, Se) Monolayers as Highly Efficient Thermoelectric Materials. Journal of Physical Chemistry C, 2017, 121, 123-128.	1.5	41

#	ARTICLE	IF	CITATIONS
109	Synthesis of Cs ₂ AgSbCl ₆ and improved optoelectronic properties of Cs ₂ AgSbCl ₆ /TiO ₂ heterostructure driven by the interface effect for lead-free double perovskites solar cells. Applied Physics Letters, 2017, 111, .	1.5	63
110	Exploring Emerging Photovoltaic Materials Beyond Perovskite: The Case of Skutterudite. Chemistry of Materials, 2017, 29, 9429-9435.	3.2	16
111	Inhomogeneous strain-induced half-metallicity in bent zigzag graphene nanoribbons. Npj Computational Materials, 2017, 3, .	3.5	33
112	Microscopic mechanism of the tunable band gap in potassium-doped few-layer black phosphorus. Physical Review B, 2017, 96, .	1.1	17
113	Self-compensation in arsenic doping of CdTe. Scientific Reports, 2017, 7, 4563.	1.6	59
114	Carrier providers or killers: The case of Cu defects in CdTe. Applied Physics Letters, 2017, 111, 042106.	1.5	22
115	Origin of polymorphism of the two-dimensional group-IV monochalcogenides. Physical Review B, 2017, 96, .	1.1	19
116	Enhanced Electrical and Optoelectronic Characteristics of Few-Layer Type-II SnSe/MoS ₂ van der Waals Heterojunctions. ACS Applied Materials & Interfaces, 2017, 9, 42149-42155.	4.0	54
117	Nonisovalent Si-III-V and Si-II-VI alloys: Covalent, ionic, and mixed phases. Physical Review B, 2017, 96, .	1.1	2
118	Prediction of Ideal Topological Semimetals with Triply Degenerate Points in the $\text{NaCu}_3\text{P}_3\text{S}_{13}$. Physical Review Letters, 2017, 119, 256402.	2.9	36
119	Notice of Removal Antimony diffusion in CdTe. , 2017, , .		0
120	Air Passivation of Chalcogen Vacancies in Two-Dimensional Semiconductors. Angewandte Chemie, 2016, 128, 977-980.	1.6	15
121	Air Passivation of Chalcogen Vacancies in Two-Dimensional Semiconductors. Angewandte Chemie - International Edition, 2016, 55, 965-968.	7.2	80
122	Polymerization of defect states at dislocation cores in InAs. Journal of Applied Physics, 2016, 119, 045706.	1.1	8
123	Wild band edges: The role of bandgap grading and band-edge fluctuations in high-efficiency chalcogenide devices. , 2016, , .		11
124	Metal compound semiconductors functionalized by polymers and their photosensitive properties. Applied Physics Reviews, 2016, 3, .	5.5	3
125	First-principles study of roles of Cu and Cl in polycrystalline CdTe. Journal of Applied Physics, 2016, 119, .	1.1	44
126	Effect of intermixing at CdS/CdTe interface on defect properties. Applied Physics Letters, 2016, 109, 042105.	1.5	9

#	ARTICLE	IF	CITATIONS
127	Suppress carrier recombination by introducing defects: The case of Si solar cell. Applied Physics Letters, 2016, 108, .	1.5	23
128	Origin of the Distinct Diffusion Behaviors of Cu and Ag in Covalent and Ionic Semiconductors. Physical Review Letters, 2016, 117, 165901.	2.9	25
129	Piezophototronic Effect in Single-Atomic-Layer MoS ₂ for Strain-Gated Flexible Optoelectronics. Advanced Materials, 2016, 28, 8463-8468.	11.1	187
130	Fast self-diffusion of ions in CH ₃ NH ₃ PbI ₃ : the interstitially mechanism versus vacancy-assisted mechanism. Journal of Materials Chemistry A, 2016, 4, 13105-13112.	5.2	74
131	Na-Diffusion Enhanced p-type Conductivity in Cu(In,Ga)Se ₂ : A New Mechanism for Efficient Doping in Semiconductors. Advanced Energy Materials, 2016, 6, 1601191.	10.2	115
132	Phosphorus Diffusion Mechanisms and Deep Incorporation in Polycrystalline and Single-Crystalline CdTe. Physical Review Applied, 2016, 5, .	1.5	26
133	Review on first-principles study of defect properties of CdTe as a solar cell absorber. Semiconductor Science and Technology, 2016, 31, 083002.	1.0	109
134	Simultaneous band-gap narrowing and carrier-lifetime prolongation of organic-inorganic trihalide perovskites. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8910-8915.	3.3	269
135	Van der Waals metal-semiconductor junction: Weak Fermi level pinning enables effective tuning of Schottky barrier. Science Advances, 2016, 2, e1600069.	4.7	446
136	Non-Radiative Carrier Recombination Enhanced by Two-Level Process: A First-Principles Study. Scientific Reports, 2016, 6, 21712.	1.6	74
137	High-Performance Hydrogen Evolution from MoS ₂ (1-x)/P _x Solid Solution. Advanced Materials, 2016, 28, 1427-1432.	11.1	309
138	A Unified Understanding of the Thickness-Dependent Bandgap Transition in Hexagonal Two-Dimensional Semiconductors. Journal of Physical Chemistry Letters, 2016, 7, 597-602.	2.1	100
139	Stabilizing Perovskite Structures by Tuning Tolerance Factor: Formation of Formamidinium and Cesium Lead Iodide Solid-State Alloys. Chemistry of Materials, 2016, 28, 284-292.	3.2	1,606
140	Two-Dimensional SiS Layers with Promising Electronic and Optoelectronic Properties: Theoretical Prediction. Nano Letters, 2016, 16, 1110-1117.	4.5	149
141	Alloy Engineering of Defect Properties in Semiconductors: Suppression of Deep Levels in Transition-Metal Dichalcogenides. Physical Review Letters, 2015, 115, 126806.	2.9	81
142	Origin of and tuning the optical and fundamental band gaps in transparent conducting oxides: The case of M_2O_3 . Physical Review B, 2015, 92, .		
143	H-stabilized shallow acceptors in N-doped ZnO. Physical Review B, 2015, 92, .	1.1	23
144	The origin of electronic band structure anomaly in topological crystalline insulator group-IV tellurides. Npj Computational Materials, 2015, 1, .	3.5	38

#	ARTICLE	IF	CITATIONS
145	Surface stability and the selection rules of substrate orientation for optimal growth of epitaxial II-VI semiconductors. Applied Physics Letters, 2015, 107, 141607.	1.5	5
146	Self-regulation of charged defect compensation and formation energy pinning in semiconductors. Scientific Reports, 2015, 5, 16977.	1.6	56
147	Engineering Solar Cell Absorbers by Exploring the Band Alignment and Defect Disparity: The Case of Cu ²⁺ and Ag ⁺ -Based Kesterite Compounds. Advanced Functional Materials, 2015, 25, 6733-6743.	7.8	284
148	Tunable Polarity Behavior and Self-Driven Photoswitching in WSe_2/WS_2 Heterojunctions. Small, 2015, 11, 5430-5438.	5.2	114
149	First-principles Study of Defect Control in Solar Cell Materials. , 2015, , .		0
150	Highly stable two-dimensional silicon phosphides: Different stoichiometries and exotic electronic properties. Physical Review B, 2015, 91, .	1.1	58
151	Period-doubling reconstructions of semiconductor partial dislocations. NPG Asia Materials, 2015, 7, e216-e216.	3.8	12
152	Ordering-induced direct-to-indirect band gap transition in multication semiconductor compounds. Physical Review B, 2015, 91, .	1.1	20
153	Effects of deposition termination on Cu ₂ ZnSnSe ₄ device characteristics. Thin Solid Films, 2015, 582, 184-187.	0.8	29
154	First-principles multiple-barrier diffusion theory: The case study of interstitial diffusion in CdTe. Physical Review B, 2015, 91, .	1.1	33
155	Stability and electronic structure of the low- $\hat{\epsilon}$ grain boundaries in CdTe: a density functional study. New Journal of Physics, 2015, 17, 013027.	1.2	31
156	Device Performance of the Mott Insulator LaVO_3 a Photovoltaic Material. Physical Review Applied, 2015, 3, .	1.5	73
157	Interlayer coupling and optoelectronic properties of ultrathin two-dimensional heterostructures based on graphene, MoS ₂ and WS ₂ . Journal of Materials Chemistry C, 2015, 3, 5467-5473.	2.7	85
158	Origin of the structural diversity of M ₂ O ₃ (M = Al, Ga, In). Computational Materials Science, 2015, 104, 35-39.	1.4	2
159	Origin of High Electronic Quality in Structurally Disordered CH ₃ NH ₃ PbI ₃ and the Passivation Effect of Cl and O at Grain Boundaries. Advanced Electronic Materials, 2015, 1, 1500044.	2.6	175
160	Electronic Structure and Optical Properties of \pm -CH ₃ NH ₃ PbBr ₃ Perovskite Single Crystal. Journal of Physical Chemistry Letters, 2015, 6, 4304-4308.	2.1	136
161	Enhanced p-type dopability of P and As in CdTe using non-equilibrium thermal processing. Journal of Applied Physics, 2015, 118, .	1.1	60
162	Chemical trends of stability and band alignment of lattice-matched II-VI/III-V semiconductor interfaces. Physical Review B, 2015, 91, .	1.1	21

#	ARTICLE	IF	CITATIONS
163	High thermoelectric performance in copper telluride. NPG Asia Materials, 2015, 7, e210-e210.	3.8	170
164	O-O bonding stabilized zinc vacancy as origin of p-type doping on ZnO grain boundary. Journal of Applied Physics, 2015, 118, 045708.	1.1	6
165	Monitoring the stability of organometallic perovskite thin films. Journal of Materials Chemistry A, 2015, 3, 21940-21945.	5.2	13
166	Self-Regulation Mechanism for Charged Point Defects in Hybrid Halide Perovskites. Angewandte Chemie - International Edition, 2015, 54, 1791-1794.	7.2	484
167	Stable interface structures of heterovalent semiconductor superlattices: The case of (GaSb) (ZnTe). Computational Materials Science, 2015, 98, 340-344.	1.4	6
168	Impact of bulk properties and local secondary phases on the $\text{Cu}_2(\text{Zn},\text{Sn})\text{Se}_4$ solar cells open-circuit voltage. Solar Energy Materials and Solar Cells, 2015, 133, 119-125.	3.0	72
169	Halide perovskite materials for solar cells: a theoretical review. Journal of Materials Chemistry A, 2015, 3, 8926-8942.	5.2	1,114
170	Defect properties of Sb- and Bi-doped CuInSe_2 : The effect of the deep lone-pair s states. Applied Physics Letters, 2014, 105, .	1.5	21
171	Creating intermediate bands in ZnTe via co-alloying approach. Applied Physics Express, 2014, 7, 121201.	1.1	7
172	Magnetic property of transition metal-Si atomic line on silicon Si grain boundary: A theoretical study. Journal of Applied Physics, 2014, 115, 223906.	1.1	2
173	Exceptional Optoelectronic Properties of Hydrogenated Bilayer Silicene. Physical Review X, 2014, 4, .	2.8	35
174	Origin of Reduced Efficiency in $\text{Cu}(\text{In},\text{Ga})\text{Se}_2$ Solar Cells With High Ga Concentration: Alloy Solubility Versus Intrinsic Defects. IEEE Journal of Photovoltaics, 2014, 4, 477-482.	1.5	69
175	Tuning the Fermi level beyond the equilibrium doping limit through quenching: The case of CdTe. Physical Review B, 2014, 90, .	1.1	66
176	Correlation between the electronic structures and diffusion paths of interstitial defects in semiconductors: The case of CdTe. Physical Review B, 2014, 90, .	1.1	24
177	Xiangetal.Reply:. Physical Review Letters, 2014, 112, 199802.	2.9	3
178	Engineering Grain Boundaries in $\text{Cu}_2\text{ZnSnSe}_4$ for Better Cell Performance: A First-Principle Study. Advanced Energy Materials, 2014, 4, 1300712.	10.2	135
179	Layer-dependent electrical and optoelectronic responses of ReSe_2 nanosheet transistors. Nanoscale, 2014, 6, 7226.	2.8	205
180	Anomalous Alloy Properties in Mixed Halide Perovskites. Journal of Physical Chemistry Letters, 2014, 5, 3625-3631.	2.1	231

#	ARTICLE	IF	CITATIONS
181	Novel and Enhanced Optoelectronic Performances of Multilayer MoS ₂ /WS ₂ Heterostructure Transistors. <i>Advanced Functional Materials</i> , 2014, 24, 7025-7031.	7.8	388
182	Influence of Defects and Synthesis Conditions on the Photovoltaic Performance of Perovskite Semiconductor CsSn ₃ . <i>Chemistry of Materials</i> , 2014, 26, 6068-6072.	3.2	256
183	Design of I ₂ /V ₄ Semiconductors through Element Substitution: The Thermodynamic Stability Limit and Chemical Trend. <i>Chemistry of Materials</i> , 2014, 26, 3411-3417.	3.2	128
184	Origin of the failed ensemble average rule for the band gaps of disordered nonisovalent semiconductor alloys. <i>Physical Review B</i> , 2014, 90, .	1.1	13
185	Dependence of the Minority-Carrier Lifetime on the Stoichiometry of CdTe Using Time-Resolved Photoluminescence and First-Principles Calculations. <i>Physical Review Letters</i> , 2013, 111, 067402.	2.9	124
186	The state and future prospects of kesterite photovoltaics. <i>Energy and Environmental Science</i> , 2013, 6, 3171.	15.6	294
187	Prediction of (TiO ₂) _x (Cu ₂ O) _y alloys for efficient photoelectrochemical water splitting. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 1778-1781.	1.3	17
188	Kesterite Successes, Ongoing Work, and Challenges: A Perspective From Vacuum Deposition. <i>IEEE Journal of Photovoltaics</i> , 2013, 3, 439-445.	1.5	78
189	Pathways toward higher performance CdS/CdTe devices: Te exposure of CdTe surface before ZnTe:Cu/Ti contacting. <i>Thin Solid Films</i> , 2013, 535, 237-240.	0.8	15
190	Chemical Functionalization of Silicene: Spontaneous Structural Transition and Exotic Electronic Properties. <i>Physical Review Letters</i> , 2013, 111, 145502.	2.9	68
191	Stability and electronic structure of Cu ZnSnS_4 surfaces: First-principles study. <i>Physical Review B</i> , 2013, 88, .	1.1	55
192	Electronic origin of the conductivity imbalance between covalent and ionic amorphous semiconductors. <i>Physical Review B</i> , 2013, 87, .	1.1	38
193	Origin of the superior conductivity of perovskite Ba(Sr)SnO ₃ . <i>Applied Physics Letters</i> , 2013, 102, .	1.5	116
194	Control of one-dimensional magnetism in graphene via spontaneous hydrogenation of the grain boundary. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 8271.	1.3	5
195	Origin of the Variation of Exciton Binding Energy in Semiconductors. <i>Physical Review Letters</i> , 2013, 110, 016402.	2.9	132
196	Classification of Lattice Defects in the Kesterite Cu ₂ ZnSnS ₄ and Cu ₂ ZnSnSe ₄ Earth-Abundant Solar Cell Absorbers. <i>Advanced Materials</i> , 2013, 25, 1522-1539.	11.1	1,210
197	$\text{Zn}(\text{Sn}, \text{Ge})\text{Se}$ and Cu ₂ ZnSnS ₄ surfaces: First-principles study. <i>Physical Review B</i> , 2013, 88, .	1.1	90
198	Chemical trends of magnetic interaction in Mn-doped III-V semiconductors. <i>Applied Physics Letters</i> , 2013, 102, 122409.	1.5	10

#	ARTICLE	IF	CITATIONS
199	Chemical trend of the formation energies of the group-III and group-V dopants in Si quantum dots. Physical Review B, 2013, 87, .	1.1	5
200	Origin of Novel Diffusions of Cu and Ag in Semiconductors: The Case of CdTe. Physical Review Letters, 2013, 110, 235901.	2.9	49
201	Exotic Geometrical and Electronic Properties in Hydrogenated Graphyne. Journal of Physical Chemistry C, 2013, 117, 11960-11967.	1.5	41
202	Towards Direct-Gap Silicon Phases by the Inverse Band Structure Design Approach. Physical Review Letters, 2013, 110, 118702.	2.9	136
203	Bowing of the defect formation energy in semiconductor alloys. Physical Review B, 2013, 87, .	1.1	18
204	Hexagonal boron nitride and 6H-SiC heterostructures. Applied Physics Letters, 2013, 102, .	1.5	43
205	Overcoming the Phase Inhomogeneity in Chemically Functionalized Graphene: The Case of Graphene Oxides. Physical Review Letters, 2013, 110, 085501.	2.9	47
206	Origin of anomalous strain effects on the molecular adsorption on boron-doped graphene. Journal of Chemical Physics, 2013, 139, 044709.	1.2	6
207	Tunable Anderson Localization in Hydrogenated Graphene Based on the Electric Field Effect. Physical Review Letters, 2013, 111, 216801.	2.9	4
208	Rational design of semiconductors for photoelectrochemical water splitting. , 2013, , .		0
209	Ordering-enhanced dislocation glide in III-V alloys. Journal of Applied Physics, 2013, 114, .	1.1	20
210	Origin of the Bismuth-Induced Decohesion of Nickel and Copper Grain Boundaries. Physical Review Letters, 2013, 111, 055502.	2.9	30
211	Enhancing structural transition by carrier and quantum confinement: Stabilization of cubic InN quantum dots by Mn incorporation. Applied Physics Letters, 2013, 103, .	1.5	4
212	Electron-limiting defect complex in hyperdoped GaAs: TheDDXcenter. Physical Review B, 2013, 87, .	1.1	3
213	Kesterite successes, ongoing work, and challenges: A perspective from vacuum deposition. , 2013, , .		0
214	Strain effect on the diffusion of interstitial Mn in GaAs. Journal of Physics Condensed Matter, 2012, 24, 215801.	0.7	2
215	Graphene Adsorbed on Corundum Surface: Clean Interface and Band Gap Opening. Materials Research Society Symposia Proceedings, 2012, 1407, 131.	0.1	0
216	Selection rule of preferred doping site for n-type oxides. Applied Physics Letters, 2012, 100, 262109.	1.5	10

#	ARTICLE	IF	CITATIONS
217	Atomically Abrupt Liquid-Oxide Interface Stabilized by Self-Regulated Interfacial Defects: The Case of $\text{Al}_2\text{O}_3/\text{Al}_2\text{O}_3$ Interfaces. Physical Review Letters, 2012, 108, 206802.	2.9	135
218	Implications of the formation of small polarons in Li_2O for Li-air batteries. Physical Review B, 2012, 85, .	1.1	74
219	Effective Control of the Charge and Magnetic States of Transition-Metal Atoms on Single-Layer Boron Nitride. Physical Review Letters, 2012, 108, 206802.	2.9	135
220	Electronic and optical properties of $\text{Co}_x\text{Zn}_{1-x}\text{O}$ ($x = \text{Al, Ga, In}$) alloys. Applied Physics Letters, 2012, 100, .	1.5	15
221	Kesterite successes, ongoing work, and challenges: A perspective from vacuum deposition. , 2012, , .		4
222	Carrier-mediated long-range ferromagnetism in electron-doped Fe-C and Fe-N incorporated graphene. Physical Review B, 2012, 86, .	1.1	50
223	Unusual nonlinear strain dependence of valence-band splitting in ZnO. Physical Review B, 2012, 86, .	1.1	11
224	Comparative study of defect transition energy calculation methods: The case of oxygen vacancy in In_2O_3 and ZnO. Physical Review B, 2012, 86, .	1.1	23
225	Possible effects of oxygen in Te-rich $\text{Fe}_3(112)$ grain boundaries in CdTe. Solid State Communications, 2012, 152, 1744-1747.	0.9	27
226	Effect of hydrogen passivation on the electronic structure of ionic semiconductor nanostructures. Physical Review B, 2012, 85, .	1.1	38
227	Persistent Medium-Range Order and Anomalous Liquid Properties of $\text{Al}_{1-x}\text{Cu}_x$ Alloys. Physical Review Letters, 2012, 108, 115901.	2.9	29
228	Strong asymmetrical doping properties of spinel CoAl_2O_4 . Journal of Applied Physics, 2012, 111, 093723.	1.1	6
229	Origin of Long-Range Ferromagnetic Ordering in Metal-Organic Frameworks with Antiferromagnetic Dimeric-Cu(II) Building Units. Journal of the American Chemical Society, 2012, 134, 17286-17290.	6.6	86
230	Stability and electronic structures of CuInS solar cell absorbers. , 2012, , .		4
231	First-principles study on the effective masses of zinc-blend-derived $\text{Cu}_2\text{Zn}^{\text{IV}}$ ($\text{IV} = \text{Sn, Ge, Si}$) ETQq_1 0.7843	1.1	74
232	Strong Dzyaloshinskii-Moriya Interaction and Origin of Ferroelectricity in Cu_2OSeO_3 . Physical Review Letters, 2012, 109, 107203.	3.9	121
233	Origin of the significantly enhanced optical transitions in layered boron nitride. Physical Review B, 2012, 86, .	1.1	49
234	Abundance of $\text{Cu}_x\text{Zn}_{1-x}$ and $2\text{Cu}_x\text{Zn}_{1-x}$ defect clusters in kesterite solar cells. Applied Physics Letters, 2012, 101, .	1.5	178

#	ARTICLE	IF	CITATIONS
235	Si ₃ AlP: A New Promising Material for Solar Cell Absorber. Journal of the American Chemical Society, 2012, 134, 12653-12657.	6.6	37
236	Realizing a SnO ₂ -based ultraviolet light-emitting diode via breaking the dipole-forbidden rule. NPG Asia Materials, 2012, 4, e30-e30.	3.8	137
237	Crystal and electronic structures of Cu _x S solar cell absorbers. Applied Physics Letters, 2012, 100, .	1.5	105
238	First-Principles Study of Electronic Structure and Hydrogen Adsorption of 3d Transition Metal Exposed Paddle Wheel Frameworks. Journal of Physical Chemistry C, 2012, 116, 7386-7392.	1.5	14
239	P-type doping of lithium peroxide with carbon sheets. Applied Physics Letters, 2012, 101, .	1.5	19
240	Origin of the diverse behavior of oxygen vacancies in ABO ₃ perovskites: A symmetry based analysis. Physical Review B, 2012, 85, .	1.1	28
241	Kesterite Thin-Film Solar Cells: Advances in Materials Modelling of Cu ₂ ZnSnS ₄ . Advanced Energy Materials, 2012, 2, 400-409.	10.2	589
242	A Novel Codoping Approach for Enhancing the Performance of LiFePO ₄ Cathodes. Advanced Energy Materials, 2012, 2, 1028-1032.	10.2	72
243	Local Structure Around Te in Heavily Doped GaAs:Te using X-Ray Absorption Fine Structure. Acta Physica Polonica A, 2012, 121, 879-882.	0.2	1
244	Kesterites and Chalcopyrites: A Comparison of Close Cousins. Materials Research Society Symposia Proceedings, 2011, 1324, 97.	0.1	53
245	Microstructure, optical property, and electronic band structure of cuprous oxide thin films. Journal of Applied Physics, 2011, 110, .	1.1	45
246	Origin of charge separation in III-nitride nanowires under strain. Applied Physics Letters, 2011, 99, 262103.	1.5	6
247	Single-ion anisotropy, Dayaloshinskii-Moriya interaction, and negative magnetoresistance of the spin- $\frac{1}{2}$ $\text{Cu}_2\text{ZnSnS}_4$. Physical Review B, 2011, 83, .	1.1	39
248	Theoretical study of corundum as an ideal gate dielectric material for graphene transistors. Physical Review B, 2011, 84, .	1.1	56
249	Double-Hole-Mediated Coupling of Dopants and Its Impact on Band Gap Engineering in TiO_2 . Physical Review Letters, 2011, 106, 066801.	2.9	134
250	Doping properties of monoclinic BiVO ₄ studied by first-principles density-functional theory. Physical Review B, 2011, 83, .	1.1	194
251	Multi-component transparent conducting oxides: progress in materials modelling. Journal of Physics Condensed Matter, 2011, 23, 334210.	0.7	52
252	First-Principles Study of Lithium Borocarbide as a Cathode Material for Rechargeable Li ion Batteries. Journal of Physical Chemistry Letters, 2011, 2, 1129-1132.	2.1	36

#	ARTICLE	IF	CITATIONS
271	al diversity and electronic properties of Cu \times Sn \times <small>xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" ><mml:msub><mml:mrow </mml:mrow></mml:msub></mml:math>Sn<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"</small>		

#	ARTICLE	IF	CITATIONS
289	Microscopic Theory of Hysteretic Hydrogen Adsorption in Nanoporous Materials. Journal of the American Chemical Society, 2010, 132, 1510-1511.	6.6	19
290	Structural motifs in oxidized graphene: A genetic algorithm study based on density functional theory. Physical Review B, 2010, 82, .	1.1	77
291	Origin of the Diverse Melting Behaviors of Intermediate-Size Nanoclusters: Theoretical Study of AlN(N= 51 $\hat{\sim}$ 58, 64). Journal of the American Chemical Society, 2010, 132, 18287-18291.	6.6	24
292	Passivation of deep electronic states of partial dislocations in GaAs: A theoretical study. Applied Physics Letters, 2010, 96, .	1.5	24
293	Defect physics of the kesterite thin-film solar cell absorber Cu ₂ ZnSnS ₄ . Applied Physics Letters, 2010, 96, .	1.5	454
294	The roles of CU impurity states in CdTe thin film solar cells. , 2010, , .		11
295	Structures of [Ag ₇ (SR) ₄] ⁺ and [Ag ₇ (DMSA) ₄] ⁺ . Journal of the American Chemical Society, 2010, 132, 7355-7360.	6.6	60
296	Origin of antiferromagnetism in CoO: A density functional theory study. Applied Physics Letters, 2010, 96, .	1.5	56
297	Native defect-induced multifarious magnetism in nonstoichiometric cuprous oxide: First-principles study of bulk and surface properties of Cu_{1-x} . Physical Review B, 2009, 79, .	1.1	109
298	Ordered ground state wurtzite alloys from zinc-blende parent compounds. Physical Review B, 2009, 80, .	1.1	3
299	Exchange-induced negative-U charge order in N-doped WO ₃ : A spin-Peierls-like system. Physical Review B, 2009, 80, .	1.1	14
300	Comparison of atomistic simulations and statistical theories for variable degree of long-range order in semiconductor alloys. Physical Review B, 2009, 80, .	1.1	1
301	Understanding the Clean Interface between Covalent Si and Ionic Al ₂ O ₃ . Physical Review Letters, 2009, 103, 116101.	2.9	20
302	Origin of the phase transition of AlN, GaN, and ZnO nanowires. Applied Physics Letters, 2009, 94, .	1.5	18
303	Walsh, Da Silva, and Wei Reply:. Physical Review Letters, 2009, 102, .	2.9	7
304	Group-III A versus III B delafossites: Electronic structure study. Physical Review B, 2009, 80, .	1.1	69
305	Enhancing dopant solubility via epitaxial surfactant growth. Physical Review B, 2009, 80, .	1.1	18
306	Origin of the Ising ferrimagnetism and spin-charge coupling in LuFe ₂ . Physical Review B, 2009, 80, .	1.1	32

#	ARTICLE	IF	CITATIONS
307	Atomistic origins of the phase transition mechanism in Ge ₂ Sb ₂ Te ₅ . Journal of Applied Physics, 2009, 106, .	1.1	29
308	Design of shallow acceptors in ZnO through compensated donor-acceptor complexes: A density functional calculation. Physical Review B, 2009, 80, .	1.1	28
309	Stability of a planar defect structure of the wurtzite AlN $\frac{1}{10} \frac{1}{1.1} \frac{1}{1.07}$	1.1	12
310	Density functional study. Physical Review B, 2009, 80, . Ferrimagnetic Fe-doped GaN: An unusual magnetic phase in dilute magnetic semiconductors. Physical Review B, 2009, 79, .	1.1	27
311	Symmetry-breaking-induced enhancement of visible light absorption in delafossite alloys. Applied Physics Letters, 2009, 94, 251907.	1.5	20
312	Revised <i>ab initio</i> natural band offsets of all group IV, II-VI, and III-V semiconductors. Applied Physics Letters, 2009, 94, .	1.5	188
313	Configuration dependence of the electronic structure and optical properties of BC ₂ N alloys. Physica Status Solidi (B): Basic Research, 2009, 246, 589-593.	0.7	5
314	Electronic structure and stability of quaternary chalcogenide semiconductors derived from cation cross-substitution of II-VI and III-VI $\frac{1.1}{2} \frac{413}{1.1}$	1.1	413
315	Identifying Optimal Inorganic Nanomaterials for Hybrid Solar Cells. Journal of Physical Chemistry C, 2009, 113, 18968-18972.	1.5	34
316	Shape Control of Al Nanoclusters by Ligand Size. Journal of the American Chemical Society, 2009, 131, 8522-8526.	6.6	21
317	Interplay between Order and Disorder in the High Performance of Amorphous Transparent Conducting Oxides. Chemistry of Materials, 2009, 21, 5119-5124.	3.2	90
318	Electronic structure and phase stability of MgTe, ZnTe, CdTe, and their alloys in the B ₃ , B ₄ , and B ₈ structures. Physical Review B, 2009, 79, .	1.1	55
319	Magnetic states of zigzag graphene nanoribbons from first principles. Applied Physics Letters, 2009, 94, .	1.5	41
320	Narrow Graphene Nanoribbons Made Easier by Partial Hydrogenation. Nano Letters, 2009, 9, 4025-4030.	4.5	120
321	Effects of Side-Chain and Electron Exchange Correlation on the Band Structure of Perylene Diimide Liquid Crystals: A Density Functional Study. Journal of Physical Chemistry B, 2009, 113, 5376-5380.	1.2	12
322	Origin of electronic and optical trends in ternary $\ln \frac{1}{2} \frac{74}{1.1}$ conducting oxides Physical Review B, 2009, 79, .	1.1	74
323	Crystal and electronic band structure of Cu ₂ ZnSnX ₄ (X=S and Se) photovoltaic absorbers: First-principles insights. Applied Physics Letters, 2009, 94, .	1.5	585
324	Band Edge Electronic Structure of BiVO ₄ : Elucidating the Role of the Bi s and V d Orbitals. Chemistry of Materials, 2009, 21, 547-551.	3.2	624

#	ARTICLE	IF	CITATIONS
325	Design of Narrow-Gap TiO_2 : A Passivated Codoping Approach for Enhanced Photoelectrochemical Activity. <i>Physical Review Letters</i> , 2009, 102, 036402.	2.9	728
326	Structural, electronic, and optical properties of the In_2O_3 (ZnO) $_n$ system. , 2009, , .		0
327	Origin and Enhancement of Hole-Induced Ferromagnetism in First-Row d^0 Semiconductors. <i>Physical Review Letters</i> , 2009, 102, 017201.	2.9	392
328	Ternary cobalt spinel oxides for solar driven hydrogen production: Theory and experiment. <i>Energy and Environmental Science</i> , 2009, 2, 774.	15.6	60
329	Theoretical investigation of atomic and electronic structures of Ga_2Zn_7 . <i>Physical Review B</i> , 2009, 80, .	1.1	27
330	Design of quaternary chalcogenide photovoltaic absorbers through cation mutation. , 2009, , .		7
331	Quaternary semiconductors with positive crystal field splitting: Potential high-efficiency spin-polarized electron sources. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	14
332	Large-Scale Ab Initio Study of Size, Shape, and Doping Effects on Electronic Structure of Nanocrystals. , 2009, , 193-211.		0
333	Filling the green gap: A first-principles study of the $\text{LiMg}_x\text{Zn}_x\text{N}$ alloy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 2326-2328.	0.8	1
334	Doping asymmetry in wide-bandgap semiconductors: Origins and solutions. <i>Physica Status Solidi (B): Basic Research</i> , 2008, 245, 641-652.	0.7	187
335	Enhanced Ferromagnetic Stability in Cu Doped Passivated GaN Nanowires. <i>Nano Letters</i> , 2008, 8, 1825-1829.	4.5	54
336	Electronic structure and phase stability of MgO, ZnO, CdO, and related ternary alloys. <i>Physical Review B</i> , 2008, 77, .	1.1	186
337	Electronic, Energetic, and Chemical Effects of Intrinsic Defects and Fe-Doping of CoAl_2O_4 : A DFT+U Study. <i>Journal of Physical Chemistry C</i> , 2008, 112, 12044-12050.	1.5	75
338	Origins of band-gap renormalization in degenerately doped semiconductors. <i>Physical Review B</i> , 2008, 78, .	1.1	282
339	Spin-Orbit Coupling and Ion Displacements in Multiferroic TbMnO_3 . <i>Physical Review Letters</i> , 2008, 101, 037209.	2.9	171
340	Theoretical Description of Carrier Mediated Magnetism in Cobalt Doped ZnO. <i>Physical Review Letters</i> , 2008, 100, 256401.	2.9	261
341	Strain relaxation and band-gap tunability in ternary $\text{In}_x\text{Al}_{1-x}\text{N}$. <i>Physical Review B</i> , 2008, 78, .	1.1	69
342	Structural and electronic properties of [0001] AlN nanowires: A first-principles study. <i>Journal of Applied Physics</i> , 2008, 104, 084313.	1.1	20

#	ARTICLE	IF	CITATIONS
361	Structural, magnetic, and electronic properties of the Co-Fe-Al oxide spinel system: Density-functional theory calculations. <i>Physical Review B</i> , 2007, 76, .	1.1	168
362	Chemical trends of defect formation in Si quantum dots: The case of group-III and group-V dopants. <i>Physical Review B</i> , 2007, 75, .	1.1	48
363	Atomic structure of In ₂ O ₃ /ZnO systems. <i>Applied Physics Letters</i> , 2007, 90, 261904.	1.5	32
364	Chen, Gong, and Wei Reply:. <i>Physical Review Letters</i> , 2007, 99, .	2.9	9
365	Stability and electronic structures of CuxTe. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	61
366	Theoretical study of stability and electronic structure of Li(Mg,Zn)N alloys: A candidate for solid state lighting. <i>Physical Review B</i> , 2007, 76, .	1.1	20
367	The Mechanism of J-V Roll-Over in CdS/CdTe Devices. <i>Materials Research Society Symposia Proceedings</i> , 2007, 1012, 1.	0.1	4
368	Effects of the wave function localization in AlInGaN quaternary alloys. <i>Applied Physics Letters</i> , 2007, 91, 061125.	1.5	38
369	Possible Approach to Overcome the Doping Asymmetry in Wideband Gap Semiconductors. <i>Physical Review Letters</i> , 2007, 98, 135506.	2.9	204
370	Band-structure anomalies of the chalcopyrite semiconductors CuGaX ₂ versus AgGaX ₂ (X=S and Se) and their alloys. <i>Physical Review B</i> , 2007, 75, .	1.1	132
371	Electrically Benign Behavior of Grain Boundaries in Polycrystalline CuInSe_2 Films. <i>Physical Review Letters</i> , 2007, 99, 235504.	2.9	192
372	Superhard Pseudocubic BC ₂ N Superlattices. <i>Physical Review Letters</i> , 2007, 98, 015502.	2.9	71
373	Phase control of CuxTe film and its effects on CdS/CdTe solar cell. <i>Thin Solid Films</i> , 2007, 515, 5798-5803.	0.8	143
374	Unintentional doping and compensation effects of carbon in metal-organic chemical-vapor deposition fabricated ZnO thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2006, 24, 1213-1217.	0.9	27
375	Synthesis and Characterization of Nitrogen-Doped ZnO Films Grown by MOCVD. , 2006, , 43-83.		3
376	Band-gap bowing coefficients in large size-mismatched II-VI alloys: first-principles calculations. <i>Physical Review B</i> , 2006, 74, .	1.1	78
377	First-principles study of native defects in anatase TiO ₂ . <i>Physical Review B</i> , 2006, 73, .	1.1	346
378	Doping of ZnO by group-IB elements. <i>Applied Physics Letters</i> , 2006, 89, 181912.	1.5	275

#	ARTICLE	IF	CITATIONS
379	Study of Phase Selectivity of Organic-Inorganic Hybrid Semiconductors. Chemistry of Materials, 2006, 18, 2805-2809.	3.2	35
380	Ab initio all-electron calculation of absolute volume deformation potentials of IV-IV, III-V, and II-VI semiconductors: The chemical trends. Physical Review B, 2006, 73, .	1.1	140
381	Carrier-mediated stabilization of ferromagnetism in semiconductors: holes and electrons. Physica Status Solidi (B): Basic Research, 2006, 243, 2170-2187.	0.7	46
382	Impurity effects in ZnO and nitrogen-doped ZnO thin films fabricated by MOCVD. Journal of Crystal Growth, 2006, 287, 94-100.	0.7	60
383	Phenomenological band structure model of magnetic coupling in semiconductors. Solid State Communications, 2006, 138, 353-358.	0.9	134
384	Design of shallow acceptors in ZnO: First-principles band-structure calculations. Physical Review B, 2006, 74, .	1.1	198
385	Probing deactivations in Nitrogen doped ZnO by vibrational signatures: A first principles study. Physica B: Condensed Matter, 2006, 376-377, 686-689.	1.3	23
386	Study of defect levels in CdTe using thermoelectric effect spectroscopy. Journal of Electronic Materials, 2006, 35, 1333-1340.	1.0	76
387	Novel Approach to Tuning the Physical Properties of Organic-Inorganic Hybrid Semiconductors. Physical Review Letters, 2006, 96, 026405.	2.9	52
388	Mutual Passivation of Donors and Isovalent Nitrogen in GaAs. Physical Review Letters, 2006, 96, 035505.	2.9	20
389	Impurity-induced phase stabilization of semiconductors. Applied Physics Letters, 2006, 89, 011907.	1.5	20
390	Band gap of Hg chalcogenides: Symmetry-reduction-induced band-gap opening of materials with inverted band structures. Physical Review B, 2006, 74, .	1.1	51
391	Ab initio calculation of hydrostatic absolute deformation potential of semiconductors. Applied Physics Letters, 2006, 88, 042104.	1.5	81
392	Alignment of isovalent impurity levels: Oxygen impurity in II-VI semiconductors. Physical Review B, 2006, 73, .	1.1	39
393	Ordering induced direct and indirect transitions in semiconductor alloys. Physical Review B, 2006, 74, .	1.1	4
394	Electron-mediated ferromagnetism and negative s-d exchange splitting in semiconductors. Physical Review B, 2006, 73, .	1.1	23
395	Defect properties of CuInSe ₂ and CuGaSe ₂ . Journal of Physics and Chemistry of Solids, 2005, 66, 1994-1999.	1.9	84
396	Impurity-stabilized zinc-blende phase of wurtzite compounds. Journal of Physics and Chemistry of Solids, 2005, 66, 2008-2010.	1.9	2

#	ARTICLE	IF	CITATIONS
397	Substitutional diatomic molecules NO, NC, CO, N ₂ , and O ₂ : Their vibrational frequencies and effects on p doping of ZnO. Applied Physics Letters, 2005, 86, 211910.	1.5	121
398	Vibrational and crystalline properties of polymorphic CuInC ₂ (C=Se,S) chalcogenides. Physical Review B, 2005, 71, .	1.1	86
399	Evolution of structural properties and formation of N-N split interstitials in GaAs _{1-x} N _x alloys. Physical Review B, 2005, 71, .	1.1	39
400	Electron-induced stabilization of ferromagnetism in Ga _{1-x} Gd _x N. Physical Review B, 2005, 72, .	1.1	120
401	First-principles study of Mn-induced local magnetic moments in host semiconductors. Physical Review B, 2005, 71, .	1.1	23
402	Transition from ferromagnetism to antiferromagnetism in Ga _{1-x} Mn _x N. Journal of Applied Physics, 2005, 98, 083905.	1.1	18
403	Oxygen-vacancy mediated adsorption and reactions of molecular oxygen on the ZnO(101̄0) surface. Physical Review B, 2005, 72, .	1.1	78
404	Step Structures on III-V Phosphide (001) Surfaces: How Do Steps and Sb affect CuPt Ordering of GaInP ₂ ?. Physical Review Letters, 2005, 94, 096101.	2.9	13
405	Photoinduced cation interstitial diffusion in II-VI semiconductors. Physical Review B, 2005, 72, .	1.1	14
406	Hydrogen passivation effect in nitrogen-doped ZnO thin films. Applied Physics Letters, 2005, 86, 122107.	1.5	139
407	Structure-derived electronic and optical properties of transparent conducting oxides. Physical Review B, 2005, 71, .	1.1	123
408	Stability of the DX̄-Center in GaAs Quantum Dots. Physical Review Letters, 2005, 94, 185501.	2.9	47
409	Theoretical study of the band-gap anomaly of InN. Journal of Applied Physics, 2005, 97, 033707.	1.1	124
410	Dielectric functions and electronic band structure of lead zirconate titanate thin films. Journal of Applied Physics, 2005, 98, 094108.	1.1	62
411	Effects of alloying, ordering, and strain on the exchange parameters of II-VI dilute magnetic semiconductors. Physical Review B, 2004, 70, .	1.1	7
412	Effect of Zn on the cation vacancy isoelectronic oxygen pair in Cd _{1-x} Zn _x Te crystals. Physical Review B, 2004, 70, .	1.1	2
413	Theory of Mn supersaturation in Si and Ge. Physical Review B, 2004, 70, .	1.1	35
414	Hole-Mediated Stabilization of Cubic GaN. Physical Review Letters, 2004, 93, 216401.	2.9	32

#	ARTICLE	IF	CITATIONS
415	Surface Energy and the Common Dangling Bond Rule for Semiconductors. <i>Physical Review Letters</i> , 2004, 92, 086102.	2.9	130
416	Effects of N on the electronic structures of H defects in III-V semiconductors. <i>Optical Materials</i> , 2004, 25, 261-269.	1.7	4
417	Energetics and electronic structure of stacking faults in ZnO. <i>Physical Review B</i> , 2004, 70, .	1.1	85
418	Doping by Large-Size-Mismatched Impurities: The Microscopic Origin of Arsenic- or Antimony-Doped p-Type Zinc Oxide. <i>Physical Review Letters</i> , 2004, 92, 155504.	2.9	584
419	Isoelectronic oxygen-related defect in CdTe crystals investigated using thermoelectric effect spectroscopy. <i>Physical Review B</i> , 2004, 69, .	1.1	40
420	Calculated spin-orbit splitting of all diamondlike and zinc-blende semiconductors: Effects of l^2 local orbitals and chemical trends. <i>Physical Review B</i> , 2004, 70, .	1.1	152
421	Overcoming the doping bottleneck in semiconductors. <i>Computational Materials Science</i> , 2004, 30, 337-348.	1.4	462
422	Epitaxially stabilized AgGaSe ₂ for high-efficiency spin-polarized electron source. <i>Journal of Physics and Chemistry of Solids</i> , 2003, 64, 1881-1885.	1.9	1
423	Interactions between nitrogen, hydrogen, and gallium vacancies in GaAs _{1-x} N _x alloys. <i>Physical Review B</i> , 2003, 67, .	1.1	99
424	Band structure and fundamental optical transitions in wurtzite AlN. <i>Applied Physics Letters</i> , 2003, 83, 5163-5165.	1.5	310
425	Breakdown of the band-gap-common-cation rule: The origin of the small band gap of InN. <i>Physical Review B</i> , 2003, 67, .	1.1	97
426	Quadruple-period ordering in MBE GaAsSb alloys. <i>Materials Research Society Symposia Proceedings</i> , 2003, 794, 49.	0.1	0
427	Local structure of CuIn ₃ Se ₅ : X-ray absorption fine structure study and first-principles calculations. <i>Physical Review B</i> , 2003, 68, .	1.1	29
428	Donor-donor binding in semiconductors: Engineering shallow donor levels for ZnTe. <i>Applied Physics Letters</i> , 2003, 83, 3522-3524.	1.5	23
429	Effects of covalency, p^d coupling, and epitaxial strain on the band offsets of II-VI semiconductors. <i>Physical Review B</i> , 2003, 68, .	1.1	14
430	Design of Shallow Donor Levels in Diamond by Isovalent-Donor Coupling. <i>Physical Review Letters</i> , 2003, 91, 126406.	2.9	79
431	Growth Model for Atomic Ordering: The Case for Quadruple-Period Ordering in GaAsSb Alloys. <i>Physical Review Letters</i> , 2003, 90, 026102.	2.9	8
432	Electronic and magnetic properties of MnN versus MnAs. <i>Applied Physics Letters</i> , 2003, 82, 766-768.	1.5	44

#	ARTICLE	IF	CITATIONS
433	Understanding Ultrahigh Doping: The Case of Boron in Silicon. <i>Physical Review Letters</i> , 2003, 90, 026103.	2.9	41
434	Electronic and optical properties of δ -layer GaN/(GaAs) _n superlattices. <i>Physical Review B</i> , 2003, 67, .	1.1	0
435	Chemical Design of Direct-Gap Light-Emitting Silicon. <i>Physical Review Letters</i> , 2002, 89, 076802.	2.9	15
436	Hydrogen Vibration Modes in GaP:N: The Pivotal Role of Nitrogen in Stabilizing the H ₂ ⁺ Complex. <i>Physical Review Letters</i> , 2002, 88, 125506.	2.9	42
437	Self-doping of cadmium stannate in the inverse spinel structure. <i>Applied Physics Letters</i> , 2002, 80, 1376-1378.	1.5	54
438	First-principles study of transparent p-type conductive SrCu ₂ O ₂ and related compounds. <i>Physical Review B</i> , 2002, 65, .	1.1	85
439	Theoretical study of the effects of isovalent co-alloying of Bi and N in GaAs. <i>Physical Review B</i> , 2002, 65, .	1.1	235
440	Computational design of a material for high-efficiency spin-polarized electron source. <i>Applied Physics Letters</i> , 2002, 81, 3957-3959.	1.5	17
441	Polymorphism in CuInS ₂ epilayers: Origin of additional Raman modes. <i>Applied Physics Letters</i> , 2002, 80, 562-564.	1.5	74
442	Chemical trends of defect formation and doping limit in II-VI semiconductors: The case of CdTe. <i>Physical Review B</i> , 2002, 66, .	1.1	548
443	Effects of Ordering on Physical Properties of Semiconductor Alloys. , 2002, , 423-450.		2
444	Bipolar Doping and Band-Gap Anomalies in Delafossite Transparent Conductive Oxides. <i>Physical Review Letters</i> , 2002, 88, 066405.	2.9	314
445	Origin of p-type doping difficulty in ZnO: The impurity perspective. <i>Physical Review B</i> , 2002, 66, .	1.1	1,068
446	Effects of Hydrogen on the Electronic Properties of Dilute GaAsN Alloys. <i>Physical Review Letters</i> , 2002, 89, 086403.	2.9	95
447	Nitrogen-Stabilized H ₂ ⁺ Defects in GaP:N. <i>Materials Research Society Symposia Proceedings</i> , 2002, 719, 631.	0.1	0
448	First-Principles Study of Doping Limits of CdTe. <i>Physica Status Solidi (B): Basic Research</i> , 2002, 229, 305-310.	0.7	56
449	First-principles study of cation distribution in eighteen closed-shell AIB ₂ III ₂ O ₄ and AIVB ₂ IIIO ₄ spinel oxides. <i>Physical Review B</i> , 2001, 63, .	1.1	162
450	Structure Investigations of Several In-rich (Cu _{2-x} Se) _x (In _{2-x} Se ₃) _x Compositions: From Local Structure to Long Range Order. <i>Materials Research Society Symposia Proceedings</i> , 2001, 668, 1.	0.1	2

#	ARTICLE	IF	CITATIONS
451	Nitrogen solubility and N-induced defect complexes in epitaxial GaAs:N. <i>Physica B: Condensed Matter</i> , 2001, 308-310, 839-842.	1.3	8
452	Structural and electronic properties of ZnGeAs ₂ . <i>Physical Review B</i> , 2001, 63, .	1.1	25
453	Nitrogen Solubility and Induced Defect Complexes in Epitaxial GaAs:N. <i>Physical Review Letters</i> , 2001, 86, 1789-1792.	2.9	228
454	Steps on As-Terminated Ge(001) Revisited: Theory versus Experiment. <i>Physical Review Letters</i> , 2001, 87, 166104.	2.9	16
455	Electronic Structure and Stability of Spinel Oxides. <i>Japanese Journal of Applied Physics</i> , 2000, 39, 251.	0.8	5
456	Long and Short Range Ordering of CuInSe ₂ . <i>Japanese Journal of Applied Physics</i> , 2000, 39, 411.	0.8	5
457	Observation and first-principles calculation of buried wurtzite phases in zinc-blende CdTe thin films. <i>Applied Physics Letters</i> , 2000, 77, 1461-1463.	1.5	58
458	Microscopic Origin of the Phenomenological Equilibrium "Doping Limit Rule"-Type III-V Semiconductors. <i>Physical Review Letters</i> , 2000, 84, 1232-1235.	2.9	204
459	First-principles calculation of band offsets, optical bowings, and defects in CdS, CdSe, CdTe, and their alloys. <i>Journal of Applied Physics</i> , 2000, 87, 1304-1311.	1.1	406
460	Structure stability and carrier localization in CdX(X=S,Se,Te)semiconductors. <i>Physical Review B</i> , 2000, 62, 6944-6947.	1.1	212
461	Band Structure and Stability of Ternary Semiconductor Polytypes. <i>Japanese Journal of Applied Physics</i> , 2000, 39, 237.	0.8	2
462	Electronic Structure of "Sequence Mutations" in Ordered GaInP ₂ Alloys. <i>Physical Review Letters</i> , 1999, 83, 2010-2013.	2.9	40
463	Effects of Na on the electrical and structural properties of CuInSe ₂ . <i>Journal of Applied Physics</i> , 1999, 85, 7214-7218.	1.1	322
464	Multiband coupling and electronic structure of (InAs) _n /(GaSb) _n superlattices. <i>Physical Review B</i> , 1999, 60, 5590-5596.	1.1	65
465	Predicted band-gap pressure coefficients of all diamond and zinc-blende semiconductors: Chemical trends. <i>Physical Review B</i> , 1999, 60, 5404-5411.	1.1	542
466	Resonant hole localization and anomalous optical bowing in InGaN alloys. <i>Applied Physics Letters</i> , 1999, 74, 1842-1844.	1.5	173
467	Localization and anticrossing of electron levels in GaAs _{1-x} N _x alloys. <i>Physical Review B</i> , 1999, 60, R11245-R11248.	1.1	210
468	Band structure and stability of zinc-blende-based semiconductor polytypes. <i>Physical Review B</i> , 1999, 59, R2478-R2481.	1.1	79

#	ARTICLE	IF	CITATIONS
469	Transmission electron microscopy investigation and first-principles calculation of the phase stability in epitaxial CuInS ₂ and CuGaSe ₂ films. Applied Physics Letters, 1999, 74, 2483-2485.	1.5	49
470	Elements of doping engineering in semiconductors. , 1999, , .		6
471	A phenomenological model for systematization and prediction of doping limits in II-VI and III-V compounds. Journal of Applied Physics, 1998, 83, 3192-3196.	1.1	412
472	Fingerprints of CuPt ordering in III-V semiconductor alloys: Valence-band splittings, band-gap reduction, and x-ray structure factors. Physical Review B, 1998, 57, 8983-8988.	1.1	103
473	Majority Representation of Alloy Electronic States. Physical Review Letters, 1998, 80, 4725-4728.	2.9	101
474	Trends in band-gap pressure coefficients in chalcopyrite semiconductors. Physical Review B, 1998, 58, R1710-R1713.	1.1	62
475	Calculated natural band offsets of all II-VI and III-V semiconductors: Chemical trends and the role of cation d orbitals. Applied Physics Letters, 1998, 72, 2011-2013.	1.5	726
476	Effects of Ga addition to CuInSe ₂ on its electronic, structural, and defect properties. Applied Physics Letters, 1998, 72, 3199-3201.	1.5	482
477	Defect physics of the CuInSe ₂ chalcopyrite semiconductor. Physical Review B, 1998, 57, 9642-9656.	1.1	1,264
478	Spin polarization of photoelectrons from ordered semiconductor alloys. , 1998, , .		0
479	Bond-length distribution in tetrahedral versus octahedral semiconductor alloys: The case of Ga _{1-x} In _x N. Physical Review B, 1997, 56, 13872-13877.	1.1	20
480	Point-ion versus density functional calculations of electric field gradients in ordered GaInP ₂ . Journal of Chemical Physics, 1997, 107, 1931-1935.	1.2	11
481	Stabilization of Ternary Compounds via Ordered Arrays of Defect Pairs. Physical Review Letters, 1997, 78, 4059-4062.	2.9	303
482	Composition dependence of interband transition intensities in GaPN, GaAsN, and GaPAs alloys. Physical Review B, 1997, 56, 10233-10240.	1.1	137
483	Electronic and structural anomalies in lead chalcogenides. Physical Review B, 1997, 55, 13605-13610.	1.1	279
484	Band gaps of GaPN and GaAsN alloys. Applied Physics Letters, 1997, 70, 3558-3560.	1.5	164
485	Valence band splittings and band offsets of AlN, GaN, and InN. Applied Physics Letters, 1996, 69, 2719-2721.	1.5	322
486	Fundamental optical transitions in GaN. Applied Physics Letters, 1996, 68, 2784-2786.	1.5	185

#	ARTICLE	IF	CITATIONS
487	Localization and percolation in semiconductor alloys: GaAsN vs GaAsP. Physical Review B, 1996, 54, 17568-17576.	1.1	278
488	Giant and Composition-Dependent Optical Bowing Coefficient in GaAsN Alloys. Physical Review Letters, 1996, 76, 664-667.	2.9	526
489	Chemical trends in band offsets of Zn- and Mn-based II-VI superlattices: d-level pinning and offset compression. Physical Review B, 1996, 53, R10457-R10460.	1.1	20
490	Point-charge electrostatics in disordered alloys. Physical Review B, 1996, 54, 7843-7856.	1.1	26
491	Prediction of New Fingerprints of Ordering in GaInP ₂ Alloys. Materials Research Society Symposia Proceedings, 1995, 417, 103.	0.1	3
492	Dependence of Optical Properties of Semiconductor Alloys on Long Range Order, Strain and Pressure. Materials Research Society Symposia Proceedings, 1995, 417, 3.	0.1	1
493	E ₁ , E ₂ , and E ₀ transitions and pressure dependence in ordered Ga _{0.5} In _{0.5} P. Physical Review B, 1995, 51, 13097-13102.	1.1	17
494	Theory of reflectance-difference spectroscopy in ordered III-V semiconductor alloys. Physical Review B, 1995, 51, 14110-14114.	1.1	8
495	Effects of ordering on the electron effective mass and strain deformation potential in GaInP ₂ : Deficiencies of the k·p model. Physical Review B, 1995, 52, 13992-13997.	1.1	30
496	InAsSb/InAs: A type-I or a type-II band alignment. Physical Review B, 1995, 52, 12039-12044.	1.1	70
497	d-band excitations in II-VI semiconductors: A broken-symmetry approach to the core hole. Physical Review B, 1995, 52, 13975-13982.	1.1	35
498	Band offsets and optical bowings of chalcopyrites and Zn-based II-VI alloys. Journal of Applied Physics, 1995, 78, 3846-3856.	1.1	446
499	Structural instability in zinc-blende semiconductors. Ferroelectrics, 1994, 155, 127-132.	0.3	0
500	First-principles simulated-annealing study of phase transitions and short-range order in transition-metal and semiconductor alloys. Physical Review B, 1994, 50, 6642-6661.	1.1	79
501	Optical properties of zinc-blende semiconductor alloys: Effects of epitaxial strain and atomic ordering. Physical Review B, 1994, 49, 14337-14351.	1.1	143
502	Absolute deformation potentials of Al, Si, and NaCl. Physical Review B, 1994, 50, 17797-17801.	1.1	41
503	Type-II to type-I transition in (GaX) _n /(InX) _n (001) superlattices (X=P, Sb) as a function of period n. Physical Review B, 1994, 50, 8094-8097.	1.1	13
504	Optical anisotropy and spin polarization in ordered GaInP. Applied Physics Letters, 1994, 64, 1676-1678.	1.5	36

#	ARTICLE	IF	CITATIONS
505	Prediction and observation of II-VI/CuInSe ₂ heterojunction band offsets. Journal of Electron Spectroscopy and Related Phenomena, 1994, 68, 185-193.	0.8	24
506	Relationships between the band gaps of the zinc-blende and wurtzite modifications of semiconductors. Physical Review B, 1994, 50, 2715-2718.	1.1	175
507	Strain effects on the spectra of spontaneously ordered GaIn _{1-x} P. Applied Physics Letters, 1994, 64, 757-759.	1.5	27
508	Electronic origins of the magnetic phase transitions in zinc-blende Mn chalcogenides. Physical Review B, 1993, 48, 6111-6115.	1.1	71
509	Off-center atomic displacements in zinc-blende semiconductor. Physical Review Letters, 1993, 70, 1639-1642.	2.9	53
510	ELECTRONIC STRUCTURE OF II-VI SEMICONDUCTORS AND THEIR ALLOYS. , 1993, , 71-101.		0
511	Relativity-Induced Ordering and Phase Separation in Intermetallic Compounds. Europhysics Letters, 1993, 21, 221-226.	0.7	38
512	Dependence of the optical properties of semiconductor alloys on the degree of long-range order. Applied Physics Letters, 1993, 62, 1937-1939.	1.5	139
513	Band offsets at the CdS/CuInSe ₂ heterojunction. Applied Physics Letters, 1993, 63, 2549-2551.	1.5	103
514	Theoretical and experimental studies of the ZnSe/CuInSe ₂ heterojunction band offset. Applied Physics Letters, 1993, 62, 2557-2559.	1.5	45
515	First-principles phase diagrams of pseudoternary chalcopyrite zinc-blende alloys. Physical Review B, 1993, 47, 9985-9988.	1.1	17
516	First-principles calculation of the order-disorder transition in chalcopyrite semiconductors. Physical Review B, 1992, 45, 2533-2536.	1.1	90
517	Evolution of alloy properties with long-range order. Physical Review Letters, 1992, 69, 3766-3769.	2.9	91
518	Comment on "Origins of compositional order in NiPt alloys". Physical Review Letters, 1992, 68, 1961-1961.	2.9	22
519	Theory of bonding charge density in NiAl . Acta Metallurgica Et Materialia, 1992, 40, 2155-2165.	1.9	38
520	Electronic structure of ordered and disordered Cu ₃ Au and Cu ₃ Pd. Physical Review B, 1992, 45, 10314-10330.	1.1	89
521	Disorder effects on the density of states of the II-VI semiconductor alloys Hg _{0.5} Cd _{0.5} Te, Cd _{0.5} Zn _{0.5} Te, and Hg _{0.5} Zn _{0.5} Te. Physical Review B, 1991, 43, 1662-1677.	1.1	90
522	Pseudopotential plane-wave calculations for ZnS. Physical Review B, 1991, 43, 2213-2217.	1.1	144

#	ARTICLE	IF	CITATIONS
523	Proposal for III-V ordered alloys with infrared band gaps. Applied Physics Letters, 1991, 58, 2684-2686.	1.5	59
524	First-principles statistical mechanics of structural stability of intermetallic compounds. Physical Review B, 1991, 44, 512-544.	1.1	286
525	Ground state structures of intermetallic compounds: A first-principles Ising model. Solid State Communications, 1991, 78, 583-588.	0.9	18
526	Electronic structure of random Ag _{0.5} Pd _{0.5} and Ag _{0.5} Au _{0.5} alloys. Physical Review B, 1991, 44, 10470-10484.	1.1	62
527	Large lattice-relaxation-induced electronic level shifts in random Cu _{1-x} Pd _x alloys. Physical Review B, 1991, 44, 3387-3390.	1.1	51
528	Long-range order in binary late-transition-metal alloys. Physical Review Letters, 1991, 66, 1753-1756.	2.9	105
529	Instability of diatomic deuterium in fcc palladium. Journal of Fusion Energy, 1990, 9, 367-370.	0.5	3
530	Stability of atomic and diatomic hydrogen in fcc palladium. Solid State Communications, 1990, 73, 327-330.	0.9	7
531	Ordering in semiconductor alloys. Applied Physics Letters, 1990, 56, 731-733.	1.5	47
532	Stability of coherently strained semiconductor superlattices. Physical Review Letters, 1990, 64, 36-39.	2.9	71
533	Ground-state structures and the random-state energy of the Madelung lattice. Physical Review B, 1990, 42, 11388-11391.	1.1	147
534	Absence of volume metastability in bcc copper. Physical Review B, 1990, 41, 2699-2703.	1.1	39
535	First-principles calculation of temperature-composition phase diagrams of semiconductor alloys. Physical Review B, 1990, 41, 8240-8269.	1.1	267
536	Electronic properties of random alloys: Special quasirandom structures. Physical Review B, 1990, 42, 9622-9649.	1.1	829
537	Band-gap narrowing in ordered and disordered semiconductor alloys. Applied Physics Letters, 1990, 56, 662-664.	1.5	241
538	Special quasirandom structures. Physical Review Letters, 1990, 65, 353-356.	2.9	2,702
539	Negative spin-orbit bowing in semiconductor alloys. Physical Review B, 1989, 39, 6279-6282.	1.1	33
540	First-principles calculation of the formation energies of ordered and disordered phases of AlAs-GaAs. Physical Review B, 1989, 40, 1642-1646.	1.1	11

#	ARTICLE	IF	CITATIONS
541	Band gaps and spin-orbit splitting of ordered and disordered $\text{Al}_x\text{Ga}_{1-x}\text{As}$ and $\text{GaAs}_x\text{Sb}_{1-x}$ alloys. <i>Physical Review B</i> , 1989, 39, 3279-3304.	1.1	231
542	First-principles calculation of alloy phase diagrams: The renormalized-interaction approach. <i>Physical Review B</i> , 1989, 40, 3197-3231.	1.1	259
543	A novel viewpoint on the Cu–Au phase diagram: The interplay between fixed ising energies and elastic effects. <i>Acta Metallurgica</i> , 1988, 36, 2239-2248.	2.1	40
544	Electronic structure of II–VI compounds and their alloys – role of cation d bands. <i>Journal of Crystal Growth</i> , 1988, 86, 1-7.	0.7	25
545	Ordering-induced changes in the optical spectra of semiconductor alloys. <i>Applied Physics Letters</i> , 1988, 52, 311-313.	1.5	35
546	Role of metal states in II-VI semiconductors. <i>Physical Review B</i> , 1988, 37, 8958-8981.	1.1	578
547	Electronic structure of ultrathin $(\text{GaAs})_n(\text{AlAs})_n[001]$ superlattices and the $\text{Ga}_{0.5}\text{Al}_{0.5}\text{As}$ alloy. <i>Journal of Applied Physics</i> , 1988, 63, 5794-5804.	1.1	76
548	Thermodynamic Stability of $(\text{AlAs})_n(\text{GaAs})_n$ Superlattices and the Random $\text{Al}_{0.5}\text{Ga}_{0.5}\text{As}$ Alloy. <i>Physical Review Letters</i> , 1988, 61, 1505-1508.	2.9	38
549	(111) oriented $(\text{GaAs})_n(\text{AlAs})_n$ superlattices are direct band-gap materials for all $n \in \mathbb{N}$. <i>Applied Physics Letters</i> , 1988, 53, 2077-2079.	1.5	30
550	Epitaxy-induced structural phase transformations. <i>Physical Review B</i> , 1988, 38, 10124-10127.	1.1	59
551	Stability and electronic structure of ultrathin $[001] (\text{GaAs})_m(\text{AlAs})_m$ superlattices. <i>Physical Review B</i> , 1988, 37, 1342-1363.	1.1	63
552	Ordering of isovalent intersemiconductor alloys. <i>Physical Review B</i> , 1988, 38, 6338-6341.	1.1	106
553	Role of d Orbitals in Valence-Band Offsets of Common-Anion Semiconductors. <i>Perspectives in Condensed Matter Physics</i> , 1988, , 200-203.	0.1	1
554	Calculation of the valence band offsets of common-anion semiconductor heterojunctions from core levels: The role of cation d orbitals. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1987, 5, 1239.	1.6	20
555	Comment on "Coulomb Energy in Pseudobinary Alloys". <i>Physical Review Letters</i> , 1987, 59, 2613-2613.	2.9	9
556	First-principles calculations of the phase diagrams of noble metals: Cu-Au, Cu-Ag, and Ag-Au. <i>Physical Review B</i> , 1987, 36, 4163-4185.	1.1	147
557	Electronic structure of $M_3\text{Sb}$ -type filled tetrahedral semiconductors. <i>Physical Review B</i> , 1987, 35, 3952-3961.	1.1	26
558	Common-anion rule and its limits: Photoemission studies of $\text{CuIn}_x\text{Ga}_{1-x}\text{Se}_2$ -Ge and $\text{Cu}_x\text{Ag}_{1-x}\text{InSe}_2$ -Ge interfaces. <i>Physical Review B</i> , 1987, 36, 9388-9391.	1.1	9

#	ARTICLE	IF	CITATIONS
559	Thermodynamic instability of ultrathin semiconductor superlattices: The (001) (GaAs) _{1-x} (AlAs) _x structure. <i>Physical Review Letters</i> , 1987, 58, 1123-1126.	2.9	64
560	Role of d orbitals in valence-band offsets of common-anion semiconductors. <i>Physical Review Letters</i> , 1987, 59, 144-147.	2.9	196
561	Total-energy and band-structure calculations for the semimagnetic Cd _{1-x} Mn _x Te semiconductor alloy and its binary constituents. <i>Physical Review B</i> , 1987, 35, 2340-2365.	1.1	235
562	Work in the solid state theory group at the solar energy research institute. <i>Solar Cells</i> , 1987, 21, 458-459.	0.6	0
563	Band Structure and Electronic Excitations in Cd _{1-x} Mn _x Te. <i>Materials Research Society Symposia Proceedings</i> , 1986, 89, 197.	0.1	0
564	Alloy-Stabilized Semiconducting and Magnetic Zinc-Blende Phase of MnTe. <i>Physical Review Letters</i> , 1986, 56, 2391-2394.	2.9	72
565	Instability of the ideal tungsten (001) surface. <i>Physical Review Letters</i> , 1986, 57, 3292-3295.	2.9	63
566	Electronic structure and phase stability of LiZnAs: A half ionic and half covalent tetrahedral semiconductor. <i>Physical Review Letters</i> , 1986, 56, 528-531.	2.9	104
567	Local-Density-Functional Calculation of the Pressure-Induced Metallization of BaSe and BaTe. <i>Physical Review Letters</i> , 1985, 55, 1200-1203.	2.9	491
568	Linearized augmented-plane-wave calculation of the electronic structure and total energy of tungsten. <i>Physical Review B</i> , 1985, 32, 7792-7797.	1.1	137
569	Revisiting the defect physics in CuInSe ₂ and CuGaSe ₂ . , 0, , .		3
570	Electronic structure and doping of p-type transparent conducting oxides. , 0, , .		1