

David Joseph Singh

List of Publications by Year in descending order

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355
papers

51,865
citations

5876

81
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1341

223
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363
all docs

363
docs citations

363
times ranked

32456
citing authors

#	ARTICLE	IF	CITATIONS
1	Wet-chemistry hydrogen doped TiO ₂ with switchable defects control for photocatalytic hydrogen evolution. <i>Matter</i> , 2022, 5, 206-218.	5.0	66
2	Favorable Energy Band Alignment of TiO ₂ Anatase/Rutile Heterophase Homojunctions Yields Photocatalytic Hydrogen Evolution with Quantum Efficiency Exceeding 45.6%. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	106
3	Computational search for itinerant n -type and p -type magnetic semiconductors: Arsenopyrites as bipolar magnetic semiconductors. <i>Physical Review B</i> , 2022, 105, .	1.1	0
4	Low thermal conductivity and high thermoelectric performance via Cd underbonding in half-Heusler PCdNa. <i>Physical Review B</i> , 2022, 105, .	1.1	15
5	Progress of graphdiyne-based materials for anodes of alkali metal ion batteries. <i>Nano Futures</i> , 2022, 6, 022004.	1.0	4
6	Complex structure due to As bonding and interplay with electronic structure in superconducting BaNi_2As_2 . <i>Physical Review B</i> , 2022, 105, .	1.1	5
7	Dirac Fermion Cloning, Moiré Flat Bands, and Magic Lattice Constants in Epitaxial Monolayer Graphene. <i>Advanced Materials</i> , 2022, 34, e2200625.	11.1	9
8	Unraveling the relationships between chemical bonding and thermoelectric properties: n-type ABO ₃ perovskites. <i>Journal of Materials Chemistry A</i> , 2022, 10, 11039-11045.	5.2	10
9	Favorable Energy Band Alignment of TiO ₂ Anatase/Rutile Heterophase Homojunctions Yields Photocatalytic Hydrogen Evolution with Quantum Efficiency Exceeding 45.6% (Adv. Energy) Tj ETQq1 1 0.784314 rgB/Overlo	10.2	106
10	Ta_2Te_5 : A possible one-dimensional topological insulator. <i>Physical Review B</i> , 2022, 105, .	1.1	0
11	Self-Intercalation Tunable Interlayer Exchange Coupling in a Synthetic van der Waals Antiferromagnet. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	10
12	KCo_2 : A new portal for the physics of high-purity metals. <i>Physical Review Materials</i> , 2022, 6, .	1.1	0
13	Atomically Dispersed MoO _x on Rhodium Metallene Boosts Electrocatalyzed Alkaline Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	57
14	Violation of the rule of parsimony: Mixed local moment and itinerant Fe magnetism in Fe_3Te_2 . <i>Physical Review B</i> , 2022, 106, .	1.1	0
15	Designing Rashba systems for high thermoelectric performance based on the van der Waals heterostructure. <i>Materials Today Physics</i> , 2022, 27, 100788.	2.9	1
16	Origin of giant electric-field-induced strain in faulted alkali niobate films. <i>Nature Communications</i> , 2022, 13, .	5.8	11
17	TransOpt. A code to solve electrical transport properties of semiconductors in constant electron-phonon coupling approximation. <i>Computational Materials Science</i> , 2021, 186, 110074.	1.4	55
18	First-principles study of electronic and optical properties of ternary compounds AuBX ₂ (X = S, Se, Te) and AuMTe ₂ (M = Al, In, Ga). <i>Solid State Sciences</i> , 2021, 111, 106508.	1.5	27

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19	Vertical Strain Engineering of Epitaxial La _{2/3} Sr _{1/3} MnO ₃ Thin Films by Spontaneously Embedding ZrO ₂ Nanopillar Arrays. <i>Advanced Materials Interfaces</i> , 2021, 8, 2001355.	1.9	1
20	Disorder and Itinerant Magnetism in Full Heusler Pd ₂ TiIn. <i>Chinese Physics Letters</i> , 2021, 38, 017102.	1.3	1
21	Storage mechanism of K in hydrogen-substituted graphdiyne as a superior anode. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12320-12330.	5.2	4
22	Improved thermoelectric transport properties of Ge ₄ Se ₃ Te through dimensionality reduction. <i>Journal of Materials Chemistry C</i> , 2021, 9, 1804-1813.	2.7	17
23	Binary and Ternary Colloidal Cu ₂ SnTe Nanocrystals for Thermoelectric Thin Films. <i>Small</i> , 2021, 17, e2006729.	5.2	8
24	Vacancy ordering induced topological electronic transition in bulk Eu ₂ ZnSb ₂ . <i>Science Advances</i> , 2021, 7, .	4.7	21
25	Multigap electron-phonon superconductivity in the quasi-one-dimensional pnictide KMo_3 . <i>Physical Review B</i> , 2021, 103, .	1.1	4
26	Stable Bimetallene Hydride Boosts Anodic CO Tolerance of Fuel Cells. <i>ACS Energy Letters</i> , 2021, 6, 1912-1919.	8.8	48
27	Deformation and ductile fracture of nanocrystalline gold ultrathin nanoribbon: Width effect. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2021, 44, 1850-1861.	1.7	5
28	Ferromagnetism in a Semiconductor with Mobile Carriers via Low-Level Nonmagnetic Doping. <i>Physical Review Applied</i> , 2021, 15, .	1.5	3
29	Room-temperature intrinsic ferromagnetism in epitaxial CrTe ₂ ultrathin films. <i>Nature Communications</i> , 2021, 12, 2492.	5.8	179
30	Zintl chemistry leading to ultralow thermal conductivity, semiconducting behavior, and high thermoelectric performance of hexagonal KBaBi. <i>Physical Review B</i> , 2021, 103, .	1.1	24
31	Thermoelectrics by Computational Design: Progress and Opportunities. <i>Annual Review of Materials Research</i> , 2021, 51, 565-590.	4.3	23
32	Adsorption of K Ions on Single-Layer GeC for Potential Anode of K Ion Batteries. <i>Nanomaterials</i> , 2021, 11, 1900.	1.9	6
33	Interior Melting of Rapidly Heated Gold Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 8170-8177.	2.1	6
34	Identification of a low-energy metastable 1T'-type phase for monolayer VSe ₂ . <i>Physical Review B</i> , 2021, 104, .	1.1	2
35	Intrinsic nanostructure induced ultralow thermal conductivity yields enhanced thermoelectric performance in Zintl phase Eu ₂ ZnSb ₂ . <i>Nature Communications</i> , 2021, 12, 5718.	5.8	34
36	Type-II Dirac cones and electron-phonon interaction in monolayer biphenylene from first-principles calculations. <i>Physical Review B</i> , 2021, 104, .	1.1	33

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37	Thermoelectric Properties of Zintl Phase YbMg_2Sb_2 . Chemistry of Materials, 2020, 32, 776-784.	3.2	40
38	Recent progress of TMD nanomaterials: phase transitions and applications. Nanoscale, 2020, 12, 1247-1268.	2.8	132
39	Bandgap Tunable Ternary $\text{Cd}_x\text{Sb}_{2-2x}\text{S}_3$ Nanocrystals for Solar Cell Applications. ACS Omega, 2020, 5, 113-121.	1.6	4
40	Prediction of superconductivity and topological aspects in single-layer Bi_2Pd . Physical Review B, 2020, 102, .	1.1	10
41	The Effect of Strain Rate on the Deformation Processes of NC Gold with Small Grain Size. Crystals, 2020, 10, 858.	1.0	3
42	Ultralow Thermal Conductivity in CsSbSe Compounds: Lattice Instability versus Lone-Pair Electrons. Chemistry of Materials, 2020, 32, 8906-8913.	3.2	18
43	Giant piezoelectricity in oxide thin films with nanopillar structure. Science, 2020, 369, 292-297.	6.0	86
44	Copper(I)-Based Flexible Organic-Inorganic Coordination Polymer and Analogues: High-Power Factor Thermoelectrics. ACS Applied Materials & Interfaces, 2020, 12, 53841-53851.	4.0	14
45	Defect-mediated Rashba engineering for optimizing electrical transport in thermoelectric BiTeI . Npj Computational Materials, 2020, 6, .	3.5	24
46	Shortcomings of meta-GGA functionals when describing magnetism. Physical Review B, 2020, 102, .	1.1	27
47	Competing magnetic orders in quantum critical Sr_3O_7 . Physical Review B, 2020, 102, .	1.1	5
48	Pressure-driven significant phonon mode softening and robust superconductivity in layered germanium phosphide. Journal of Materials Chemistry A, 2020, 8, 20054-20061.	5.2	17
49	Second Harmonic Generation Susceptibilities from Symmetry Adapted Wannier Functions. Physical Review Letters, 2020, 125, 187402.	2.9	94
50	Localization in the SCAN meta-generalized gradient approximation functional leading to broken symmetry ground states for graphene and benzene. Physical Chemistry Chemical Physics, 2020, 22, 19585-19591.	1.3	8
51	Superstructures and Superconductivity Linked with Pd Intercalation in $\text{Nb}_2\text{Pd}_x\text{Se}_5$. Chemistry of Materials, 2020, 32, 8361-8366.	3.2	1
52	Enhanced Thermoelectric Performance in Black Phosphorus Nanotubes by Band Modulation through Tailoring Nanotube Chirality. Small, 2020, 16, e2001820.	5.2	13
53	Thermoelectric properties of monolayer GeAsSe and SnSbTe . Journal of Materials Chemistry C, 2020, 8, 9763-9774.	2.7	22
54	Establishing the carrier scattering phase diagram for ZrNiSn -based half-Heusler thermoelectric materials. Nature Communications, 2020, 11, 3142.	5.8	87

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55	Heating-Rate and Particle-Size Effects on Melting Process of Au Nanoparticles. Journal of Physical Chemistry C, 2020, 124, 7414-7420.	1.5	12
56	Bi _{0.5} Sb _{1.5} Te ₃ -based films for flexible thermoelectric devices. Journal of Materials Chemistry A, 2020, 8, 4552-4561.	5.2	53
57	Electronic and magnetic properties of perovskite selenite and tellurite compounds: CoSeO_3 , and NiTeO . Physical Review B, 2020, 101, .	1.1	11
58	Achieving high-performance p-type SmMg ₂ Bi ₂ thermoelectric materials through band engineering and alloying effects. Journal of Materials Chemistry A, 2020, 8, 15760-15766.	5.2	21
59	Quantum critical point and ferromagnetic semiconducting behavior in p-type FeAs ₂ . Physical Review B, 2020, 101, .	1.1	5
60	Characterization of rattling in relation to thermal conductivity: Ordered half-Heusler semiconductors. Physical Review B, 2020, 101, .	1.1	43
61	Hydrogen Stabilized RhPdH 2D Bimetalene Nanosheets for Efficient Alkaline Hydrogen Evolution. Journal of the American Chemical Society, 2020, 142, 3645-3651.	6.6	152
62	Defect Engineering for Realizing p-Type AgBiSe ₂ with a Promising Thermoelectric Performance. Chemistry of Materials, 2020, 32, 3528-3536.	3.2	17
63	Nanocrystalline gold with small size: inverse Hall-Petch between mixed regime and super-soft regime. Philosophical Magazine, 2020, 100, 2335-2351.	0.7	21
64	Interplay of local moment and itinerant magnetism in cobalt-based Heusler ferromagnets: Co_2 and Co_2 . Physical Review B, 2020, 101, .	1.1	17
65	Understanding the lattice thermal conductivity of SrTiO_3 from an <i>ab initio</i> perspective. Physical Review Materials, 2020, 4, .	0.9	1
66	Prediction of ternary alkaline-earth metal Sn(II) and Pb(II) chalcogenide semiconductors. Physical Review Materials, 2020, 4, .	0.9	1
67	The thermal and thermoelectric transport properties of SiSb, GeSb and SnSb monolayers. Journal of Materials Chemistry C, 2019, 7, 10652-10662.	2.7	36
68	Electronic structure as a guide in screening for potential thermoelectrics: Demonstration for half-Heusler compounds. Physical Review B, 2019, 100, .	1.1	34
69	Density functional methods for the magnetism of transition metals: SCAN in relation to other functionals. Physical Review B, 2019, 100, .	1.1	42
70	n-Type TaCoSn-Based Half-Heuslers as Promising Thermoelectric Materials. ACS Applied Materials & Interfaces, 2019, 11, 41321-41329.	4.0	44
71	Orthorhombic to monoclinic phase transition in NbNiTe ₂ . Physical Review B, 2019, 100, .	1.1	1
72	3D Printing of Solution-Processable 2D Nanoplates and 1D Nanorods for Flexible Thermoelectrics with Ultrahigh Power Factor at Low-Medium Temperatures. Advanced Science, 2019, 6, 1901788.	5.6	33

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73	Interplay of electronic, magnetic, and structural properties of GdBi_6 from first principles. <i>Physical Review B</i> , 2019, 100, .		
74	Bottom-up growth of homogeneous Moiré superlattices in bismuth oxychloride spiral nanosheets. <i>Nature Communications</i> , 2019, 10, 4472.	5.8	59
75	Understanding the asymmetrical thermoelectric performance for discovering promising thermoelectric materials. <i>Science Advances</i> , 2019, 5, eaav5813.	4.7	52
76	Structural instability and magnetism of superconducting KCr_3Bi_3 . <i>Physical Review B</i> , 2019, 99, .		
77	Doping dependence of the magnitude of fluctuating spin moments in the normal state of the pnictide superconductor $\text{Sr}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ inferred from photoemission spectroscopy. <i>Physical Review B</i> , 2019, 99, .	1.1	0
78	Complex Band Structures and Lattice Dynamics of Bi_2Te_3 -Based Compounds and Solid Solutions. <i>Advanced Functional Materials</i> , 2019, 29, 1900677.	7.8	135
79	High-Throughput Screening for Advanced Thermoelectric Materials: Diamond-Like ABX_2 Compounds. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 24859-24866.	4.0	72
80	Divalent doping-induced thermoelectric power factor increase in p-type Bi_2Te_3 via electronic structure tuning. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	11
81	Achieving band convergence by tuning the bonding ionicity in n-type Mg_3Sb_2 . <i>Journal of Computational Chemistry</i> , 2019, 40, 1693-1700.	1.5	68
82	Switchable Out-of-Plane Polarization in 2D LiAlTe_2 . <i>Advanced Electronic Materials</i> , 2019, 5, 1900089.	2.6	20
83	Layered Tl_2O : a model thermoelectric material. <i>Journal of Materials Chemistry C</i> , 2019, 7, 5094-5103.	2.7	46
84	Thermal conductivity of MoS_2 monolayers from molecular dynamics simulations. <i>AIP Advances</i> , 2019, 9, .	0.6	22
85	Boron-oxygen complex yields n-type surface layer in semiconducting diamond. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 7703-7711.	3.3	60
86	Multi Band Gap Electronic Structure in $\text{CH}_3\text{NH}_3\text{PbI}_3$. <i>Scientific Reports</i> , 2019, 9, 2144.	1.6	26
87	Tunable Optical Properties in $\text{Sn}_x\text{Sb}_{2-x}\text{S}_3$: A New Solar Absorber Material with an Efficiency of near 5%. <i>Journal of Physical Chemistry C</i> , 2019, 123, 5209-5215.	1.5	12
88	$\text{Ba}_3\text{CrN}_3\text{H}$: A New Nitride-Hydride with Trigonal Planar Cr^{4+} . <i>Inorganic Chemistry</i> , 2019, 58, 3302-3307.	1.9	16
89	Molecular Bridge Thermal Diode Enabled by Vibrational Mismatch. <i>Physical Review Applied</i> , 2019, 11, .	1.5	11
90	Storage of Na in layered graphdiyne as high capacity anode materials for sodium ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25609-25618.	5.2	20

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91	Tuning from frustrated magnetism to superconductivity in quasi-one-dimensional KCr_3As_5 through hydrogen doping. Physical Review B, 2019, 100, .	1.1	11
92	Melting of Nanocrystalline Gold. Journal of Physical Chemistry C, 2019, 123, 907-914.	1.5	4
93	Discovery of TaFeSb-based half-Heuslers with high thermoelectric performance. Nature Communications, 2019, 10, 270.	5.8	227
94	Adsorption of Na on silicene for potential anode for Na-ion batteries. Electrochimica Acta, 2019, 297, 497-503.	2.6	35
95	First principles based screen for identification of transparent conductors. Journal of Materials Chemistry C, 2019, 7, 2436-2442.	2.7	5
96	Adsorption of Li on single-layer silicene for anodes of Li-ion batteries. Physical Chemistry Chemical Physics, 2018, 20, 8887-8896.	1.3	62
97	Thermoelectric properties of layered $NaSbSe_2$. Journal of Physics Condensed Matter, 2018, 30, 225501.	0.7	10
98	Synthesis and Crystal Structure of the Layered Lanthanide Oxochlorides $Ba_3Ln_2O_5Cl_2$. Inorganic Chemistry, 2018, 57, 1727-1734.	1.9	9
99	Reemergence of high- T_c superconductivity in the $(Li_{1-x}Fe_x)OHFe_{1-y}Se$ under high pressure. Nature Communications, 2018, 9, 380.	5.8	60
100	Orbital controlled band gap engineering of tetragonal $BiFeO_3$ for optoelectronic applications. Journal of Materials Chemistry C, 2018, 6, 1239-1247.	2.7	80
101	Collective-Goldstone-mode-induced ultralow lattice thermal conductivity in Sn-filled skutterudite $SnFe_4Sb_{11}$. Physical Review B, 2018, 97, .	1.1	11
102	Large thermoelectric power factor from crystal symmetry-protected non-bonding orbital in half-Heuslers. Nature Communications, 2018, 9, 1721.	5.8	111
103	Bismuth and antimony-based oxyhalides and chalcogenides as potential optoelectronic materials. Npj Computational Materials, 2018, 4, .	3.5	86
104	Efficient Discovery of Optimal N-Layered TMDC Hetero-Structures. MRS Advances, 2018, 3, 397-402.	0.5	5
105	$Pb_5Sb_8S_{17}$ quantum dot sensitized solar cells with an efficiency of 6% under 0.05 sun: theoretical and experimental studies. Progress in Photovoltaics: Research and Applications, 2018, 26, 205-213.	4.4	13
106	First principles study on $2H \rightarrow 1T$ transition in MoS_2 with copper. Physical Chemistry Chemical Physics, 2018, 20, 26986-26994.	1.3	39
107	Experimental Identification of Critical Condition for Drastically Enhancing Thermoelectric Power Factor of Two-Dimensional Layered Materials. Nano Letters, 2018, 18, 7538-7545.	4.5	72
108	Applicability of the Strongly Constrained and Appropriately Normed Density Functional to Transition-Metal Magnetism. Physical Review Letters, 2018, 121, 207201.	2.9	118

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109	Active learning for accelerated design of layered materials. Npj Computational Materials, 2018, 4, .	3.5	107
110	Dielectric Behavior as a Screen in Rational Searches for Electronic Materials: Metal Pnictide Sulfosalts. Journal of the American Chemical Society, 2018, 140, 18058-18065.	6.6	69
111	Frustrated Structural Instability in Superconducting Quasi-One-Dimensional $K_2\text{Pt}_3\text{Sb}_3$. Physical Review Letters, 2018, 121, 167002.	2.9	16
112	Modulation of Hydrogen Evolution Catalytic Activity of Basal Plane in Monolayer Platinum and Palladium Dichalcogenides. ACS Omega, 2018, 3, 10058-10065.	1.6	46
113	Thermoelectric properties of p-type cubic and rhombohedral GeTe. Journal of Applied Physics, 2018, 123, .	1.1	40
114	Optimal Bandgap in a 2D Ruddlesden-Popper Perovskite Chalcogenide for Single-Junction Solar Cells. Chemistry of Materials, 2018, 30, 4882-4886.	3.2	49
115	Phase-transition temperature suppression to achieve cubic GeTe and high thermoelectric performance by Bi and Mn codoping. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5332-5337.	3.3	183
116	Tunability of electronic and optical properties of the BaZrS system via dimensional reduction. European Physical Journal B, 2018, 91, 1.	0.6	16
117	Giant optical anisotropy in a quasi-one-dimensional crystal. Nature Photonics, 2018, 12, 392-396.	15.6	269
118	Spin-orbit coupled systems in the atomic limit: rhenates, osmates, iridates. Physical Review B, 2018, 97, .	1.1	25
119	Discovery of ZrCoBi based half Heuslers with high thermoelectric conversion efficiency. Nature Communications, 2018, 9, 2497.	5.8	243
120	Optical and electronic properties of doped p-type CuI: Explanation of transparent conductivity from first principles. Physical Review Materials, 2018, 2, .	0.9	7
121	Thermal conductivity of perovskite KTaO_3 and PbTiO_3 from first principles. Physical Review Materials, 2018, 2, .	0.9	16
122	First-principles study of tantalum-arsenic binary compounds. Journal of Applied Physics, 2017, 121, 015101.	1.1	3
123	Using gapped topological surface states of Bi ₂ Se ₃ films in a field effect transistor. Journal of Applied Physics, 2017, 121, .	1.1	16
124	First-principles mode-by-mode analysis for electron-phonon scattering channels and mean free path spectra in GaAs. Physical Review B, 2017, 95, .	1.1	125
125	Tuning the carrier scattering mechanism to effectively improve the thermoelectric properties. Energy and Environmental Science, 2017, 10, 799-807.	15.6	326
126	Pressure-induced insulator-to-metal transitions for enhancing thermoelectric power factor in bismuth telluride-based alloys. Physical Chemistry Chemical Physics, 2017, 19, 12784-12793.	1.3	23

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145	Prospective high thermoelectric performance of the heavily p -doped half-Heusler compound CoVSn. Physical Review B, 2017, 95, .	1.1	37
146	High- T_c Superconductivity in FeSe at High Pressure: Dominant Hole Carriers and Enhanced Spin Fluctuations. Physical Review Letters, 2017, 118, 147004.	2.9	64
147	Sn(II)-Containing Phosphates as Optoelectronic Materials. Chemistry of Materials, 2017, 29, 2459-2465.	3.2	17
148	Prediction of nontrivial band topology and superconductivity in $MgPb$. Physical Review Materials, 2017, 1, .	0.9	8
149	CaO_3 and $BaPbO_2$. Physical Review Materials, 2017, 1, .	0.9	10
150	Electronic fitness function for screening semiconductors as thermoelectric materials. Physical Review Materials, 2017, 1, .	0.9	98
151	Properties of the ferroelectric visible light absorbing semiconductors: $PbSn_2P_6S_6$ and $S_6Sn_2P_6$. Physical Review Materials, 2017, 1, .	0.9	23
152	Harnessing Topological Band Effects in Bismuth Telluride Selenide for Large Enhancements in Thermoelectric Properties through Isovalent Doping. Advanced Materials, 2016, 28, 6436-6441.	11.1	44
153	Modulation of electronic properties from stacking orders and spin-orbit coupling for 3R-type MoS ₂ . Scientific Reports, 2016, 6, 24140.	1.6	23
154	On the tuning of electrical and thermal transport in thermoelectrics: an integrated theory–experiment perspective. Npj Computational Materials, 2016, 2, .	3.5	399
155	Candidate Elastic Quantum Critical Point in $LaCu_6$. Nonrigid band shift and nonmonotonic electronic structure changes upon doping in the normal state of the pnictide high-temperature superconductor. Physical Review Letters, 2016, 117, 015701.	2.9	14
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163	Intermediate regime between metal and superconductor below $T = 100$ K in NiSi. Physical Review B, 2016, 94, .	1.1	2
164	Perspective: <i>n</i> -type oxide thermoelectrics via visual search strategies. APL Materials, 2016, 4, .	2.2	42
165	Pressure evolution of the potential barriers of phase transition of MoS ₂ , MoSe ₂ and MoTe ₂ . Physical Chemistry Chemical Physics, 2016, 18, 12080-12085.	1.3	38
166	Valence Band Splitting on Multilayer MoS ₂ : Mixing of Spin-Orbit Coupling and Interlayer Coupling. Journal of Physical Chemistry Letters, 2016, 7, 2175-2181.	2.1	73
167	Design of ternary alkaline-earth metal Sn oxides with potential good p-type conductivity. Journal of Materials Chemistry C, 2016, 4, 4592-4599.	2.7	29
168	ThFeAsN in relation to other iron-based superconductors. Journal of Alloys and Compounds, 2016, 687, 786-789.	2.8	17
169	Intrinsic ultralow lattice thermal conductivity of the unfilled skutterudite FeSb_3 . Physical Review B, 2016, 94, .	1.1	11
170	Interference evidence for Rashba-type spin splitting on a semimetallic WT_2 surface. Physical Review B, 2016, 94, .	1.1	11
171	Electronic nature of the lock-in magnetic transition in CeX_2 . Physical Review B, 2016, 93, .	1.1	40
172	Coexistence of Weyl physics and planar defects in the semimetals TaP and TaAs. Physical Review B, 2016, 93, .	1.1	40
173	Evidence for proximity of a magnetic quantum critical point. Physical Review B, 2016, 93, .	1.3	9
174	Adsorption and diffusion of Li with S on pristine and defected graphene. Physical Chemistry Chemical Physics, 2016, 18, 31268-31276.	1.3	9
175	Competing covalent and ionic bonding in Ge-Sb-Te phase change materials. Scientific Reports, 2016, 6, 25981.	1.6	35
176	Controlling phase transition for single-layer MTe ₂ (M = Mo and W): modulation of the potential barrier under strain. Physical Chemistry Chemical Physics, 2016, 18, 4086-4094.	1.3	105
177	Properties of MgGe_2Sn . Physical Review Applied, 2016, 5, .	1.5	45
178	High-Pressure Phase Stability and Superconductivity of Pnictogen Hydrides and Chemical Trends for Compressed Hydrides. Chemistry of Materials, 2016, 28, 1746-1755.	3.2	68
179	Metallic nickel silicides: Experiments and theory for NiSi and first principles calculations for other phases. Journal of Alloys and Compounds, 2016, 672, 110-116.	2.8	28
180	Benefits of Carrier-Pocket Anisotropy to Thermoelectric Performance: The Case of AgBiSe_2 . Physical Review Applied, 2015, 3, .	1.5	84

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181	Magnetic order and electronic structure of the perovskite $\text{Sr}_{1-x}\text{Ca}_x\text{FeAs}_2$. Physical Review B, 2015, 91, .	1.1	58
182	Spectroscopic evidence for strong quantum spin fluctuations with itinerant character in YFe_2Ge_2 . Physical Review B, 2015, 91, .	1.1	21
183	Synthesis of monoclinic IrTe_2 under high pressure and its physical properties. Physical Review B, 2015, 92, .	1.1	6
184	Electronic structure and weak itinerant magnetism in metallic Y_2Ni_7 . Physical Review B, 2015, 92, .	1.1	8
185	Transport properties of cubic crystalline $\text{Ge}_2\text{Sb}_2\text{Te}_5$: A potential low-temperature thermoelectric material. Applied Physics Letters, 2015, 106, .	1.5	17
186	Magnetism in Na-filled Fe-based skutterudites. Scientific Reports, 2015, 5, 10782.	1.6	12
187	Electronic, transport, and optical properties of bulk and mono-layer PdSe_2 . Applied Physics Letters, 2015, 107, .	1.5	170
188	Multiband Semimetallic Electronic Structure of Superconducting Ta_2PdSe_5 . PLoS ONE, 2015, 10, e0123667.	1.1	5
189	Atomic Resolution STEM-EELS Study of Transition Electronic Localization State Induced by Strain. Microscopy and Microanalysis, 2015, 21, 617-618.	0.2	0
190	Transparent conducting properties of SrSnO_3 and ZnSnO_3 . APL Materials, 2015, 3, 062505.	2.2	65
191	Ensemble averaging vs. time averaging in molecular dynamics simulations of thermal conductivity. Journal of Applied Physics, 2015, 117, .	1.1	19
192	Connecting Thermoelectric Performance and Topological-Insulator Behavior: Bi_2Te_3 . Physical Review Applied, 2015, 3, .	1.5	178
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