

# 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  
g-index

363  
all docs

363  
docs citations

363  
times ranked

32456  
citing authors

#	ARTICLE	IF	CITATIONS
1	Atoms, molecules, solids, and surfaces: Applications of the generalized gradient approximation for exchange and correlation. Physical Review B, 1992, 46, 6671-6687.	1.1	19,217
2	BoltzTraP. A code for calculating band-structure dependent quantities. Computer Physics Communications, 2006, 175, 67-71.	3.0	4,184
3	Unconventional Superconductivity with a Sign Reversal in the Order Parameter of $\text{LaFeAsO}$ . Physical Review Letters, 2008, 101, 057003.	2.9	1,049
4	Density Functional Study of $\text{LaFeAsO}$ : A Low Carrier Density Superconductor Near Itinerant Magnetism. Physical Review Letters, 2008, 100, 237003.	2.9	1,049
5	Superconductivity at 22 K in Co-Doped $\text{BaFeAs}$ . Physical Review Letters, 2008, 101, 117004.	2.9	1,049
6	Electronic structure and half-metallic transport in the $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$ system. Physical Review B, 1996, 53, 1146-1160.	1.1	750
7	Giant anharmonic phonon scattering in PbTe. Nature Materials, 2011, 10, 614-619.	13.3	561
8	Light scattering and surface plasmons on small spherical particles. Light: Science and Applications, 2014, 3, e179-e179.	7.7	450
9	On the tuning of electrical and thermal transport in thermoelectrics: an integrated theory-experiment perspective. Npj Computational Materials, 2016, 2, .	3.5	399
10	Electronic structure and magnetism in Ru-based perovskites. Physical Review B, 1997, 56, 2556-2571.	1.1	377
11	Problems with reconciling density functional theory calculations with experiment in ferropnictides. Physical Review B, 2008, 78, .	1.1	352
12	Tuning the carrier scattering mechanism to effectively improve the thermoelectric properties. Energy and Environmental Science, 2017, 10, 799-807.	15.6	326
13	Electronic correlations in the iron pnictides. Nature Physics, 2009, 5, 647-650.	6.5	317
14	Ferromagnetic Spin Fluctuation Induced Superconductivity in $\text{Sr}_2\text{RuO}_4$ . Physical Review Letters, 1997, 79, 733-736.	2.9	311
15	Electronic structure calculations with the Tran-Blaha modified Becke-Johnson density functional. Physical Review B, 2010, 82, .	1.1	292
16	Calculated thermoelectric properties of La-filled skutterudites. Physical Review B, 1997, 56, R1650-R1653.	1.1	283
17	Electronic structure of the iron-based superconductor $\text{LaOFeP}$ . Nature, 2008, 455, 81-84.	13.7	279
18	Giant optical anisotropy in a quasi-one-dimensional crystal. Nature Photonics, 2018, 12, 392-396.	15.6	269

#	ARTICLE	IF	CITATIONS
19	Manipulation of ionized impurity scattering for achieving high thermoelectric performance in n-type Mg <sub>3</sub> Sb <sub>2</sub> -based materials. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10548-10553.	3.3	267
20	Analysis of the thermoelectric properties of $\langle \text{mml:mrow} \langle \text{mml:mi} n \rangle \rangle \langle \text{mml:math} \rangle$ -type ZnO. Physical Review B, 2011, 83, .	1.1	265
21	Relationship of Sr <sub>2</sub> RuO <sub>4</sub> to the superconducting layered cuprates. Physical Review B, 1995, 52, 1358-1361.	1.1	262
22	Doping-dependent thermopower of PbTe from Boltzmann transport calculations. Physical Review B, 2010, 81, .	1.1	259
23	Electronic structure and transport in type-I and type-VIII clathrates containing strontium, barium, and europium. Physical Review B, 2003, 68, .	1.1	251
24	High-temperature thermoelectric performance of heavily doped PbSe. Physical Review B, 2010, 82, .	1.1	243
25	Discovery of ZrCoBi based half Heuslers with high thermoelectric conversion efficiency. Nature Communications, 2018, 9, 2497.	5.8	243
26	Wide bandgap tunability in complex transition metal oxides by site-specific substitution. Nature Communications, 2012, 3, 689.	5.8	237
27	Competitions in Layered Ruthenates: Ferromagnetism versus Antiferromagnetism and Triplet versus Singlet Pairing. Physical Review Letters, 1999, 82, 4324-4327.	2.9	229
28	Discovery of TaFeSb-based half-Heuslers with high thermoelectric performance. Nature Communications, 2019, 10, 270.	5.8	227
29	Adsorption of Single Li and the Formation of Small Li Clusters on Graphene for the Anode of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2013, 5, 7793-7797.	4.0	190
30	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
31	Room-temperature intrinsic ferromagnetism in epitaxial CrTe <sub>2</sub> ultrathin films. Nature Communications, 2021, 12, 2492.	5.8	179
32	Connecting Thermoelectric Performance and Topological-Insulator Behavior: $\langle \text{mml:mrow} \langle \text{mml:mrow} \langle \text{mml:mi} Bi \rangle \rangle \langle \text{mml:mrow} \langle \text{mml:mrow} \langle \text{mml:mn} \rangle^2 \rangle \rangle \rangle \langle \text{mml:math} \rangle$	1.5	178
33	Electronic and magnetic properties of the 4d itinerant ferromagnet SrRuO <sub>3</sub> . Journal of Applied Physics, 1996, 79, 4818.	1.1	176
34	Electronic, transport, and optical properties of bulk and mono-layer PdSe <sub>2</sub> . Applied Physics Letters, 2015, 107, .	1.5	170
35	Gradient-corrected density functionals: Full-potential calculations for iron. Physical Review B, 1991, 43, 11628-11634.	1.1	166
36	Chemical bonding, conductive network, and thermoelectric performance of the ternary semiconductors Cu $\langle \text{mml:mrow} \langle \text{mml:mrow} \langle \text{mml:mi} Bi \rangle \rangle \langle \text{mml:mrow} \langle \text{mml:mrow} \langle \text{mml:mn} \rangle^2 \rangle \rangle \rangle \langle \text{mml:math} \rangle$ Sn $\langle \text{mml:mrow} \langle \text{mml:mrow} \langle \text{mml:mi} Bi \rangle \rangle \langle \text{mml:mrow} \langle \text{mml:mrow} \langle \text{mml:mn} \rangle^2 \rangle \rangle \rangle \langle \text{mml:math} \rangle$		

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37	Structure and optical properties of high light output halide scintillators. <i>Physical Review B</i> , 2010, 82, .	1.1	155
38	Bandgap Control via Structural and Chemical Tuning of Transition Metal Perovskite Chalcogenides. <i>Advanced Materials</i> , 2017, 29, 1604733.	11.1	154
39	Hydrogen Stabilized RhPdH 2D Bimetallene Nanosheets for Efficient Alkaline Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2020, 142, 3645-3651.	6.6	152
40	Importance of non-parabolic band effects in the thermoelectric properties of semiconductors. <i>Scientific Reports</i> , 2013, 3, 3168.	1.6	147
41	Quantum critical behavior and possible triplet superconductivity in electron-doped CoO <sub>2</sub> sheets. <i>Physical Review B</i> , 2003, 68, .	1.1	136
42	Complex Band Structures and Lattice Dynamics of Bi <sub>2</sub> Te <sub>3</sub> -Based Compounds and Solid Solutions. <i>Advanced Functional Materials</i> , 2019, 29, 1900677.	7.8	135
43	Unconventional electronic reconstruction in undoped Ba <sub>2</sub> Te: the spin density wave transition. <i>Physical Review B</i> , 2009, 80, .	1.1	134
44	Recent progress of TMD nanomaterials: phase transitions and applications. <i>Nanoscale</i> , 2020, 12, 1247-1268.	2.8	132
45	High Three-Dimensional Thermoelectric Performance from Low-Dimensional Bands. <i>Physical Review Letters</i> , 2013, 110, 146601.	2.9	131
46	Influence of band structure on the large thermoelectric performance of lanthanum telluride. <i>Physical Review B</i> , 2009, 79, .	1.1	129
47	Doping and temperature dependence of thermoelectric properties in Mg <sub>2</sub> (Si,Sn). <i>Physical Review B</i> , 2012, 86, .	1.1	126
48	Phonon Self-Energy and Origin of Anomalous Neutron Scattering Spectra in SnTe and PbTe Thermoelectrics. <i>Physical Review Letters</i> , 2014, 112, 175501.	2.9	125
49	First-principles mode-by-mode analysis for electron-phonon scattering channels and mean free path spectra in GaAs. <i>Physical Review B</i> , 2017, 95, .	1.1	125
50	First principles analysis of vibrational modes in KNbO <sub>3</sub> . <i>Ferroelectrics</i> , 1992, 136, 95-103.	0.3	121
51	Thermoelectric properties of AgGaTe <sub>2</sub> and related chalcopyrite structure materials. <i>Physical Review B</i> , 2012, 85, .	1.1	118
52	Applicability of the Strongly Constrained and Appropriately Normed Density Functional to Transition-Metal Magnetism. <i>Physical Review Letters</i> , 2018, 121, 207201.	2.9	118
53	Lattice dynamics and reduced thermal conductivity of filled skutterudites. <i>Physical Review B</i> , 2000, 61, R9209-R9212.	1.1	116
54	Electronic structure of the BaFe <sub>2</sub> As <sub>2</sub> of iron-pnictide superconductors. <i>Physical Review B</i> , 2009, 80, .	1.1	116

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55	Suppression of thermopower of $\text{NaCo}_2\text{O}_7$ . Electronic structure and magnetism in $\text{BaMn}_2\text{O}_7$ . Physical Review B, 2009, 79, .	1.1	114
56	Large thermoelectric power factor from crystal symmetry-protected non-bonding orbital in half-Heuslers. Nature Communications, 2018, 9, 1721.	1.1	112
57	Electric-field-gradient calculations for systems with large extended-core-state contributions. Physical Review B, 1992, 46, 1321-1325.	5.8	111
58	Strain effects on the band gap and optical properties of perovskite $\text{SrSnO}_3$ and $\text{BaSnO}_3$ . Applied Physics Letters, 2014, 104, .	1.1	108
59	Active learning for accelerated design of layered materials. Npj Computational Materials, 2018, 4, .	1.5	108
60	Evidence for Strong Itinerant Spin Fluctuations in the Normal State of $\text{CeFeAsO}_{0.89}$ . Superconductors. Physical Review Letters, 2008, 101, 267001.	3.5	107
61	Favorable Energy Band Alignment of $\text{TiO}_2$ Anatase/Rutile Heterophase Homojunctions Yields Photocatalytic Hydrogen Evolution with Quantum Efficiency Exceeding 45.6%. Advanced Energy Materials, 2022, 12, .	2.9	106
62	First-principles study of the stability of BN and C. Physical Review B, 2001, 64, .	10.2	106
63	Controlling phase transition for single-layer $\text{MTe}_2$ (M = Mo and W): modulation of the potential barrier under strain. Physical Chemistry Chemical Physics, 2016, 18, 4086-4094.	1.1	105
64	Theoretical determination that electrons act as anions in the electride $\text{Cs}^+(15\text{-crown-5})_2\text{A}^-$ . Nature, 1993, 365, 39-42.	1.3	105
65	Absence of superconductivity in hole-doped $\text{BaFe}_2\text{O}_7$ crystals. Physical Review B, 2009, 79, .	1.1	101
66	Electronic structure and magnetism of $\text{Sr}_3\text{Ru}_2\text{O}_7$ . Physical Review B, 2001, 63, .	1.1	100
67	High Temperature Magnetic Ordering in the $\text{Sr}_4\text{Ru}_3\text{O}_{13}$ Perovskite. Physical Review Letters, 2011, 106, 067201.	2.9	99
68	Electronic fitness function for screening semiconductors as thermoelectric materials. Physical Review Materials, 2017, 1, .	0.9	98
69	Fermi Surface and van Hove Singularities in the Itinerant Metamagnet $\text{Sr}_3\text{Ru}_2\text{O}_7$ . Physical Review Letters, 2008, 101, 026407.	2.9	94
70	Second Harmonic Generation Susceptibilities from Symmetry Adapted Wannier Functions. Physical Review Letters, 2020, 125, 187402.	2.9	94
71	Evidence for three-dimensional Fermi-surface topology of the layered electron-doped iron superconductor $\text{Ba}_2\text{FeO}_7$ .		

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73	The Electronic Properties of Single-Layer and Multilayer MoS <sub>2</sub> under High Pressure. Journal of Physical Chemistry C, 2015, 119, 10189-10196.	1.5	89
74	Establishing the carrier scattering phase diagram for ZrNiSn-based half-Heusler thermoelectric materials. Nature Communications, 2020, 11, 3142.	5.8	87
75	Optical properties of ferroelectric $\text{Bi}_4\text{Te}_3$ . Physical Review B, 2010, 82, .		
76	Bismuth and antimony-based oxyhalides and chalcogenides as potential optoelectronic materials. Npj Computational Materials, 2018, 4, .	3.5	86
77	Giant piezoelectricity in oxide thin films with nanopillar structure. Science, 2020, 369, 292-297.	6.0	86
78	Benefits of Carrier-Pocket Anisotropy to Thermoelectric Performance: The Case of $\text{AgBiSe}_2$ . Physical Review Applied, 2015, 3, .	1.5	84
79	Thermoelectric properties of $\text{Ag}_2\text{X}_2$ , $\text{AZn}_2\text{Sb}_2$ ( $A = \text{Tl, Bi, Sb, As, Sn, Pb, Bi, Te, Se, S, Te, Se, S}$ ). Materials Chemistry A, 2017, 5, 8499-8509.	5.2	83
80	Why $\text{Ni}_3\text{Al}$ is an Itinerant Ferromagnet but $\text{Ni}_3\text{Ga}$ is Not. Physical Review Letters, 2004, 92, 147201.	2.9	82
81	Unusual Transport and Strongly Anisotropic Thermopower in $\text{PtCoO}_2$ and $\text{PdCoO}_2$ . Physical Review Letters, 2010, 104, 176601.	2.9	82
82	Surface plasmon resonance technique for directly probing the interaction of DNA and graphene oxide and ultra-sensitive biosensing. Biosensors and Bioelectronics, 2014, 58, 374-379.	5.3	81
83	Orbital controlled band gap engineering of tetragonal $\text{ZnIrO}_6$ and $\text{La}_2\text{Mg}_6\text{O}_{10}$ . Physical Review B, 2011, 84, 115111.	1.1	80
84	Orbital controlled band gap engineering of tetragonal $\text{BiFeO}_3$ for optoelectronic applications. Journal of Materials Chemistry C, 2018, 6, 1239-1247.	2.7	80
85	Electronic and thermoelectric properties of $\text{CuCo}_2$ . Thermoelectric transport properties of $\text{CaMg}_2\text{Bi}$ . Physical Review B, 2011, 84, 115111.	1.1	75
86	Thermoelectric transport properties of $\text{CaMg}_2\text{Bi}$ . Physical Review B, 2011, 84, 115111.	1.1	75
87	Structure and Properties of Single Crystalline $\text{CaMg}_2\text{Bi}$ , $\text{EuMg}_2\text{Bi}$ , and $\text{YbMg}_2\text{Bi}$ . Inorganic Chemistry, 2011, 50, 11127-11133.	1.9	74
88	Valence Band Splitting on Multilayer MoS <sub>2</sub> : Mixing of Spin-Orbit Coupling and Interlayer Coupling. Journal of Physical Chemistry Letters, 2016, 7, 2175-2181.	2.1	73
89	Enhanced Born charge and proximity to ferroelectricity in thallium halides. Physical Review B, 2010, 81, .	1.1	72
90	Optical properties of PbTe and PbSe. Physical Review B, 2012, 85, .	1.1	72



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91	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
92	High-Throughput Screening for Advanced Thermoelectric Materials: Diamond-Like ABX <sub>2</sub> Compounds. ACS Applied Materials & Interfaces, 2019, 11, 24859-24866.	4.0	72
93	Dimensionality Controlled Octahedral Symmetry-Mismatch and Functionalities in Epitaxial LaCoO <sub>3</sub> /SrTiO <sub>3</sub> Heterostructures. Nano Letters, 2015, 15, 4677-4684.	4.5	71
94	Thermoelectric properties of n-type SrTiO <sub>3</sub> . APL Materials, 2016, 4, .	2.2	71
95	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
96	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
97	Achieving band convergence by tuning the bonding ionicity in n-type Mg <sub>3</sub> Sb <sub>2</sub> . Journal of Computational Chemistry, 2019, 40, 1693-1700.	1.5	68
98	Zintl-phase compounds with $\text{SnSb}$ anions: Electronic structure and thermoelectric properties. Physical Review B, 2010, 81, .	4.4	66
99	Wet-chemistry hydrogen doped TiO <sub>2</sub> with switchable defects control for photocatalytic hydrogen evolution. Matter, 2022, 5, 206-218.	5.0	66
100	Transparent conducting properties of SrSnO <sub>3</sub> and ZnSnO <sub>3</sub> . APL Materials, 2015, 3, 062505.	2.2	65
101	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
102	Origin of the phase transition in IrTe <sub>2</sub> : Structural modulation and local bonding instability. Physical Review B, 2013, 88, .	1.1	62
103	Ferromagnetism of Fe <sub>3</sub> Sn and Alloys. Scientific Reports, 2014, 4, 7024.	1.6	62
104	Adsorption of Li on single-layer silicene for anodes of Li-ion batteries. Physical Chemistry Chemical Physics, 2018, 20, 8887-8896.	1.3	62
105	Heavy element doping for enhancing thermoelectric properties of nanostructured zinc oxide. RSC Advances, 2014, 4, 6363.	1.7	61
106	Reemergence of high-T <sub>c</sub> superconductivity in the (Li <sub>1-x</sub> Fe <sub>x</sub> )OHFe <sub>1-y</sub> Se under high pressure. Nature Communications, 2018, 9, 380.	5.8	60
107	Boron-oxygen complex yields n-type surface layer in semiconducting diamond. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7703-7711.	3.3	60
108	Bottom-up growth of homogeneous Moiré superlattices in bismuth oxychloride spiral nanosheets. Nature Communications, 2019, 10, 4472.	5.8	59

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109	Local density and generalized gradient approximation studies of KNbO <sub>3</sub> and BaTiO <sub>3</sub> . Ferroelectrics, 1995, 164, 143-152.	0.3	58
110	Spin glass and semiconducting behavior in one-dimensional BaFe <sub>2</sub> As <sub>2</sub> crystals. Physical Review B, 2011, 84, .	1.1	58
111	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
112	Electronic structure of Ba(Sn,Sb)O <sub>3</sub> : Absence of superconductivity. Physical Review B, 1991, 44, 9519-9523.	1.1	57
113	Electronic structure and thermoelectric properties of layered $\text{PbSe-WSe}_2$ . Physical Review B, 2009, 80, .	1.1	57
114	Atomically Dispersed MoO <sub>3</sub> on Rhodium Metallene Boosts Electrocatalyzed Alkaline Hydrogen Evolution. Angewandte Chemie - International Edition, 2022, 61, .	7.2	57
115	TransOpt. A code to solve electrical transport properties of semiconductors in constant electron-phonon coupling approximation. Computational Materials Science, 2021, 186, 110074.	1.4	55
116	Low-Temperature Magnetothermal Transport Investigation of a Ni-Based Superconductor $\text{BaNi}_2\text{As}_2$ : Evidence for Fully Gapped Superconductivity. Physical Review Letters, 2009, 102, 147004.	2.9	54
117	$\text{Bi}_{0.5}\text{Sb}_{1.5}\text{Te}_3$ -based films for flexible thermoelectric devices. Journal of Materials Chemistry A, 2020, 8, 4552-4561.	5.2	53
118	Understanding the asymmetrical thermoelectric performance for discovering promising thermoelectric materials. Science Advances, 2019, 5, eaav5813.	4.7	52
119	Measurements of spin polarization of epitaxial SrRuO <sub>3</sub> thin films. Applied Physics Letters, 2003, 82, 427-429.	1.5	51
120	Native defects and oxygen and hydrogen-related defect complexes in CdTe: Density functional calculations. Journal of Applied Physics, 2008, 104, 093521.	1.1	50
121	THERMOPOWER OF $\text{SnTe}$ FROM BOLTZMANN TRANSPORT CALCULATIONS. Functional Materials Letters, 2010, 03, 223-226.	0.7	50
122	Lattice instabilities and ferroelectricity in $\text{AScO}_3$ perovskite alloys. Physical Review B, 2004, 69, .	1.1	49
123	Thermoelectric properties of Ni-doped $\text{CeFe}_4\text{Sb}_{12}$ skutterudites. Journal of Applied Physics, 2012, 111, .	1.1	49
124	Optimal Bandgap in a 2D Ruddlesden-Popper Perovskite Chalcogenide for Single-Junction Solar Cells. Chemistry of Materials, 2018, 30, 4882-4886.	3.2	49
125	Stable Bimetallene Hydride Boosts Anodic CO Tolerance of Fuel Cells. ACS Energy Letters, 2021, 6, 1912-1919.	8.8	48
126	Dynamic Optical Tuning of Interlayer Interactions in the Transition Metal Dichalcogenides. Nano Letters, 2017, 17, 7761-7766.	4.5	46



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127	Modulation of Hydrogen Evolution Catalytic Activity of Basal Plane in Monolayer Platinum and Palladium Dichalcogenides. ACS Omega, 2018, 3, 10058-10065.	1.6	46
128	Layered $Tl_2O$ : a model thermoelectric material. Journal of Materials Chemistry C, 2019, 7, 5094-5103.	2.7	46
129	Electronic and thermoelectric properties of CoSb and FeSbS. Physical Review B, 2013, 87, .	1.1	45
130	Electronic and transport properties of zintl phase $AeMg_2Pn_2$ , $Ae = Ca, Sr, Ba$ , $Pn = As, Sb, Bi$ in relation to $Mg_3Sb_2$ . Journal of Applied Physics, 2013, 114, 143703.	1.1	45
131	Thermoelectric Properties of $Zn_{1-x}Ge_x$ and $Tl_{1-x}Sn_x$ . Physical Review Applied, 2016, 5, .	1.5	45
132	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
133	Optic phonons and anisotropic thermal conductivity in hexagonal $Ge_2Sb_2Te_5$ . Scientific Reports, 2016, 6, 37076.	1.6	44
134	n-Type TaCoSn-Based Half-Heuslers as Promising Thermoelectric Materials. ACS Applied Materials & Interfaces, 2019, 11, 41321-41329.	4.0	44
135	Transport, thermal, and magnetic properties of the narrow-gap semiconductor $CrSb_2$ . Physical Review B, 2012, 86, .	1.1	43
136	Characterization of rattling in relation to thermal conductivity: Ordered half-Heusler semiconductors. Physical Review B, 2020, 101, .	1.1	43
137	Perspective: <i>n</i> -type oxide thermoelectrics via visual search strategies. APL Materials, 2016, 4, .	2.2	42
138	Adsorption and Formation of Small Na Clusters on Pristine and Double-Vacancy Graphene for Anodes of Na-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 17076-17084.	4.0	42
139	Density functional methods for the magnetism of transition metals: SCAN in relation to other functionals. Physical Review B, 2019, 100, .	1.1	42
140	A magnetic anti-cancer compound for magnet-guided delivery and magnetic resonance imaging. Scientific Reports, 2015, 5, 9194.	1.6	40
141	Coexistence of Weyl physics and planar defects in the semimetals TaP and TaAs. Physical Review B, 2016, 93, .	1.1	40
142	Computational modelling of the thermoelectric properties of p-type Zintl compound $CaMg_2Bi_2$ . Materials Today Physics, 2017, 2, 40-45.	2.9	40
143	Thermoelectric properties of p-type cubic and rhombohedral GeTe. Journal of Applied Physics, 2018, 123, .	1.1	40
144	Thermoelectric Properties of Zintl Phase $YbMg_2Sb_2$ . Chemistry of Materials, 2020, 32, 776-784.	3.2	40

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145	Role of A-Site and B-Site Ions in Perovskite Ferroelectricity. <i>Ferroelectrics</i> , 2006, 338, 73-79.	0.3	39
146	First principles study on $2H\text{-}1T\text{-}\epsilon^2$ transition in $\text{MoS}_2$ with copper. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 26986-26994.	1.3	39
147	Ferrimagnetism in $\text{EuFe}_4\text{Sb}_{12}$ due to the Interplay off-Electron Moments and a Nearly Ferromagnetic Host. <i>Physical Review Letters</i> , 2007, 98, 126403.	2.9	38
148	Pressure evolution of the potential barriers of phase transition of $\text{MoS}_2$ , $\text{MoSe}_2$ and $\text{MoTe}_2$ . <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 12080-12085.	1.3	38
149	bcc cobalt: Metastable phase or forced structure?. <i>Journal of Applied Physics</i> , 1993, 73, 6189-6191.	1.1	37
150	Lattice instabilities in (Pb,Cd)TiO <sub>3</sub> alloys. <i>Applied Physics Letters</i> , 2002, 81, 3443-3445.	1.5	37
151	Magnetism, critical fluctuations, and susceptibility renormalization in Pd. <i>Physical Review B</i> , 2004, 69, .	1.1	37
152	Bond competition and phase evolution on the IrTe <sub>2</sub> surface. <i>Nature Communications</i> , 2014, 5, 5358.	5.8	37
153	Prospective high thermoelectric performance of the heavily $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi mathvariant="bold-italic"} \rangle \text{p} \langle / \text{mml:mi} \rangle \langle / \text{mml:math} \rangle$ -doped half-Heusler compound CoVSn. <i>Physical Review B</i> , 2017, 95, .	1.1	37
154	Spin fluctuations and the magnetic phase diagram of ZrZn <sub>2</sub> . <i>Physical Review B</i> , 2004, 69, .	1.1	36
155	Electronic Structure and Bulk Spin-Valve Behavior in $\text{Ca}_3\text{Ru}_2\text{O}_7$ . <i>Physical Review Letters</i> , 2006, 96, 097203.	2.9	36
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