Sung Wng Kim

List of Publications by Year
in descending order

174 papers	11,704 citations	53794 45 h-index	29157 104 g-index
185 all docs	185 docs citations	185 times ranked	12429 citing authors

#	Article	IF	Citations
1	Dense dislocation arrays embedded in grain boundaries for high-performance bulk thermoelectrics. Science, 2015, 348, 109-114.	12.6	1,552
2	Ammonia synthesis using a stable electride as an electron donor and reversible hydrogen store. Nature Chemistry, 2012, 4, 934-940.	13.6	1,085
3	Phase patterning for ohmic homojunction contact in MoTe ₂. Science, 2015, 349, 625-628.	12.6	918
4	Giant thermoelectric Seebeck coefficient of a two-dimensional electron gas in SrTiO3. Nature Materials, 2007, 6, 129-134.	27.5	910
5	Bandgap opening in few-layered monoclinic MoTe2. Nature Physics, 2015, 11, 482-486.	16.7	800
6	Dicalcium nitride as a two-dimensional electride with an anionic electron layer. Nature, 2013, 494, 336-340.	27.8	386
7	Structural and quantum-state phase transitions in van der Waals layered materials. Nature Physics, 2017, 13, 931-937.	16.7	280
8	Crystallographic phase transition and high-<i>T</i>_csuperconductivity in LaFeAsO:F. Superconductor Science and Technology, 2008, 21, 125028.	3.5	230
9	Metallic State in a Limeâˆ'Alumina Compound with Nanoporous Structure. Nano Letters, 2007, 7, 1138-1143.	9.1	208
10	Superconductivity in an Inorganic Electride 12CaOÂ·7Al2O3:e-. Journal of the American Chemical Society, 2007, 129, 7270-7271.	13.7	199
11	Two-dome structure in electron-doped iron arsenide superconductors. Nature Communications, 2012, 3, 943.	12.8	198
12	Lowering the Schottky Barrier Height by Graphene/Ag Electrodes for Highâ€Mobility MoS₂ Fieldâ€Effect Transistors. Advanced Materials, 2019, 31, e1804422.	21.0	165
13	Solvated Electrons in High-Temperature Melts and Glasses of the Room-Temperature Stable Electride [Ca ₂₄ Al ₂₈ O ₆₄] ⁴⁺ â‹…4e ^{âˆ'}. Science, 2011, 333, 71-74.	12.6	127
14	High temperature thermoelectric properties of TiNiSn-based half-Heusler compounds. Intermetallics, 2007, 15, 349-356.	3.9	124
15	Hydrotrifluoromethylation and iodotrifluoromethylation of alkenes and alkynes using an inorganic electride as a radical generator. Nature Communications, 2014, 5, 4881.	12.8	110
16	Synthesis of a Room Temperature Stable 12CaOÂ·7Al2O3 Electride from the Melt and Its Application as an Electron Field Emitter. Chemistry of Materials, 2006, 18, 1938-1944.	6.7	109
17	Active hydrogen evolution through lattice distortion in metallic MoTe ₂. 2D Materials, 2017, 4, 025061.	4.4	103
18	Enhanced thermoelectric performance of Bi0.5Sb1.5Te3-expanded graphene composites by simultaneous modulation of electronic and thermal carrier transport. Nano Energy, 2015, 13, 67-76.	16.0	100

#	Article	IF	Citations
19	Topotactic Metalâ€“Insulator Transition in Epitaxial SrFeO<i>_x</i> Thin Films. Advanced Materials, 2017, 29, 1606566.	21.0	96
20	Ruddlesden-Popper phases as thermoelectric oxides: Nb-doped SrO(SrTiO3)n (n=1,2). Journal of Applied Physics, 2006, 100, 063717.	2.5	95
21	First-Principles Prediction of Thermodynamically Stable Two-Dimensional Electrides. Journal of the American Chemical Society, 2016, 138, 15336-15344.	13.7	91
22	Highly Dispersed Ru on Electride [Ca₂₄Al₂₈O₆₄]⁴⁺(e^{â€“})₄ as a Catalyst for Ammonia Synthesis. ACS Catalysis, 2014, 4, 674-680.	11.2	90
23	The effects of quaternary additions on thermoelectric properties of TiNiSn-based half-heusler alloys. Journal of Electronic Materials, 2003, 32, 1160-1165.	2.2	87
24	Enhanced electrocatalytic activity via phase transitions in strongly correlated SrRuO₃thin films. Energy and Environmental Science, 2017, 10, 924-930.	30.8	82
25	Intense thermal field electron emission from room-temperature stable electride. Applied Physics Letters, 2005, 87, 254103.	3.3	81
26	Synthesis and properties of 12CaOâ€‰Â·â€‰7Al₂O₃electride: review of single crystal and thin film growth. Philosophical Magazine, 2012, 92, 2596-2628.	1.6	77
27	Field-induced water electrolysis switches an oxide semiconductor from an insulator to a metal. Nature Communications, 2010, 1, 118.	12.8	76
28	Long-Range Lattice Engineering of MoTe₂ by a 2D Electride. Nano Letters, 2017, 17, 3363-3368.	9.1	72
29	Simple and Efficient Fabrication of Room Temperature Stable Electride:Â Melt-Solidification and Glass Ceramics. Journal of the American Chemical Society, 2005, 127, 1370-1371.	13.7	71
30	Strong Localization of Anionic Electrons at Interlayer for Electrical and Magnetic Anisotropy in Two-Dimensional Y₂C Electride. Journal of the American Chemical Society, 2017, 139, 615-618.	13.7	71
31	High temperature thermoelectric properties of p- and n-type Î²-FeSi2 with some dopants. Intermetallics, 2003, 11, 399-405.	3.9	69
32	Boundary Engineering for the Thermoelectric Performance of Bulk Alloys Based on Bismuth Telluride. ChemSusChem, 2015, 8, 2312-2326.	6.8	68
33	Reactive Solid-Phase Epitaxial Growth of NaxCoO2(xâˆ¼0.83) via Lateral Diffusion of Na into a Cobalt Oxide Epitaxial Layer. Crystal Growth and Design, 2005, 5, 25-28.	3.0	66
34	Electron Carrier Generation in a Refractory Oxide 12CaOÂ·7Al2O3by Heating in Reducing Atmosphere: Conversion from an Insulator to a Persistent Conductor. Journal of the American Ceramic Society, 2006, 89, 3294-3298.	3.8	65
35	Fabrication of room temperature-stable 12CaOÂÂ·Â7Al2O3 electride: a review. Journal of Materials Science: Materials in Electronics, 2007, 18, 5-14.	2.2	63
36	Ferroelectricity Driven by Twisting of Silicate Tetrahedral Chains. Angewandte Chemie - International Edition, 2013, 52, 8088-8092.	13.8	62

#	Article	IF	Citations
37	Evidence for Anionic Excess Electrons in a Quasi-Two-Dimensional Ca₂N Electride by Angle-Resolved Photoemission Spectroscopy. Journal of the American Chemical Society, 2016, 138, 2496-2499.	13.7	58
38	First-Principles Prediction of New Electrides with Nontrivial Band Topology Based on One-Dimensional Building Blocks. Physical Review Letters, 2018, 120, 026401.	7.8	58
39	Ferromagnetic quasi-atomic electrons in two-dimensional electride. Nature Communications, 2020, 11, 1526.	12.8	57
40	Localized and Delocalized Electrons in Room-Temperature Stable Electride [Ca₂₄Al₂₈O₆₄]⁴⁺(O²⁻)₂₋<i>_x</i>(<i>e</i>< Analysis of Optical Reflectance Spectra. Journal of Physical Chemistry C, 2008, 112, 4753-4760.	8.1	56
41	Role of alkali metal promoter in enhancing lateral growth of monolayer transition metal dichalcogenides. Nanotechnology, 2017, 28, 36LT01.	2.6	56
42	Structural analysis and superconductivity of CeFeAsO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>âˆ'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>H<mml:m xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>. Physical Review B, 2012, 85, .	3.2	52
43	Two dimensional inorganic electride-promoted electron transfer efficiency in transfer hydrogenation of alkynes and alkenes. Chemical Science, 2015, 6, 3577-3581.	7.4	51
44	High Thermoelectric Power Factor of Highâ€Mobility 2D Electron Gas. Advanced Science, 2018, 5, 1700696.	11.2	51
45	Direct Observation of Inherent Atomicâ€Scale Defect Disorders responsible for Highâ€Performance Ti_{1âˆ'}<i>_x</i>Hf<i>_x</i>NiSn_{1âˆ'}<i>_y</i>Sb<i>_y</i> Halfâ€Heusler Thermoelectric Alloys. Advanced Materials, 2017, 29, 1702091.	21.0	49
46	Phase transitions via selective elemental vacancy engineering in complex oxide thin films. Scientific Reports, 2016, 6, 23649.	3.3	46
47	Band Convergence in Thermoelectric Materials: Theoretical Background and Consideration on Biâ€"Sbâ€"Te Alloys. ACS Applied Energy Materials, 2020, 3, 2214-2223.	5.1	46
48	Simple and efficient synthesis of nanograin structured single phase filled skutterudite for high thermoelectric performance. Acta Materialia, 2018, 142, 8-17.	7.9	44
49	Phonon scattering by dislocations at grain boundaries in polycrystalline Bi_{0.5}Sb_{1.5}Te₃. Physica Status Solidi (B): Basic Research, 2017, 254, 1600103.	1.5	43
50	The scalable pinacol coupling reaction utilizing the inorganic electride [Ca₂N]⁺Â·e^{âˆ'} as an electron donor. Chemical Communications, 2014, 50, 4791-4794.	4.1	42
51	Te vacancy-driven superconductivity in orthorhombic molybdenum ditelluride. 2D Materials, 2017, 4, 021030.	4.4	42
52	Effect of Dislocation Arrays at Grain Boundaries on Electronic Transport Properties of Bismuth Antimony Telluride: Unified Strategy for High Thermoelectric Performance. Advanced Energy Materials, 2018, 8, 1800065.	19.5	40
53	Superconductivity in room-temperature stable electride and high-pressure phases of alkali metals. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140450.	3.4	39
54	Weighted Mobility Ratio Engineering for Highâ€Performance Biâ€"Teâ€Based Thermoelectric Materials via Suppression of Minority Carrier Transport. Advanced Materials, 2021, 33, e2005931.	21.0	39

#	Article	IF	Citations
55	Indium-free, acid-resistant anatase Nb-doped TiO2 electrodes activated by rapid-thermal annealing for cost-effective organic photovoltaics. Solar Energy Materials and Solar Cells, 2011, 95, 2178-2185.	6.2	38
56	Two-Dimensional Spin Density Wave State in LaFeAsO. Journal of the Physical Society of Japan, 2009, 78, 043705.	1.6	37
57	Large work function difference driven electron transfer from electrides to single-walled carbon nanotubes. Nanoscale, 2014, 6, 8844.	5.6	36
58	Tuning electromagnetic properties of SrRuO3 epitaxial thin films via atomic control of cation vacancies. Scientific Reports, 2017, 7, 11583.	3.3	36
59	Origin of extremely large magnetoresistance in the candidate type-II Weyl semimetal MoTe2â^ˆ'x. Scientific Reports, 2018, 8, 13937.	3.3	36
60	Enhanced thermoelectric performance of n-type Cu_{0.008}Bi₂Te_{2.7}Se_{0.3} by band engineering. Journal of Materials Chemistry C, 2015, 3, 10604-10609.	5.5	34
61	Non-oxidized bare copper nanoparticles with surface excess electrons in air. Nature Nanotechnology, 2022, 17, 285-291.	31.5	34
62	Graphene Substrate for van der Waals Epitaxy of Layerâ€Structured Bismuth Antimony Telluride Thermoelectric Film. Advanced Materials, 2017, 29, 1604899.	21.0	33
63	Tuning the Spin-Alignment of Interstitial Electrons in Two-Dimensional Y₂C Electride via Chemical Pressure. Journal of the American Chemical Society, 2017, 139, 17277-17280.	13.7	33
64	Effect of Substitutional Pb Doping on Bipolar and Lattice Thermal Conductivity in p-Type Bi0.48Sb1.52Te3. Materials, 2017, 10, 763.	2.9	33
65	Thermoelectric properties of layered perovskite-type (Sr1â^'xCax)3(Ti1â^'yNby)2O7. Journal of Applied Physics, 2007, 101, 083707.	2.5	32
66	Thin film and bulk fabrication of room-temperature-stable electride C12A7:eâ^' utilizing reduced amorphous 12CaOÂ·7Al2O3(C12A7). Journal of Non-Crystalline Solids, 2008, 354, 2772-2776.	3.1	30
67	Hierarchical dielectric orders in layered ferroelectrics Bi₂SiO₅. IUCrJ, 2014, 1, 160-164.	2.2	30
68	Water- and acid-stable self-passivated dihafnium sulfide electride and its persistent electrocatalytic reaction. Science Advances, 2020, 6, eaba7416.	10.3	30
69	High-pressure synthesis of the indirectly electron-doped iron pnictide superconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Sr</mml:mtext></mml:mrow><mml:mrow><mml:mn>1</mml:m Physical Review B, 2010, 82, .	3.2	29
70	Probing Multiphased Transition in Bulk MoS₂ by Direct Electron Injection. ACS Nano, 2019, 13, 14437-14446.	14.6	29
71	Thermoelectric properties and figure of merit of perovskite-type Ba1â^'xLaxSnO3 with x=0.002â€"0.008. Solid State Communications, 2013, 172, 49-53.	1.9	28
72	Effect of process conditions on the thermoelectric properties of CoSi. Intermetallics, 2002, 10, 177-184.	3.9	27

#	Article	IF	Citations
73	Suppression of bipolar conduction via bandgap engineering for enhanced thermoelectric performance of p-type Bi0.4Sb1.6Te3 alloys. Journal of Alloys and Compounds, 2018, 741, 869-874.	5.5	27
74	Cumulative defect structures for experimentally attainable low thermal conductivity in thermoelectric (Bi,Sb)2Te3 alloys. Materials Today Energy, 2021, 21, 100795.	4.7	27
75	Strong anisotropy of ferroelectricity in lead-free bismuth silicate. Nanoscale, 2015, 7, 11561-11565.	5.6	26
76	Iodometric Determination of Electrons Incorporated into Cages in 12CaOÂ·7Al₂O₃ Crystals. Journal of Physical Chemistry C, 2010, 114, 15354-15357.	3.1	25
77	Design and Preparation of High-Performance Bulk Thermoelectric Materials with Defect Structures. Journal of the Korean Ceramic Society, 2017, 54, 75-85.	2.3	25
78	Experimental evidence of enhancement of thermoelectric properties in tellurium nanoparticle-embedded bismuth antimony telluride. Journal of Materials Research, 2012, 27, 2449-2456.	2.6	24
79	Doping effects on the thermoelectric properties of Cu-intercalated Bi2Te2.7Se0.3. Current Applied Physics, 2015, 15, 190-193.	2.4	23
80	Pore-Free 12CaOÂ·7Al₂O₃ Single-Crystal Growth by Melt State Control using the Floating Zone Method. Crystal Growth and Design, 2008, 8, 1271-1275.	3.0	22
81	Evidence for Bardeen-Cooper-Schrieffer-type superconducting behavior in the electride<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"		

#	Article	IF	Citations
91	Superconducting Transition in Electron-Doped 12CaO·7Al₂O₃. Materials Transactions, 2008, 49, 1748-1752.	1.2	20
92	Co-doping of Al and Bi to control the transport properties for improving thermoelectric performance of Mg2Si. Scripta Materialia, 2016, 116, 11-15.	5.2	20
93	Preparation and thermoelectric properties of heavily Nb-doped SrO(SrTiO3)1 epitaxial films. Journal of Applied Physics, 2007, 102, .	2.5	19
94	Enhanced Thermoelectric Performance of p-Type Bi-Sb-Te Alloys by Codoping with Ga and Ag. Journal of Electronic Materials, 2015, 44, 1531-1535.	2.2	19
95	Te Monolayer-Driven Spontaneous van der Waals Epitaxy of Two-dimensional Pnictogen Chalcogenide Film on Sapphire. Nano Letters, 2017, 17, 6140-6145.	9.1	19
96	Enhanced magnetic and thermoelectric properties in epitaxial polycrystalline SrRuO₃ thin films. Nanoscale, 2018, 10, 4377-4384.	5.6	19
97	Highly fluidic liquid at homointerface generates grain-boundary dislocation arrays for high-performance bulk thermoelectrics. Acta Materialia, 2018, 159, 266-275.	7.9	19
98	Creation of two-dimensional layered Zintl phase by dimensional manipulation of crystal structure. Science Advances, 2019, 5, eaax0390.	10.3	19
99	High-Performance Bismuth Antimony Telluride Thermoelectric Membrane on Curved and Flexible Supports. ACS Energy Letters, 2021, 6, 2378-2385.	17.4	19
100	Bistable resistance switching in surface-oxidized C12A7:eâˆ' single-crystal. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 161, 76-79.	3.5	18
101	Dimensional Crossover Transport Induced by Substitutional Atomic Doping in SnSe₂. Advanced Electronic Materials, 2018, 4, 1700563.	5.1	18
102	Birch Reduction of Aromatic Compounds by Inorganic Electride [Ca₂N]^{+â€¢}e^{â€"} in an Alcoholic Solvent: An Analogue of Solvated Electrons. Journal of Organic Chemistry, 2018, 83, 13847-13853.	3.2	18
103	In-situ reduced non-oxidized copper nanoparticles in nanocomposites with extraordinary high electrical and thermal conductivity. Materials Today, 2021, 48, 59-71.	14.2	18
104	Enhancement of high temperature thermoelectric properties of intermetallic compounds based on a Skutterudite IrSb3and a half-Heusler TiNiSb. Science and Technology of Advanced Materials, 2004, 5, 485-489.	6.1	17
105	Enhancement of Thermoelectric Figure of Merit through Nanostructural Control on Intermetallic Semiconductors toward High-Temperature Applications. , 2006, , 383-418.		17
106	Stacking-sequence-independent band structure and shear exfoliation of two-dimensional electride materials. Physical Review B, 2016, 94, .	3.2	17
107	Synergetic effect of grain size reduction on electronic and thermal transport properties by selectively-suppressed minority carrier mobility and enhanced boundary scattering in Bi0.5Sb1.5Te3 alloys. Scripta Materialia, 2019, 160, 15-19.	5.2	17
108	Hydrogen adsorption engineering by intramolecular proton transfer on 2D nanosheets. NPG Asia Materials, 2018, 10, 441-454.	7.9	16

#	Article	IF	Citations
109	Symmetry Dictated Grain Boundary State in a Two-Dimensional Topological Insulator. Nano Letters, 2020, 20, 5837-5843.	9.1	16
110	Weighted Mobility Ratio Engineering for Highâ€Performance Biâ€"Teâ€Based Thermoelectric Materials via Suppression of Minority Carrier Transport (Adv. Mater. 47/2021). Advanced Materials, 2021, 33, 2170371.	21.0	16
111	Thermal conductivity and Seebeck coefficient of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>12</mml:mn><mml:mtext>CaO</mml:mtext><mml:mo>â‹…</mml:mo><mml:mn>7</mml:m with a cage structure. Physical Review B, 2009, 80, .	3.2	15
112	Strong enhancement of superconductivity in inorganic electride 12CaOÂ·7Al2O3:eâˆ' under high pressure. Journal of the Korean Physical Society, 2013, 63, 477-480.	0.7	15
113	Critical role of atomic-scale defect disorders for high-performance nanostructured half-Heusler thermoelectric alloys and their thermal stability. Acta Materialia, 2019, 180, 97-104.	7.9	15
114	Improved trade-off between thermoelectric performance and mechanical reliability of Mg2Si by hybridization of few-layered reduced graphene oxides. Scripta Materialia, 2019, 162, 402-407.	5.2	15
115	Importance of crystal chemistry with interstitial site determining thermoelectric transport properties in pavonite homologue Cuâ€"Biâ€"S compounds. CrystEngComm, 2016, 18, 1453-1461.	2.6	14
116	Electric field effect on the electronic structure of 2D Y 2 C electride. 2D Materials, 2018, 5, 035005.	4.4	14
117	Decisive Role of Interlayer Ionic Couplings for the Electronic Properties of Two-Dimensional Layered Electrides. Journal of Physical Chemistry C, 2020, 124, 1398-1404.	3.1	14
118	Direct Evidence for Cage Conduction Band in Superconducting Cement 12CaOÂ·7Al₂O₃ by Low-Energy High-Resolution Photoemission Spectroscopy. Journal of the Physical Society of Japan, 2010, 79, 103704.	1.6	13
119	Cuâ€"Biâ€"Se-based pavonite homologue: a promising thermoelectric material with low lattice thermal conductivity. Journal of Materials Chemistry A, 2013, 1, 9768.	10.3	13
120	Giant Peak Voltage of Thermopower Waves Driven by the Chemical Potential Gradient of Singleâ€Crystalline Bi₂Te₃. Advanced Materials, 2017, 29, 1701988.	21.0	13
121	Potential-current co-adjusted pulse electrodeposition for highly (110)-oriented Bi2Te3-Se films. Journal of Alloys and Compounds, 2019, 787, 767-771.	5.5	13
122	Hidden role of intrinsic Sb-rich nano-precipitates for high-performance Bi2-Sb Te3 thermoelectric alloys. Acta Materialia, 2021, 215, 117058.	7.9	13
123	Osteoinductive superparamagnetic Fe nanocrystal/calcium phosphate heterostructured microspheres. Nanoscale, 2017, 9, 19145-19153.	5.6	12
124	Effect of partial la filling on high-temperature thermoelectric properties of IrSb3-based skutterudite compounds. Journal of Electronic Materials, 2004, 33, 1156-1160.	2.2	11
125	Growth of 12CaOÂ·7Al2O3 single crystal with tetragonal symmetry by Czochralski method. Thin Solid Films, 2008, 516, 5772-5776.	1.8	11
126	Flexible photoanodes of TiO2 particles and metallic single-walled carbon nanotubes for flexible dye-sensitized solar cells. Carbon, 2014, 79, 337-345.	10.3	10

#	Article	IF	Citations
127	Cu-incorporation by melt-spinning in n-type Bi2Te2.7Se0.3 alloys for low-temperature power generation. Scripta Materialia, 2019, 167, 120-125.	5.2	10
128	Engineering the electrical and optical properties of graphene oxide via simultaneous alkali metal doping and thermal annealing. Journal of Materials Research and Technology, 2020, 9, 15824-15837.	5.8	10
129	Van der Waals electride: Toward intrinsic two-dimensional ferromagnetism of spin-polarized anionic electrons. Materials Today Physics, 2021, 20, 100473.	6.0	10
130	Tetragonalâ€"Orthorhombic Phase Transition and F-Doping Effects on the Crystal Structure in the Iron-Based High-<i>T</i>_cSuperconductor LaFeAsO. Journal of the Physical Society of Japan, 2008, 77, 32-35.	1.6	9
131	Strong correlation between the crystal structure and the thermoelectric properties of pavonite homologue Cu_{x+y}Bi_{5âˆ’y}Ch₈(Ch = S or Se) compounds. Journal of Materials Chemistry C, 2015, 3, 11271-11285.	5.5	9
132	Dramatically Enhanced Stability of Silver Passivated Dicalcium Nitride Electride: Ag-Ca₂N. Chemistry of Materials, 2018, 30, 7803-7812.	6.7	9
133	Electrical properties of bromine doped SnSe₂ van der Waals material. Journal Physics D: Applied Physics, 2018, 51, 455102.	2.8	9
134	Proximity Engineering of the van der Waals Interaction in Multilayered Graphene. ACS Applied Materials & Interfaces, 2019, 11, 42528-42533.	8.0	9
135	Enhanced Thermoelectric Performance of Cu-incorporated Bi0.5Sb1.5Te3 by Melt Spinning and Spark Plasma Sintering. Journal of Electronic Materials, 2020, 49, 2789-2793.	2.2	9
136	The effect of cesium dopant on APCVD graphene coating on copper. Journal of Materials Research and Technology, 2020, 9, 9798-9812.	5.8	9
137	Superconductivity in Nb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub><mml:mi>M</mml:mi></mml:mrow></mml:math>Si (<mml:math) Tj ETQq1 1 0.784314 rgBT /O network. Physical Review B, 2011, 84, .	3.2	8
138	Formation of Dense Pore Structure by Te Addition in Bi0.5Sb1.5Te3: An Approach to Minimize Lattice Thermal Conductivity. Journal of Nanomaterials, 2013, 2013, 1-5.	2.7	8
139	Structural optimization for thermoelectric properties in Cu-Bi-S pavonite compounds. Journal of Alloys and Compounds, 2017, 704, 282-288.	5.5	8
140	Microstructure Analysis and Thermoelectric Properties of Melt-Spun Bi-Sb-Te Compounds. Crystals, 2017, 7, 180.	2.2	8
141	Enhanced thermoelectric performance in topological crystalline insulator n-type Pb_{0.6}Sn_{0.4}Te by simultaneous tuning of the band gap and chemical potential. Journal of Materials Chemistry A, 2018, 6, 24216-24223.	10.3	8
142	Improved carrier transport properties by I-doping in n-type Cu0.008Bi2Te2.7Se0.3 thermoelectric alloys. Scripta Materialia, 2020, 186, 357-361.	5.2	8
143	Coexistence of Surface Superconducting and Three-Dimensional Topological Dirac States in Semimetal KZnBi. Physical Review X, 2021, 11, .	8.9	8
144	Chemically Stable Low-Dimensional Electrides in Transition Metal-Rich Monochalcogenides: Theoretical and Experimental Explorations. Journal of the American Chemical Society, 2022, 144, 4496-4506.	13.7	8

#	Article	IF	Citations
145	Single Crystal Growth of Nanoporous C12A7:eâ˜ by Controlling Melt State. Journal of Nanoscience and Nanotechnology, 2009, 9, 7345-9.	0.9	7
146	Reduction of Lattice Thermal Conductivity in PbTe Induced by Artificially Generated Pores. Advances in Condensed Matter Physics, 2015, 2015, 1-6.	1.1	7
147	Boosting Photoredox Catalysis Using a Two-Dimensional Electride as a Persistent Electron Donor. ACS Applied Materials & Interfaces, 2021, 13, 42880-42888.	8.0	7
148	Cu nanoparticle-processed n-type Bi2Te2.7Se0.3 alloys for low-temperature thermoelectric power generation. Journal of Alloys and Compounds, 2021, 884, 161060.	5.5	7
149	Effects of doping on the high-temperature thermoelectric properties of IrSb3 skutterudite compounds. Journal of Electronic Materials, 2003, 32, 1141-1147.	2.2	6
150	Effect of Oxygen Flow Rate on the Electrical Properties of a Transparent SiON/Ag/SiON Multilayer. Electrochemical and Solid-State Letters, 2011, 15, H23-H26.	2.2	6
151	Manifestations of Quasi-Two-Dimensional Metallicity in a Layered Ternary Transition Metal Chalcogenide Ti₂PTe₂. Chemistry of Materials, 2016, 28, 7570-7573.	6.7	6
152	Doping and band engineering by vanadium to enhance the thermoelectric performance in n-type Cu 0.008 Bi 2 Te 2.7 Se 0.3. Physica B: Condensed Matter, 2017, 517, 1-5.	2.7	6
153	Important role of Cu in suppressing bipolar conduction in Bi-rich (Bi,Sb)2Te3. Scripta Materialia, 2020, 186, 225-229.	5.2	6
154	Superconductivity in a PbFCl-type pnictide: NbSiAs. Europhysics Letters, 2012, 99, 27002.	2.0	5
155	Superconductivity in Te-deficient polymorphic MoTe _{2â˜ <i>x</i>} and its derivatives: rich structural and electronic phase transitions. 2D Materials, 2018, 5, 031014.	4.4	5
156	Tunable Berry curvature and transport crossover in topological Dirac semimetal KZnBi. Npj Quantum Materials, 2021, 6, .	5.2	5
157	Electronic and Thermal Transport Properties of Complex Structured Cu-Bi-Se Thermoelectric Compound with Low Lattice Thermal Conductivity. Journal of Nanomaterials, 2013, 2013, 1-7.	2.7	4
158	Improvement in the thermoelectric performance of highly reproducible n-type (Bi,Sb)₂Se₃ alloys by Cl-doping. RSC Advances, 2020, 10, 24663-24668.	3.6	4
159	Mixed-cation driven magnetic interaction of interstitial electrons for ferrimagnetic two-dimensional electride. Npj Quantum Materials, 2021, 6, .	5.2	4
160	Reshaped Weyl fermionic dispersions driven by Coulomb interactions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoTe</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2022, 105, .	3.2	4
161	Strain-controlled evolution of electronic structure indicating topological phase transition in the quasi-one-dimensional superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>TaSe</mml:mi><mml:mn>3</mml:mn></mml:msub></m Physical Review B, 2022, 105, .	3.2	4
162	Superconductivity of Ca2InN with a layered structure embedding an anionic indium chain array. Superconductor Science and Technology, 2014, 27, 055005.	3.5	3

#	Article	IF	Citations
163	Correlation between thermoelectric transport properties and crystal structure in two-dimensional CrSiTe3. Journal of Alloys and Compounds, 2019, 790, 93-98.	5.5	3
164	Tunable thermoelectric transport properties of Cu0.008Bi2Te2.7Se0.3 via control of the spark plasma sintering conditions. Journal of the Korean Physical Society, 2016, 69, 811-815.	0.7	2
165	Ti Addition Effect on the Grain Structure Evolution and Thermoelectric Transport Properties of Hf0.5Zr0.5NiSn0.98Sb0.02 Half-Heusler Alloy. Materials, 2021, 14, 4029.	2.9	2
166	Antiperovskite Gd₃SnC: Unusual Coexistence of Ferromagnetism and Heavy Fermions in Gd Lattice. Advanced Materials, 2021, 33, e2102958.	21.0	2
167	Angle-resolved photoemission spectroscopy of Co-based boride superconductor LaCo<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1.73</mml:mn></mml:mrow></mml:msub></mml:math>Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.27</mml:mn></mml:mrow></mml:msub></mml:math>B<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:	3.2	1
168	Enhancement of the thermoelectric figure of merit in n-type Cu0.008Bi2Te2.7Se0.3 by using Nb doping. Journal of the Korean Physical Society, 2016, 68, 7-11.	0.7	1
169	Quasi-High-Pressure Effects in Transition-Metal-Rich Dichalcogenide, Hf₃Te₂. Journal of Physical Chemistry C, 2017, 121, 25541-25546.	3.1	1
170	Enhanced Thermoelectric Performance of <i>p</i>-Type Bi_{0.4}Sb_{1.6}Te₃ by Excess Te Addition. Journal of Nanoscience and Nanotechnology, 2017, 17, 7681-7684.	0.9	1
171	Plasticity of Fe-Oxypnictides Superconductor. Journal of the Physical Society of Japan, 2008, 77, 125-126.	1.6	0
172	Thin Films: Topotactic Metalâ€“Insulator Transition in Epitaxial SrFeO<i>_x</i> Thin Films (Adv. Mater. 37/2017). Advanced Materials, 2017, 29, .	21.0	0
173	Stoner enhancement from interstitial electrons in Y2C toward a spontaneous ferromagnetic electride. Dalton Transactions, 2021, 50, 5446-5451.	3.3	0
174	Identifying the Correlation between Structural Parameters and Anisotropic Magnetic Properties in Iï£¿Mnï£¿V Semiconductors: A Possible Roomâ€Temperature Magnetism. Advanced Materials, 0, , 2200074.	21.0	0