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	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
2	Non-oxidized bare copper nanoparticles with surface excess electrons in air. Nature Nanotechnology, 2022, 17, 285-291.	31.5	34
3	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
4	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><mr Physical Review B, 2022, 105, .	3.2	4
5	Stoner enhancement from interstitial electrons in Y2C toward a spontaneous ferromagnetic electride. Dalton Transactions, 2021, 50, 5446-5451.	3.3	0
6	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
7	Mixed-cation driven magnetic interaction of interstitial electrons for ferrimagnetic two-dimensional electride. Npj Quantum Materials, 2021, 6, .	5.2	4
8	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
9	Coexistence of Surface Superconducting and Three-Dimensional Topological Dirac States in Semimetal KZnBi. Physical Review X, 2021, 11, .	8.9	8
10	High-Performance Bismuth Antimony Telluride Thermoelectric Membrane on Curved and Flexible Supports. ACS Energy Letters, 2021, 6, 2378-2385.	17.4	19
11	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
12	Antiperovskite Gd₃SnC: Unusual Coexistence of Ferromagnetism and Heavy Fermions in Gd Lattice. Advanced Materials, 2021, 33, e2102958.	21.0	2
13	Boosting Photoredox Catalysis Using a Two-Dimensional Electride as a Persistent Electron Donor. ACS Applied Materials & Interfaces, 2021, 13, 42880-42888.	8.0	7
14	Hidden role of intrinsic Sb-rich nano-precipitates for high-performance Bi2-Sb Te3 thermoelectric alloys. Acta Materialia, 2021, 215, 117058.	7.9	13
15	Tunable Berry curvature and transport crossover in topological Dirac semimetal KZnBi. Npj Quantum Materials, 2021, 6, .	5.2	5
16	Cumulative defect structures for experimentally attainable low thermal conductivity in thermoelectric (Bi,Sb)2Te3 alloys. Materials Today Energy, 2021, 21, 100795.	4.7	27
17	Van der Waals electride: Toward intrinsic two-dimensional ferromagnetism of spin-polarized anionic electrons. Materials Today Physics, 2021, 20, 100473.	6.0	10
18	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

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19	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
20	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
21	Nanoparticles in Bi0.5Sb1.5Te3: A prerequisite defect structure to scatter the mid-wavelength phonons between Rayleigh and geometry scatterings. Acta Materialia, 2020, 185, 271-278.	7.9	21
22	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
23	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
24	The effect of cesium dopant on APCVD graphene coating on copper. Journal of Materials Research and Technology, 2020, 9, 9798-9812.	5.8	9
25	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
26	Water- and acid-stable self-passivated dihafnium sulfide electride and its persistent electrocatalytic reaction. Science Advances, 2020, 6, eaba7416.	10.3	30
27	Important role of Cu in suppressing bipolar conduction in Bi-rich (Bi,Sb)2Te3. Scripta Materialia, 2020, 186, 225-229.	5.2	6
28	Ferromagnetic quasi-atomic electrons in two-dimensional electride. Nature Communications, 2020, 11, 1526.	12.8	57
29	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
30	Symmetry Dictated Grain Boundary State in a Two-Dimensional Topological Insulator. Nano Letters, 2020, 20, 5837-5843.	9.1	16
31	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
32	Creation of two-dimensional layered Zintl phase by dimensional manipulation of crystal structure. Science Advances, 2019, 5, eaax0390.	10.3	19
33	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
34	Proximity Engineering of the van der Waals Interaction in Multilayered Graphene. ACS Applied Materials & Interfaces, 2019, 11, 42528-42533.	8.0	9
35	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
36	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

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37	Correlation between thermoelectric transport properties and crystal structure in two-dimensional CrSiTe3. Journal of Alloys and Compounds, 2019, 790, 93-98.	5.5	3
38	Probing Multiphased Transition in Bulk MoS₂ by Direct Electron Injection. ACS Nano, 2019, 13, 14437-14446.	14.6	29
39	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
40	Lowering the Schottky Barrier Height by Graphene/Ag Electrodes for Highâ€Mobility MoS₂ Fieldâ€Effect Transistors. Advanced Materials, 2019, 31, e1804422.	21.0	165
41	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
42	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
43	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
44	Enhanced magnetic and thermoelectric properties in epitaxial polycrystalline SrRuO₃ thin films. Nanoscale, 2018, 10, 4377-4384.	5.6	19
45	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
46	Electric field effect on the electronic structure of 2D Y 2 C electride. 2D Materials, 2018, 5, 035005.	4.4	14
47	Dimensional Crossover Transport Induced by Substitutional Atomic Doping in SnSe₂. Advanced Electronic Materials, 2018, 4, 1700563.	5.1	18
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	High Thermoelectric Power Factor of Highâ€Mobility 2D Electron Gas. Advanced Science, 2018, 5, 1700696.	11.2	51
50	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
51	Dramatically Enhanced Stability of Silver Passivated Dicalcium Nitride Electride: Ag-Ca₂N. Chemistry of Materials, 2018, 30, 7803-7812.	6.7	9
52	Origin of extremely large magnetoresistance in the candidate type-II Weyl semimetal MoTe2â^'x. Scientific Reports, 2018, 8, 13937.	3.3	36
53	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
54	Electrical properties of bromine doped SnSe₂ van der Waals material. Journal Physics D: Applied Physics, 2018, 51, 455102.	2.8	9

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55	Hydrogen adsorption engineering by intramolecular proton transfer on 2D nanosheets. NPG Asia Materials, 2018, 10, 441-454.	7.9	16
56	Superconductivity in Te-deficient polymorphic MoTe _{2â˜' x} and its derivatives: rich structural and electronic phase transitions. 2D Materials, 2018, 5, 031014.	4.4	5
57	Highly fluidic liquid at homointerface generates grain-boundary dislocation arrays for high-performance bulk thermoelectrics. Acta Materialia, 2018, 159, 266-275.	7.9	19
58	Highly Oriented SrTiO₃ Thin Film on Graphene Substrate. ACS Applied Materials & Interfaces, 2017, 9, 3246-3250.	8.0	22
59	Chemoselective Hydrodehalogenation of Organic Halides Utilizing Two-Dimensional Anionic Electrons of Inorganic Electride [Ca₂N]⁺Â·e^{â€“}. Langmuir, 2017, 33, 954-958.	3.5	22
60	Structural optimization for thermoelectric properties in Cu-Bi-S pavonite compounds. Journal of Alloys and Compounds, 2017, 704, 282-288.	5.5	8
61	Active hydrogen evolution through lattice distortion in metallic MoTe ₂. 2D Materials, 2017, 4, 025061.	4.4	103
62	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
63	Long-Range Lattice Engineering of MoTe₂ by a 2D Electride. Nano Letters, 2017, 17, 3363-3368.	9.1	72
64	Giant Peak Voltage of Thermopower Waves Driven by the Chemical Potential Gradient of Singleâ€Crystalline Bi₂Te₃. Advanced Materials, 2017, 29, 1701988.	21.0	13
65	Te vacancy-driven superconductivity in orthorhombic molybdenum ditelluride. 2D Materials, 2017, 4, 021030.	4.4	42
66	Enhanced electrocatalytic activity via phase transitions in strongly correlated SrRuO₃thin films. Energy and Environmental Science, 2017, 10, 924-930.	30.8	82
67	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
68	Graphene Substrate for van der Waals Epitaxy of Layerâ€Structured Bismuth Antimony Telluride Thermoelectric Film. Advanced Materials, 2017, 29, 1604899.	21.0	33
69	Thin Films: Topotactic Metalâ€“Insulator Transition in Epitaxial SrFeO_x Thin Films (Adv. Mater. 37/2017). Advanced Materials, 2017, 29, .	21.0	0
70	Quasi-High-Pressure Effects in Transition-Metal-Rich Dichalcogenide, Hf₃Te₂. Journal of Physical Chemistry C, 2017, 121, 25541-25546.	3.1	1
71	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
72	Tuning electromagnetic properties of SrRuO3 epitaxial thin films via atomic control of cation vacancies. Scientific Reports, 2017, 7, 11583.	3.3	36

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73	Direct Observation of Inherent Atomicâ€Scale Defect Disorders responsible for Highâ€Performance Ti_{1â^'}_xHf_xNiSn_{1â^'}_ySb_y Halfâ€Heusler Thermoelectric Alloys. Advanced Materials, 2017, 29, 1702091.	21.0	49
74	Structural and quantum-state phase transitions in van der Waals layered materials. Nature Physics, 2017, 13, 931-937.	16.7	280
75	Topotactic Metalâ€“Insulator Transition in Epitaxial SrFeO_x Thin Films. Advanced Materials, 2017, 29, 1606566.	21.0	96
76	Osteoinductive superparamagnetic Fe nanocrystal/calcium phosphate heterostructured microspheres. Nanoscale, 2017, 9, 19145-19153.	5.6	12
77	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
78	Role of alkali metal promoter in enhancing lateral growth of monolayer transition metal dichalcogenides. Nanotechnology, 2017, 28, 36LT01.	2.6	56
79	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
80	Effect of Substitutional Pb Doping on Bipolar and Lattice Thermal Conductivity in p-Type Bi0.48Sb1.52Te3. Materials, 2017, 10, 763.	2.9	33
81	Microstructure Analysis and Thermoelectric Properties of Melt-Spun Bi-Sb-Te Compounds. Crystals, 2017, 7, 180.	2.2	8
82	Enhanced Thermoelectric Performance of p-Type Bi_{0.4}Sb_{1.6}Te₃ by Excess Te Addition. Journal of Nanoscience and Nanotechnology, 2017, 17, 7681-7684.	0.9	1
83	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
84	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
85	Phase transitions via selective elemental vacancy engineering in complex oxide thin films. Scientific Reports, 2016, 6, 23649.	3.3	46
86	Stacking-sequence-independent band structure and shear exfoliation of two-dimensional electride materials. Physical Review B, 2016, 94, .	3.2	17
87	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
88	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
89	Manifestations of Quasi-Two-Dimensional Metallicity in a Layered Ternary Transition Metal Chalcogenide Ti₂PTe₂. Chemistry of Materials, 2016, 28, 7570-7573.	6.7	6
90	First-Principles Prediction of Thermodynamically Stable Two-Dimensional Electrides. Journal of the American Chemical Society, 2016, 138, 15336-15344.	13.7	91

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91	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
92	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
93	Reduction of Lattice Thermal Conductivity in PbTe Induced by Artificially Generated Pores. Advances in Condensed Matter Physics, 2015, 2015, 1-6.	1.1	7
94	Strong anisotropy of ferroelectricity in lead-free bismuth silicate. Nanoscale, 2015, 7, 11561-11565.	5.6	26
95	Chemoselective reduction and oxidation of ketones in water through control of the electron transfer pathway. Scientific Reports, 2015, 5, 10366.	3.3	21
96	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
97	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
98	Phase patterning for ohmic homojunction contact in MoTe ₂. Science, 2015, 349, 625-628.	12.6	918
99	Fe-Doping Effect on Thermoelectric Properties of p-Type Bi0.48Sb1.52Te3. Materials, 2015, 8, 959-965.	2.9	22
100	Two dimensional inorganic electride-promoted electron transfer efficiency in transfer hydrogenation of alkynes and alkenes. Chemical Science, 2015, 6, 3577-3581.	7.4	51
101	Dense dislocation arrays embedded in grain boundaries for high-performance bulk thermoelectrics. Science, 2015, 348, 109-114.	12.6	1,552
102	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
103	Boundary Engineering for the Thermoelectric Performance of Bulk Alloys Based on Bismuth Telluride. ChemSusChem, 2015, 8, 2312-2326.	6.8	68
104	Bandgap opening in few-layered monoclinic MoTe2. Nature Physics, 2015, 11, 482-486.	16.7	800
105	Graphene-Templated Synthesis of c-Axis Oriented Sb₂Te₃ Nanoplates by the Microwave-Assisted Solvothermal Method. Chemistry of Materials, 2015, 27, 2315-2321.	6.7	21
106	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
107	Strong correlation between the crystal structure and the thermoelectric properties of pavonite homologue Cu_{x+y}Bi_{5â”y}Ch₈(Ch = S or Se) compounds. Journal of Materials Chemistry C, 2015, 3, 11271-11285.	5.5	9
108	Doping effects on the thermoelectric properties of Cu-intercalated Bi2Te2.7Se0.3. Current Applied Physics, 2015, 15, 190-193.	2.4	23

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109	Hierarchical dielectric orders in layered ferroelectrics Bi₂SiO₅. IUCrJ, 2014, 1, 160-164.	2.2	30
110	Effects of Doping on Transport Properties in Cuâ€“Biâ€“Se-Based Thermoelectric Materials. Inorganic Chemistry, 2014, 53, 12732-12738.	4.0	22
111	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
112	Superconductivity of Ca2InN with a layered structure embedding an anionic indium chain array. Superconductor Science and Technology, 2014, 27, 055005.	3.5	3
113	The scalable pinacol coupling reaction utilizing the inorganic electride [Ca₂N]⁺·e^{â¯} as an electron donor. Chemical Communications, 2014, 50, 4791-4794.	4.1	42
114	Large work function difference driven electron transfer from electrides to single-walled carbon nanotubes. Nanoscale, 2014, 6, 8844.	5.6	36
115	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
116	Hydrotrifluoromethylation and iodotrifluoromethylation of alkenes and alkynes using an inorganic electride as a radical generator. Nature Communications, 2014, 5, 4881.	12.8	110
117	Strong enhancement of superconductivity in inorganic electride 12CaO·7Al2O3:eâ¯ under high pressure. Journal of the Korean Physical Society, 2013, 63, 477-480.	0.7	15
118	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
119	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
120	Dicalcium nitride as a two-dimensional electride with an anionic electron layer. Nature, 2013, 494, 336-340.	27.8	386
121	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
122	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
123	Ferroelectricity Driven by Twisting of Silicate Tetrahedral Chains. Angewandte Chemie - International Edition, 2013, 52, 8088-8092.	13.8	62
124	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>â¯</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:mi>H</mml:mi><mml:m xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow xmlns:mml="http://www.w3.org/1998/Math/MathML">Physical Review B, 2012, 85,	3.2	52
125	Fe<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>	3.2	1
126	Spectroscopic characterization of a multiband complex oxide: Insulating and conducting cement 12CaO·7Al2O3. Physical Review B, 2012, 85, .	3.2	21

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127	Ammonia synthesis using a stable electride as an electron donor and reversible hydrogen store. Nature Chemistry, 2012, 4, 934-940.	13.6	1,085
128	Two-dome structure in electron-doped iron arsenide superconductors. Nature Communications, 2012, 3, 943.	12.8	198
129	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
130	Superconductivity in a PbFCl-type pnictide: NbSiAs. Europhysics Letters, 2012, 99, 27002.	2.0	5
131	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
132	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
133	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	3.2	8
134	Solvated Electrons in High-Temperature Melts and Glasses of the Room-Temperature Stable Electride [Ca ₂₄ Al ₂₈ O ₆₄] ⁴⁺ â‹…4e ^{â^'}. Science, 2011, 333, 71-74.	12.6	127
135	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
136	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
137	Field-induced water electrolysis switches an oxide semiconductor from an insulator to a metal. Nature Communications, 2010, 1, 118.	12.8	76
138	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:mn> Physical Review B, 2010, 82, .	3.2	29
139	Iodometric Determination of Electrons Incorporated into Cages in 12CaOÂ·7Al₂O₃ Crystals. Journal of Physical Chemistry C, 2010, 114, 15354-15357.	3.1	25
140	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:mn> with a cage structure. Physical Review B, 2009, 80, .	3.2	15
141	Single Crystal Growth of Nanoporous C12A7:eâ^' by Controlling Melt State. Journal of Nanoscience and Nanotechnology, 2009, 9, 7345-9.	0.9	7
142	Bistable resistance switching in surface-oxidized C12A7:eâ^' single-crystal. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 161, 76-79.	3.5	18
143	Two-Dimensional Spin Density Wave State in LaFeAsO. Journal of the Physical Society of Japan, 2009, 78, 043705.	1.6	37
144	Growth of 12CaOÂ·7Al2O3 single crystal with tetragonal symmetry by Czochralski method. Thin Solid Films, 2008, 516, 5772-5776.	1.8	11

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145	Crystallographic phase transition and high-<i>T</i>_csuperconductivity in LaFeAsO:F. Superconductor Science and Technology, 2008, 21, 125028.	3.5	230
146	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.	3.1	56
147	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
148	Thin film and bulk fabrication of room-temperature-stable electride C12A7:eâˆ' utilizing reduced amorphous 12CaOÂ·7Al2O3(C12A7). Journal of Non-Crystalline Solids, 2008, 354, 2772-2776.	3.1	30
149	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
163	Enhancement of Thermoelectric Figure of Merit through Nanostructural Control on Intermetallic Semiconductors toward High-Temperature Applications. , 2006, , 383-418.		17
164	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
165	Intense thermal field electron emission from room-temperature stable electride. Applied Physics Letters, 2005, 87, 254103.	3.3	81
166	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
167	Reactive Solid-Phase Epitaxial Growth of NaxCoO2(xâ^¼ 0.83) via Lateral Diffusion of Na into a Cobalt Oxide Epitaxial Layer. Crystal Growth and Design, 2005, 5, 25-28.	3.0	66
168	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
169	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
170	Effects of doping on the high-temperature thermoelectric properties of IrSb3 skutterudite compounds. Journal of Electronic Materials, 2003, 32, 1141-1147.	2.2	6
171	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
172	High temperature thermoelectric properties of p- and n-type Î²-FeSi2 with some dopants. Intermetallics, 2003, 11, 399-405.	3.9	69
173	Effect of process conditions on the thermoelectric properties of CoSi. Intermetallics, 2002, 10, 177-184.	3.9	27
174	Identifying the Correlation between Structural Parameters and Anisotropic Magnetic Properties in Ïī£¿MnïĒ¿V Semiconductors: A Possible Roomâ€Temperature Magnetism. Advanced Materials, 0, , 2200074.	21.0	0