Takao Mori

List of Publications by Year
in descending order

253 papers	7,737 citations	61984 43 h-index	71685 76 g-index
257 all docs	257 docs citations	257 times ranked	5322 citing authors

#	Article	IF	Citations
1	Preparation and Characterization of Well-Ordered Hexagonal Mesoporous Carbon Nitride. Advanced Materials, 2005, 17, 1648-1652.	21.0	512
2	Thermoelectric materials and applications for energy harvesting power generation. Science and Technology of Advanced Materials, 2018, 19, 836-862.	6.1	413
3	Novel Principles and Nanostructuring Methods for Enhanced Thermoelectrics. Small, 2017, 13, 1702013.	10.0	265
4	Thermoelectric performance of a metastable thin-film Heusler alloy. Nature, 2019, 576, 85-90.	27.8	232
5	Demonstration of ultrahigh thermoelectric efficiency of âˆ¼7.3% in Mg3Sb2/MgAgSb module for low-temperature energy harvesting. Joule, 2021, 5, 1196-1208.	24.0	205
6	Nano-micro-porous skutterudites with 100% enhancement in ZT for high performance thermoelectricity. Nano Energy, 2017, 31, 152-159.	16.0	201
7	Polymer based thermoelectric nanocomposite materials and devices: Fabrication and characteristics. Nano Energy, 2020, 78, 105186.	16.0	185
8	High Thermoelectric Power Factor in a Carrier-Doped Magnetic Semiconductor CuFeS₂. Applied Physics Express, 2013, 6, 043001.	2.4	161
9	Thermoelectricity Generation and Electronâ€“Magnon Scattering in a Natural Chalcopyrite Mineral from a Deepâ€Sea Hydrothermal Vent. Angewandte Chemie - International Edition, 2015, 54, 12909-12913.	13.8	156
10	Materials for energy harvesting: At the forefront of a new wave. MRS Bulletin, 2018, 43, 176-180.	3.5	150
11	Observation of enhanced thermopower due to spin fluctuation in weak itinerant ferromagnet. Science Advances, 2019, 5, eaat5935.	10.3	143
12	Thermoelectric properties of CuGa_{1âˆ’x}Mn_xTe₂: power factor enhancement by incorporation of magnetic ions. Journal of Materials Chemistry A, 2017, 5, 7545-7554.	10.3	135
13	Manipulating the Ge Vacancies and Ge Precipitates through Cr Doping for Realizing the Highâ€Performance GeTe Thermoelectric Material. Small, 2020, 16, e1906921.	10.0	129
14	Enhanced thermoelectric performance of Biâ€“Sbâ€“Te/Sb₂O₃ nanocomposites by energy filtering effect. Journal of Materials Chemistry A, 2018, 6, 21341-21349.	10.3	116
15	Magnetism-mediated thermoelectric performance of the Cr-doped bismuth telluride tetradymite. Materials Today Physics, 2019, 9, 100090.	6.0	112
16	Maximizing the performance of n-type Mg3Bi2 based materials for room-temperature power generation and thermoelectric cooling. Nature Communications, 2022, 13, 1120.	12.8	101
17	Thermoelectric properties of homologous p- and n-type boron-rich borides. Journal of Solid State Chemistry, 2006, 179, 2908-2915.	2.9	90
18	Synthesis and thermoelectric behaviour of copper telluride nanosheets. Journal of Materials Chemistry A, 2014, 2, 985-990.	10.3	88

#	Article	IF	Citations
19	Enhanced thermoelectric performance through crystal field engineering in transition metalâ€“doped GeTe. Materials Today Physics, 2019, 9, 100094.	6.0	85
20	Enhanced thermoelectric performance of porous magnesium tin silicide prepared using pressure-less spark plasma sintering. Journal of Materials Chemistry A, 2015, 3, 17426-17432.	10.3	84
21	Dynamical properties of a crystalline rare-earth boron cluster spin-glass system. Physical Review B, 2003, 68, .	3.2	81
22	High Power Factor and Enhanced Thermoelectric Performance in Sc and Bi Codoped GeTe: Insights into the Hidden Role of Rhombohedral Distortion Degree. Advanced Energy Materials, 2020, 10, 2002588.	19.5	75
23	Magnetic Properties of Terbium B12Icosahedral Boron-Rich Compounds. Journal of the Physical Society of Japan, 1999, 68, 2033-2039.	1.6	71
24	Sb Doping of Metallic CuCr₂S₄ as a Route to Highly Improved Thermoelectric Properties. Chemistry of Materials, 2017, 29, 2988-2996.	6.7	68
25	High temperature thermoelectric properties of a homologous series of n-type boron icosahedra compounds: A possible counterpart to p-type boron carbide. Journal of Applied Physics, 2007, 101, 093714.	2.5	67
26	A robust starchâ€“polyacrylamide hydrogel with scavenging energy harvesting capacity for efficient solar thermoelectricityâ€“freshwater cogeneration. Energy and Environmental Science, 2022, 15, 3388-3399.	30.8	63
27	Thermoelectric and magnetic properties of rare earth borides: Boron cluster and layered compounds. Journal of Solid State Chemistry, 2019, 275, 70-82.	2.9	62
28	Hybrid effect to possibly overcome the trade-off between Seebeck coefficient and electrical conductivity. Scripta Materialia, 2016, 111, 44-48.	5.2	61
29	Energyâ€Saving Pathways for Thermoelectric Nanomaterial Synthesis: Hydrothermal/Solvothermal, Microwaveâ€Assisted, Solutionâ€Based, and Powder Processing. Advanced Science, 2022, 9, .	11.2	60
30	Thermoelectric properties of a magnetic semiconductor CuFeS2. Materials Today Physics, 2017, 3, 85-92.	6.0	59
31	Coupling of charge carriers with magnetic entropy for power factor enhancement in Mn doped Sn_{1.03}Te for thermoelectric applications. Journal of Materials Chemistry C, 2018, 6, 6489-6493.	5.5	56
32	Phase Stability and Thermoelectric Properties of CuFeS2-Based Magnetic Semiconductor. Journal of Electronic Materials, 2014, 43, 2371-2375.	2.2	55
33	Enhanced thermoelectric properties of samarium boride. Journal of Materiomics, 2015, 1, 196-204.	5.7	52
34	High temperature thermoelectric properties of B12 icosahedral cluster-containing rare earth boride crystals. Journal of Applied Physics, 2005, 97, 093703.	2.5	51
35	Recent Progress on Mixed-Anion Materials for Energy Applications. Bulletin of the Chemical Society of Japan, 2022, 95, 26-37.	3.2	51
36	Key properties of inorganic thermoelectric materialsâ€"tables (version 1). JPhys Energy, 2022, 4, 022002.	5.3	51

#	Article	IF	Citations
37	Magnetism and superconductivity of rare earth borides. Journal of Alloys and Compounds, 2020, 821, 153201.	5.5	50
38	Influence of Carrier Density and Energy Barrier Scattering on a High Seebeck Coefficient and Power Factor in Transparent Thermoelectric Copper Iodide. ACS Applied Energy Materials, 2020, 3, 10037-10044.	5.1	49
39	Perspectives of High-Temperature Thermoelectric Applications and p-type and n-type Aluminoborides. Jom, 2016, 68, 2673-2679.	1.9	47
40	Microstructurally Tailored Thin Î²â€Ag₂Se Films toward Commercial Flexible Thermoelectrics. Advanced Materials, 2022, 34, e2104786.	21.0	47
41	Thermal conductivity of YbB44Si2. Journal of Applied Physics, 2007, 102, 073510.	2.5	46
42	Crystal structure, chemical bonding, electrical transport, and magnetic behavior ofTmAlB4. Physical Review B, 2007, 76, .	3.2	46
43	Improvement in the thermoelectric properties of porous networked Al-doped ZnO nanostructured materials synthesized <i>via</i> an alternative interfacial reaction and low-pressure SPS processing. Inorganic Chemistry Frontiers, 2020, 7, 4118-4132.	6.0	46
44	Spin glass behavior in rhombohedralB12cluster compounds. Physical Review B, 2002, 66, .	3.2	45
45	Excellent p-n control in a high temperature thermoelectric boride. Applied Physics Letters, 2012, 101, .	3.3	44
46	Screening of transition (Y, Zr, Hf, V, Nb, Mo, and Ru) and rare-earth (La and Pr) elements as potential effective dopants for thermoelectric GeTe â€" an experimental and theoretical appraisal. Journal of Materials Chemistry A, 2020, 8, 19805-19821.	10.3	43
47	Higher Borides. Fundamental Theories of Physics, 2008, , 105-173.	0.3	42
48	Boosting the thermoelectric performance of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mn>2</mml:mn></mml:m Heusler compounds by band engineering. Physical Review B, 2021, 103, .	3.2	41
49	Two-Dimensional Layered Complex Nitrides as a New Class of Thermoelectric Materials. Chemistry of Materials, 2014, 26, 2532-2536.	6.7	39
50	Local Atomic Arrangements and Band Structure of Boron Carbide. Angewandte Chemie - International Edition, 2018, 57, 6130-6135.	13.8	39
51	Physical Insights on the Lattice Softening Driven Midâ€Temperature Range Thermoelectrics of Ti/Zrâ€Inserted SnTeâ€"An Outlook Beyond the Horizons of Conventional Phonon Scattering and Excavation of Heikesâ€™ Equation for Estimating Carrier Properties. Advanced Energy Materials, 2021, 11, 2101122.	19.5	39
52	A material catalogue with glass-like thermal conductivity mediated by crystallographic occupancy for thermoelectric application. Energy and Environmental Science, 2021, 14, 3579-3587.	30.8	37
53	Effect of transition metal doping and carbon doping on thermoelectric properties of YB66 single crystals. Journal of Solid State Chemistry, 2006, 179, 2889-2894.	2.9	36
54	Thermoelectric properties of the chalcopyrite Cu1â^'xMxFeS2â^'y series (M = Mn, Co, Ni). RSC Advances, 2016, 6, 55117-55124.	3.6	36

#	Article	IF	Citations
55	Ultra low thermal conductivity of disordered layered p-type bismuth telluride. Journal of Materials Chemistry C, 2013, 1, 2362.	5.5	35
56	Doping effect in a magnetic TbB50-type B12 cluster compound. Journal of Applied Physics, 2004, 95, 7204-7206.	2.5	34
57	Ferromagnetism and electronic structure ofTmB2. Physical Review B, 2009, 79, .	3.2	34
58	Effect of Zn doping on improving crystal quality and thermoelectric properties of borosilicides. Dalton Transactions, 2010, 39, 1027-1030.	3.3	34
59	Effect of two different size chiral ligand-capped gold nanoparticle dopants on the electro-optic and dielectric dynamics of a ferroelectric liquid crystal mixture. Liquid Crystals, 2016, 43, 695-703.	2.2	34
60	First-principles calculations of Seebeck coefficients in a magnetic semiconductor CuFeS2. Applied Physics Letters, 2017, 110, .	3.3	34
61	Magnetic Transitions in B12Icosahedral Cluster Compounds REB50(RE=Tb, Dy, Ho, Er). Journal of the Physical Society of Japan, 2000, 69, 579-585.	1.6	33
62	Thermal conductivity of layered borides: The effect of building defects on the thermal conductivity of TmAlB4 and the anisotropic thermal conductivity of AlB2. APL Materials, 2014, 2, .	5.1	32
63	Shaping the role of germanium vacancies in germanium telluride: metastable cubic structure stabilization, band structure modification, and stable N-type conduction. NPG Asia Materials, 2020, 12, .	7.9	32
64	Electrical, optical, and thermoelectric properties of Ga2O3(ZnO)9. RSC Advances, 2011, 1, 1788.	3.6	31
65	Anisotropic Anomalies of Thermoelectric Transport Properties and Electronic Structures in Layered Complex Nitrides AMN₂ (A = Na, Cu; M = Ta, Nb). Chemistry of Materials, 2015, 27, 7265-7275.	6.7	30
66	Magnetic transitions in B12 icosahedral boron-rich compounds TbB50 and TbB41Si1.2: Lattice constant dependence of the transition. Journal of Alloys and Compounds, 1999, 288, 32-35.	5.5	28
67	Thermal conductivity of PrRh4.8B2, a layered boride compound. APL Materials, 2017, 5, 126103.	5.1	28
68	Role of phase separation in nanocomposite indium-tin-oxide films for transparent thermoelectric applications. Journal of Materiomics, 2021, 7, 612-620.	5.7	28
69	Synthesis and magnetic properties of binary boride REB25compounds. Journal of Physics Condensed Matter, 2001, 13, L423-L430.	1.8	27
70	Organic Ï€-type thermoelectric module supported by photolithographic mold: a working hypothesis of sticky thermoelectric materials. Science and Technology of Advanced Materials, 2018, 19, 517-525.	6.1	27
71	Thermoelectric materials taking advantage of spin entropy: lessons from chalcogenides and oxides. Science and Technology of Advanced Materials, 2021, 22, 583-596.	6.1	27
72	The origin of the n-type behavior in rare earth borocarbide Y_{1âˆ’x}B_{28.5}C₄. Dalton Transactions, 2014, 43, 15048-15054.	3.3	26

#	ARTICLE	IF	CITATIONS
73	Is LiI a Potential Dopant Candidate to Enhance the Thermoelectric Performance in Sb-Free GeTe Systems? A Prelusive Study. Energies, 2020, 13, 643.	3.1	26
74	Thermoelectric Enhancement of Silicon Membranes by Ultrathin Amorphous Films. ACS Applied Materials & Interfaces, 2019, 11, 12027-12031.	8.0	25
75	Nanostructured planar-type uni-leg Si thermoelectric generators. Applied Physics Express, 2020, 13, 095001.	2.4	25
76	Improved thermoelectric performance of GeTe via efficient yttrium doping. Applied Physics Letters, 2021, 118, .	3.3	25
77	Effect of native defects on thermoelectric properties of copper iodide films. Emergent Materials, 2021, 4, 761-768.	5.7	25
78	Thermoelectric properties and spark plasma sintering of doped YB₂₂C₂N. Journal of Materials Research, 2010, 25, 665-669.	2.6	24
79	Synthesis and thermoelectric properties of composite oxides in the pseudobinary system ZnO-Ga2O3. Solid State Sciences, 2017, 65, 29-32.	3.2	24
80	Microstructure analysis and thermoelectric properties of iron doped CuGaTe2. Journal of Materiomics, 2018, 4, 221-227.	5.7	24
81	Flexible <i>n</i>-Type Abundant Chalcopyrite/PEDOT:PSS/Graphene Hybrid Film for Thermoelectric Device Utilizing Low-Grade Heat. ACS Applied Materials & Interfaces, 2021, 13, 51245-51254.	8.0	24
82	Heterometallic Benzenehexathiolato Coordination Nanosheets: Periodic Structure Improves Crystallinity and Electrical Conductivity. Advanced Materials, 2022, 34, e2106204.	21.0	24
83	Magnetic properties of thulium aluminoboride TmAlB4. Journal of Applied Physics, 2005, 97, 10A910.	2.5	23
84	Anomalous effect of vanadium boride seeding on thermoelectric properties of YB22C2N. Materials Research Bulletin, 2013, 48, 1972-1977.	5.2	23
85	High-pressure effect on the superconductivity of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">YB</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math>. Physical Review B, 2014, 90, .	3.2	23
86	Magnetism of CaB2C2. Journal of the Physical Society of Japan, 2002, 71, 1789-1790.	1.6	22
87	Deposition of thermoelectric strontium hexaboride thin films by a low pressure CVD method. Journal of Crystal Growth, 2016, 449, 10-14.	1.5	22
88	Sintering characteristics and thermoelectric properties of Mn–Al co-doped ZnO ceramics. Journal of the Ceramic Society of Japan, 2016, 124, 515-522.	1.1	22
89	An alternative, faster and simpler method for the formation of hierarchically porous ZnO particles and their thermoelectric performance. RSC Advances, 2017, 7, 31960-31968.	3.6	22
90	Thermoelectric Properties of Bi-Doped Magnesium Silicide Stannides. ACS Applied Materials & Interfaces, 2018, 10, 40585-40591.	8.0	22

#	Article	IF	Citations
91	Noncovalent Modification of Single-Walled Carbon Nanotubes Using Thermally Cleavable Polythiophenes for Solution-Processed Thermoelectric Films. ACS Applied Materials & Interfaces, 2019, 11, 4211-4218.	8.0	22
92	Unusual Lattice Dynamics and Anisotropic Thermal Conductivity in In2Te5 Due to a Layered Structure and Planar-Coordinated Te-Chains. Chemistry of Materials, 2020, 32, 5335-5342.	6.7	22
93	Realization of closed-loop optimization of epitaxial titanium nitride thin-film growth via machine learning. Materials Today Physics, 2021, 16, 100296.	6.0	22
94	Constructed Ge Quantum Dots and Sn Precipitate SiGeSn Hybrid Film with High Thermoelectric Performance at Low Temperature Region. Advanced Energy Materials, 2022, 12, .	19.5	22
95	Tailoring the thermoelectric and structural properties of Cuâ€"Sn based thiospinel compounds [CuM_{1+x}Sn_{1â^'x}S₄ (M = Ti, V, Cr, Co)]. Journal of Materials Chemistry C, 2020, 8, 16368-16383.	5.5	21
96	Direct Pyrolysis Method for Superconducting Crystalline MgB2 Nanowires. Chemistry of Materials, 2003, 15, 3194-3197.	6.7	20
97	Magnesioreduction Synthesis of Co-Doped Î²-FeSi2: Mechanism, Microstructure, and Improved Thermoelectric Properties. ACS Applied Energy Materials, 2019, 2, 8525-8534.	5.1	20
98	Strain-induced creation and switching of anion vacancy layers in perovskite oxynitrides. Nature Communications, 2020, 11, 5923.	12.8	20
99	YB48 the metal rich boundary of YB66; crystal growth and thermoelectric properties. Journal of Physics and Chemistry of Solids, 2015, 87, 221-227.	4.0	19
100	Thermoelectric Performance of n-Type Magnetic Element Doped Bi₂S₃. ACS Applied Energy Materials, 2022, 5, 3845-3853.	5.1	19
101	Crystal growth and anisotropy of high temperature thermoelectric properties of yttrium borosilicide single crystals. Journal of Solid State Chemistry, 2016, 233, 1-7.	2.9	18
102	Zr doped Î²-rhombohedral boron: Widely variable Seebeck coefficient and structural properties. Acta Materialia, 2017, 122, 378-385.	7.9	18
103	Facile pâ€"n control, and magnetic and thermoelectric properties of chromium selenides Cr2+xSe3. Journal of Materials Chemistry C, 2019, 7, 8269-8276.	5.5	18
104	Anisotropic thermal transport in magnetic intercalates <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mi>[illegible]/mml:mi[illegible]</mml:ms Physical Review B, 2019, 99, .	3.2	18
105	Reactive spark plasma sintering and thermoelectric properties of Nd-substituted BiCuSeO oxyselenides. Journal of Alloys and Compounds, 2019, 785, 96-104.	5.5	18
106	Thermoelectric Performance of Cr Doped and Crâ€"Fe Double-Doped Higher Manganese Silicides with Adjusted Carrier Concentration and Significant Electronâ€"Phonon Interaction. ACS Applied Materials & Interfaces, 2021, 13, 8574-8583.	8.0	18
107	Theory of huge thermoelectric effect based on a magnon drag mechanism: Application to thin-film Heusler alloy. Physical Review B, 2021, 104, .	3.2	18
108	Low-temperature magnetism of the compound GdB18Si5. Journal of Physics Condensed Matter, 2002, 14, 11831-11836.	1.8	17

#	Article	IF	Citations
109	Magnetism of the trigonal B12 cluster compound REB17CN (RE=Er, Ho). Journal of Applied Physics, 2003, 93, 7664-7666.	2.5	17
110	Effect of Transition-Metal Additives on Thermoelectric Properties of YB22C2N. Journal of Electronic Materials, 2011, 40, 920-925.	2.2	17
111	Thermoelectric properties of amorphous ZnO<i>x</i>N<i>y</i> thin films at room temperature. Applied Physics Letters, 2019, 114, .	3.3	17
112	Significant off-stoichiometry effect leading to the N-type conduction and ferromagnetic properties in titanium doped Fe2VAl thin films. Acta Materialia, 2020, 200, 848-856.	7.9	17
113	Influence of Stoichiometry and Aging at Operating Temperature on Thermoelectric Higher Manganese Silicides. Chemistry of Materials, 2020, 32, 10601-10609.	6.7	17
114	The electronic pseudo band gap states and electronic transport of the full-Heusler compound Fe₂VAl. Journal of Materials Chemistry C, 2021, 9, 2073-2085.	5.5	17
115	Realization of the YB50 structure type in the gadolinium borides. Materials Research Bulletin, 2001, 36, 2463-2470.	5.2	16
116	Focus on advanced materials for energy harvesting: prospects and approaches of energy harvesting technologies. Science and Technology of Advanced Materials, 2018, 19, 543-544.	6.1	16
117	Visualizing nanoscale heat pathways. Nano Energy, 2018, 52, 323-328.	16.0	16
118	Exploring the thermoelectric behavior of spark plasma sintered Fe7-xCoxS8 compounds. Journal of Alloys and Compounds, 2020, 819, 152999.	5.5	16
119	Magnetic Ordering in Boron-Rich Borides TbB₆₆and GdB₆₆. Acta Physica Polonica A, 2010, 118, 875-876.	0.5	16
120	Physical properties of layered homologous REâ€“Bâ€“C(N) compounds. Journal of Solid State Chemistry, 2004, 177, 444-448.	2.9	15
121	Three-Dimensionality of Electronic Structures and Thermoelectric Transport in SrZrN2 and SrHfN2 Layered Complex Metal Nitrides. Inorganic Chemistry, 2014, 53, 8979-8984.	4.0	15
122	HAXPES study of CeO thin filmâ€“silicon oxide interface. Applied Surface Science, 2014, 303, 46-53.	6.1	15
123	Synthesis and the physical properties of layered copper oxytellurides Sr₂TMCu₂Te₂O₂ (TM = Mn, Co, Zn). Journal of Materials Chemistry C, 2018, 6, 12260-12266.	5.5	15
124	Probing of Thermal Transport in 50 nm Thick PbTe Nanocrystal Films by Time-Domain Thermoreflectance. Journal of Physical Chemistry C, 2018, 122, 27127-27134.	3.1	15
125	Structural Properties and Thermoelectric Performance of the Double-Filled Skutterudite (Sm,Gd)y(FexNi1-x)4Sb12. Materials, 2019, 12, 2451.	2.9	15
126	Mesostructure - thermoelectric properties relationships in V Mn1âˆ'Si1.74 (xÂ= 0, 0.04) higher manganese silicides preparedÂbyÂmagnesiothermy. Journal of Alloys and Compounds, 2020, 816, 152577.	5.5	15

#	Article	IF	Citations
127	Robust, Transparent Hybrid Thin Films of Phase-Change Material Sb₂S₃ Prepared by Electrophoretic Deposition. ACS Applied Energy Materials, 2021, 4, 9891-9901.	5.1	15
128	Anderson transition in stoichiometric Fe2VAl: high thermoelectric performance from impurity bands. Nature Communications, 2022, 13, .	12.8	15
129	Electron-spin-resonance study of gadolinium borosilicide: A rare-earth ladder compound. Journal of Applied Physics, 2006, 99, 08J309.	2.5	14
130	Pt and Sn Doped Sputtered CeO₂ Electrodes for Fuel Cell Applications. Fuel Cells, 2010, 10, 139-144.	2.4	14
131	Theoretical and experimental investigation of the excellent pâ€“n control in yttrium aluminoborides. Science and Technology of Advanced Materials, 2014, 15, 035012.	6.1	14
132	Drastic power factor improvement by Te doping of rare earth-free CoSb3-skutterudite thin films. RSC Advances, 2020, 10, 21129-21135.	3.6	14
133	Bonding heterogeneity in mixed-anion compounds realizes ultralow lattice thermal conductivity. Journal of Materials Chemistry A, 2021, 9, 22660-22669.	10.3	14
134	Solubility limit and annealing effects on the microstructure & thermoelectric properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si5.svg"><mml:mrow><mml:msub><mml:mtext>Fe</mml:mtext><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>âˆ’</mml:mo><mml:mi mathvariant="normal">x</mml:mi></mml:mrow></mml:msub><mml:msub><mml:mtext>Ta</mml:mtext><mml:mi mathvariant="normal">x</mml:mi></mml:msub><mml:msub><mml:mtext>Al</mm. Acta Materialia, 2021,	7.9	14
135	High solubility of Al and enhanced thermoelectric performance due to resonant states in Fe2VAlx. Applied Physics Letters, 2022, 120, .	3.3	14
136	Direct elucidation of the effect of building defects on the physical properties of alpha-TmAlB4; An AlB2-type analogous â€œtilingâ€•compound. Journal of Applied Physics, 2012, 111, 07E127.	2.5	13
137	Effect of spark plasma sintering (SPS) on the thermoelectric properties of magnesium ferrite. Materials for Renewable and Sustainable Energy, 2017, 6, 1.	3.6	13
138	Miniaturized in-plane Ï€-type thermoelectric device composed of a IIâ€“IV semiconductor thin film prepared by microfabrication. Materials Today Energy, 2022, 28, 101075.	4.7	13
139	Specific Heat of Antiferromagnetic-like TbB41Si1.2, a B12 Icosahedral Boron-Rich Compound. Journal of Solid State Chemistry, 2000, 154, 223-228.	2.9	12
140	Homologous Phases Built by Boron Clusters and Their Vibrational Properties. Inorganic Chemistry, 2001, 40, 6948-6951.	4.0	12
141	f-electron dependence of the physical properties of REAlB4; an AlB2-type analogous â€œtilingâ€•compound. Journal of Applied Physics, 2011, 109, 07E111.	2.5	12
142	Origin of Projected Excellent Thermoelectric Transport Properties in d⁰â€Electron AMN₂ (A = Sr or Ba; M = Ti, Zr, Hf) Layered Complex Metal Nitrides. European Journal of Inorganic Chemistry, 2015, 2015, 3715-3722.	2.0	12
143	Anisotropic thermoelectric properties in layered complex nitrides with Î±-NaFeO₂-type structure. APL Materials, 2016, 4, 104808.	5.1	12
144	Effect of Nanostructuring and High-Pressure Torsion Process on Thermal Conductivity of Carrier-Doped Chalcopyrite. Journal of Electronic Materials, 2016, 45, 1642-1647.	2.2	12

#	Article	IF	Citations
145	Thermoelectric Properties of Variants of Cu4Mn2Te4 with Spinel-Related Structure. Inorganic Chemistry, 2018, 57, 5258-5266.	4.0	12
146	Effect of addition of SiC and Al2O3 refractories on Kapitza resistance of antimonide-telluride. AIP Advances, 2018, 8, .	1.3	12
147	Rapid deposition and thermoelectric properties of ytterbium boride thin films using hybrid physical chemical vapor deposition. Materialia, 2018, 1, 244-248.	2.7	12
148	High-resolution electron microscopy and X-ray diffraction study of intergrowth structures in Î±- and Î²-type YbAlB₄single crystals. Philosophical Magazine, 2013, 93, 1054-1064.	1.6	11
149	Thermoelectric properties of phase pure boron carbide prepared by a solution-based method. Advances in Applied Ceramics, 2020, 119, 97-106.	1.1	11
150	Anionic conduction mediated giant n-type Seebeck coefficient in doped Poly(3-hexylthiophene) free-standing films. Materials Today Physics, 2021, 16, 100307.	6.0	11
151	The Effect of Reactive Electric Field-Assisted Sintering of MoS2/Bi2Te3 Heterostructure on the Phase Integrity of Bi2Te3 Matrix and the Thermoelectric Properties. Materials, 2022, 15, 53.	2.9	11
152	Cold Spraying of Amorphous Cu50Zr50 Alloys. Journal of Thermal Spray Technology, 2014, 24, 108.	3.1	10
153	Role of excess tellurium on the electrical and thermal properties in Te-doped paracostibite. Journal of Materials Chemistry C, 2020, 8, 1811-1818.	5.5	10
154	Thermoelectric properties of MgTi2O5/TiN conductive composites prepared via reactive spark plasma sintering for high temperature functional applications. Scripta Materialia, 2020, 178, 44-50.	5.2	10
155	The roles of interstitial oxygen and phase compositions on the thermoelectric properties CuCr0.85Mg0.15O2 delafossite material. Journal of Alloys and Compounds, 2021, 867, 158995.	5.5	10
156	Effect of Nanostructuring on the Thermoelectric Properties of Î²-FeSi2. Nanomaterials, 2021, 11, 2852.	4.1	10
157	Thermoelectric properties of Sm-doped BiCuSeO oxyselenides fabricated by two-step reactive sintering. Journal of Alloys and Compounds, 2022, 912, 165208.	5.5	10
158	Revealing an elusive metastable wurtzite CuFeS2 and the phase switching between wurtzite and chalcopyrite for thermoelectric thin films. Acta Materialia, 2022, 235, 118090.	7.9	10
159	Effect of Transition Metal Doping in YB66. Journal of Solid State Chemistry, 2000, 154, 54-60.	2.9	9
160	Thermoelectric Properties of Ni_{0.05}Mo₃Sb_{5.4}Te_{1.6} with Embedded SiC and Al₂O₃ Nanoparticles. European Journal of Inorganic Chemistry, 2016, 2016, 853-860.	2.0	9
161	Direct synthesis of p-type bulk BiCuSeO oxyselenides by reactive spark plasma sintering and related thermoelectric properties. Scripta Materialia, 2020, 187, 317-322.	5.2	9
162	Recent Developments and Progress on BiCuSeO Based Thermoelectric Materials. Nanobiotechnology Reports, 2021, 16, 294-307.	0.6	9

#	Article	IF	Citations
163	Thermoelectric Performance Enhancement of Film by Pulse Electric Field and Multiâ€Nanocomposite Strategy. Small, 2021, 17, e2100554.	10.0	9
164	Doping Effects in Rare-Earth Borides. Journal of Electronic Materials, 2009, 38, 1098-1103.	2.2	8
165	On the boron rich phases in the Yb-B system. Journal of Solid State Chemistry, 2017, 255, 172-177.	2.9	8
166	Fabrication of Mg2Sn(111) film by molecular beam epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	2.1	8
167	On the thermoelectric and magnetic properties, hardness, and crystal structure of the higher boride YbB66. Journal of Alloys and Compounds, 2020, 813, 152182.	5.5	8
168	New Synthesis Route for Complex Borides; Rapid Synthesis of Thermoelectric Yttrium Aluminoboride via Liquid-Phase Assisted Reactive Spark Plasma Sintering. Scientific Reports, 2020, 10, 8914.	3.3	8
169	Improvement of Thermoelectric Properties of Evaporated ZnO:Al Films by CNT and Au Nanocomposites. Journal of Physical Chemistry C, 2020, 124, 12713-12722.	3.1	8
170	Preparation of Ordered Nanoporous Indium Tin Oxides with Large Crystallites and Individual Control over Their Thermal and Electrical Conductivities. ACS Applied Materials & Interfaces, 2021, 13, 15373-15382.	8.0	8
171	High power factor in epitaxial Mg2Sn thin films via Ga doping. Applied Physics Letters, 2021, 119, .	3.3	8
172	Investigation of the magnetic structure of a TbB50-type B12 cluster compound. Journal of Alloys and Compounds, 2004, 374, 105-107.	5.5	7
173	Synthesis and magnetic properties of the ThMoB4-type modification of ErAlB4. Journal of Applied Physics, 2008, 103, 07B730.	2.5	7
174	Magnetic properties of the thulium layered compound Tm2AlB116: An AlB2-type analogue. Journal of Applied Physics, 2009, 105, 07E124.	2.5	7
175	Topology and symmetry analysis of rare earth borocarbides structural family, analogy to hexaferrites and relation to properties. Crystal Research and Technology, 2009, 44, 19-24.	1.3	7
176	Synthesis of morphology controllable aluminum nitride by direct nitridation of Î3-AlOOH in the presence of N₂H₄and their sintering behavior. Journal of Asian Ceramic Societies, 2018, 6, 63-69.	2.3	7
177	Influence of Slight Substitution (Mn/In) on Thermoelectric and Magnetic Properties in Chalcopyrite-Type CuInTe2. Journal of Electronic Materials, 2019, 48, 4524-4532.	2.2	7
178	Thermoelectric Performance Enhancement of the Cost-Effective Phosphide ZnCu2P8. ACS Applied Energy Materials, 2021, 4, 4861-4866.	5.1	7
179	Effect of microstructure on lattice thermal conductivity of thermoelectric chalcopyrite CuFeS₂: experimental and computational studies. Applied Physics Express, 2021, 14, 087002.	2.4	7
180	Thermoelectric properties of zinc-doped Cu5Sn2Se7 and Cu5Sn2Te7. Dalton Transactions, 2021, 50, 6561-6567.	3.3	7

#	Article	IF	Citations
181	Rational Design of 3d Transition-Metal Compounds for Thermoelectric Properties by Using Periodic Trends in Electron-Correlation Modulation. Journal of the American Chemical Society, 2022, 144, 3590-3602.	13.7	7
182	Crystal Structure of Ce₃Ni₂(BN)₂N and Magnetic Behavior of (CeNi(BN))₂(CeN)_x with x = 0, 1. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2008, 634, 1067-1070.	1.2	6
183	Intergrowth structure of Î±-phase in Î²-type TmAlB4 compound studied by high-angle annular detector dark-field scanning transmission electron microscopy. Journal of Solid State Chemistry, 2014, 219, 274-279.	2.9	6
184	Nanoscale characterization of the thermal interface resistance of a heat-sink composite material by<i>in situ</i>TEM. Nanotechnology, 2015, 26, 465705.	2.6	6
185	Comparative Study of Exchangeâ€“Correlation Functional and Potential for Evaluating Thermoelectric Transport Properties in <i>d</i>⁰ Perovskite Oxides. Journal of the Physical Society of Japan, 2017, 86, 074705.	1.6	6
186	Thermoelectric and magnetic properties of spark plasma sintered REB66 (REâ€¯=â€¯Y, Sm, Ho, Tm, Yb). Journal of the European Ceramic Society, 2020, 40, 3585-3591.	5.7	6
187	Improvement of power factor in the room temperature range of Mg₂Sn_{1â^'x}Ge_x. Japanese Journal of Applied Physics, 2021, 60, SBBF06.	1.5	6
188	Synthesis and Characterization of Al- and SnO2-Doped ZnO Thermoelectric Thin Films. Materials, 2021, 14, 6929.	2.9	6
189	Feasibility of high performance in p â€type Ge 1â^' x Bi x Te materials for thermoelectric modules. Journal of the American Ceramic Society, 0, , .	3.8	6
190	Thermoelectric materials developments: past, present, and future. Science and Technology of Advanced Materials, 2021, 22, 998-999.	6.1	6
191	Strong magnetic coupling in a magnetically dilute f-electron insulator: A dysprosium boron-cluster compound. Journal of Applied Physics, 2013, 113, 17E156.	2.5	5
192	SPS-sintered NaTaO3â€“Fe2O3 composite exhibits enhanced Seebeck coefficient and electric current. Materials for Renewable and Sustainable Energy, 2014, 3, 1.	3.6	5
193	Stability and Thermoelectric Property of Cu₉Fe₉S₁₆: Sulfide Mineral as a Promising Thermoelectric Material. Materials Research Society Symposia Proceedings, 2014, 1680, 1.	0.1	5
194	Rare earth higher borides. Fundamental Theories of Physics, 2020, 58, 39-154.	0.3	5
195	Rational Design of Spinel-Type Cu₄Mn₂Te₄/TMTe (TM = Co, Ni) Composites with Synergistically Manipulated Electrical and Thermal Transport Properties. ACS Applied Energy Materials, 2020, 3, 2096-2102.	5.1	5
196	Nanostructured Bulk Thermoelectric Materials for Energy Harvesting. NIMS Monographs, 2022, , 199-231.	0.3	5
197	New record high thermoelectric ZT of delafossite-based CuCrO2 thin films obtained by simultaneously reducing electrical resistivity and thermal conductivity via heavy doping with controlled residual stress. Applied Surface Science, 2022, 583, 152526.	6.1	5
198	Insight of the preponderant role of the lattice size in the Sn-based colusite for promoting high power factor. Journal of Materials Chemistry A, 0, , .	10.3	5

#	Article	IF	Citations
199	Determination of thermal diffusivity of thin films by applying Fourier expansion analysis to thermo-reflectance signal after periodic pulse heating. Journal of Applied Physics, 2021, 130, .	2.5	5
200	Large thermoelectric power factors by opening the band gap in semimetallic Heusler alloys. Materials Today Physics, 2022, 27, 100742.	6.0	5
201	Development of Thermoelectric Materials Based on Iron Sulfide Minerals. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2017, 64, 173-179.	0.2	4
202	Crystal structure and high temperature X-ray diffraction study of thermoelectric chimney-ladder FeGe (Î³ â‰ˆ 1.52). Journal of Alloys and Compounds, 2020, 846, 155696.	5.5	4
203	Sticky thermoelectric materials for flexible thermoelectric modules to capture lowâ€“temperature waste heat. MRS Advances, 2020, 5, 481-487.	0.9	4
204	Control of Competing Thermodynamics and Kinetics in Vapor Phase Thin-Film Growth of Nitrides and Borides. Frontiers in Chemistry, 2021, 9, 642388.	3.6	4
205	Fabrication and Evaluation of Low-Cost CrSi2 Thermoelectric Legs. Crystals, 2021, 11, 1140.	2.2	4
206	Investigation on the Power Factor of Skutterudite Smy(FexNi1âˆ’x)4Sb12 Thin Films: Effects of Deposition and Annealing Temperature. Materials, 2021, 14, 5773.	2.9	4
207	The role of sulfur valency on thermoelectric properties of sulfur ion implanted copper iodide. Journal of Alloys and Compounds, 2022, 921, 166103.	5.5	4
208	Investigation of Superconductivity in Isoelectronic and Related Compounds of MgB2. Journal of the Physical Society of Japan, 2002, 71, 323-325.	1.6	3
209	Crystal Structure and Properties of Novel Quaternary Actinoid Boron Carbides U2ScB6C3 and Th2ScB6C3. Journal of Nuclear Science and Technology, 2002, 39, 122-125.	1.3	3
210	Low Temperature Properties and Superconductivity of YB6 and YB4. AIP Conference Proceedings, 2006, , .	0.4	3
211	Pressure Dependence of the Ginzburgâ€“Landau Parameter in Superconducting $$hbox {YB}_{6}$$ YB 6. Journal of Low Temperature Physics, 2017, 187, 559-564.	1.4	3
212	Seebeck coefficients in CuFeS2thin films by first-principles calculations. Japanese Journal of Applied Physics, 2019, 58, SIIB01.	1.5	3
213	Crystal Growth and Physical Properties of Lu(Al_{1-x}<i>T</i>_x)B₄ (<i>T</i> = Fe, Cr) by Al-Self Flux. Solid State Phenomena, 2019, 289, 120-126.	0.3	3
214	Origin of Band Modulation in GeTe-Rich Geâ€“Sbâ€“Te Thin Film. ACS Applied Electronic Materials, 2019, 1, 2619-2625.	4.3	3
215	dz2 orbital character of polyhedra in complex solid-state transition-metal compounds. Dalton Transactions, 2020, 49, 431-437.	3.3	3
216	The low and high temperature thermoelectric properties of Yb3Si5. Materials Research Express, 2021, 8, 075504.	1.6	3

#	Article	IF	Citations
217	Synthesis of novel hexamolybdenum cluster-functionalized copper hydroxide nanocomposites and its catalytic activity for organic molecule degradation. Science and Technology of Advanced Materials, 2021, 22, 758-771.	6.1	3
218	Strong-Coupling Features in YB₆and ZrB₁₂Studied by Point-Contact Spectroscopy. Acta Physica Polonica A, 2010, 118, 1042-1044.	0.5	3
219	Rapid synthesis of thermoelectric YB₂₂C₂N via spark plasma sintering with gas/solid reaction technology. Journal of the Ceramic Society of Japan, 2020, 128, 181-185.	1.1	3
220	Induced 2H-Phase Formation and Low Thermal Conductivity by Reactive Spark Plasma Sintering of 1T-Phase Pristine and Co-Doped MoS₂ Nanosheets. ACS Omega, 2021, 6, 32783-32790.	3.5	3
221	Improvement of Thermoelectric Properties via Texturation Using a Magnetic Slip Casting Processâ€"The Illustrative Case of CrSi₂. Chemistry of Materials, 2022, 34, 1143-1156.	6.7	3
222	Development of micro / nano-size hollow silicate particles for thermal energy saving application. MRS Advances, 2016, 1, 3947-3952.	0.9	2
223	Pressure Effect on the Einstein-Like Phonon Mode in Superconducting $$hbox {YB}_{6}$$ YB 6. Journal of Low Temperature Physics, 2017, 187, 553-558.	1.4	2
224	Evaluation of the f-electron rare-earth copper telluride GdCu1+xTe2 as a thermoelectric material. Journal of Solid State Chemistry, 2017, 255, 193-199.	2.9	2
225	Transport properties of single-component organic conductors, TED derivatives. Molecular Systems Design and Engineering, 2017, 2, 653-658.	3.4	2
226	Development of Nanoscale Thermocouple Probes for Local Thermal Measurements. E-Journal of Surface Science and Nanotechnology, 2019, 17, 102-107.	0.4	2
227	Proximity coupling of superconducting nanograins with fractal distributions. Physical Review B, 2020, 101, .	3.2	2
228	Experimental investigation of reciprocity of temperature response across two layer samples by flash method. Review of Scientific Instruments, 2020, 91, 014905.	1.3	2
229	Thermoelectrics: Physical Insights on the Lattice Softening Driven Midâ€Temperature Range Thermoelectrics of Ti/Zrâ€Inserted SnTeâ€"An Outlook Beyond the Horizons of Conventional Phonon Scattering and Excavation of Heikesâ€™ Equation for Estimating Carrier Properties (Adv. Energy Mater.) Tj ETQq1 1 0.784314 rgBT /O	19.5	2
230	Fabrication and Thermoelectric Properties of Chromium Silicide Thin Films. Sensors and Materials, 2020, 32, 2433.	0.5	2
231	Syntheses and Properties of Yb(Al_{1â^'x}<i>T</i>_x)B₄ (<i>T</i> = Cr,) Tj ETQq1 1 0.784314 rgBT /O Metallurgy, 2019, 66, 525-529.	0.2	2
232	Thermal conductivity of rare-earth titanate pyrochlores. Physical Review Materials, 2022, 6, .	2.4	2
233	Facile Fabrication of N-Type Flexible CoSb3-xTex Skutterudite/PEDOT:PSS Hybrid Thermoelectric Films. Polymers, 2022, 14, 1986.	4.5	2
234	Influence of micro-structure in doped CeO2 solid electrolytes on conducting properties. Microscopy and Microanalysis, 2007, 13, .	0.4	1

#	Article	IF	Citations
235	Influence of Pressure on Superconductivity in YB_{6}. Acta Physica Polonica A, 2014, 126, 340-341.	0.5	1
236	Interface engineering of bio-inspired Boron nitride nano-architectures toward controllable hydrophobicity/hydrophilicity. , 2015, , .		1
237	Novel Materials and Processes to Develop Viable Thermoelectrics. Journal of Physics: Conference Series, 2018, 1052, 012001.	0.4	1
238	Crystal Growth and some Properties of Tm(Al_{1-x}Mo_x)B₄ Synthesized by Al-Flux. Solid State Phenomena, 2019, 289, 65-70.	0.3	1
239	Development of thermoelectric thin films and characterization methods. Journal of Physics: Conference Series, 2019, 1407, 012055.	0.4	1
240	Thermoelectric Materials and Applicative Issues for Energy Harvesting to Power IoT Sensors and Devices. , 2019, , .		1
241	Transport properties of a molybdenum antimonide-telluride with dispersed NiSb nanoparticles. Materials Chemistry and Physics, 2021, 260, 124061.	4.0	1
242	Thermoelectric properties of Nb-doped Sr1âˆ'x (La0.5Na0.5) x TiO3 perovskites. Applied Physics Express, 2022, 15, 011003.	2.4	1
243	First principles study of Fe₂VAl and Fe₂VAl/Si thin films and their magnetic properties. Japanese Journal of Applied Physics, 0, , .	1.5	1
244	Synthesis and Properties of [B/C] Layered Compounds.. Materials Research Society Symposia Proceedings, 2004, 848, 270.	0.1	0
245	RMn2Si2 (R=La, Ce, Pr, Nd, Sm, Gd) Compounds Grown from Metal Flux and Properties of the Crystals. Journal of the Ceramic Society of Japan, 2004, 112, 263-265.	1.3	0
246	Development of high quality Pt-CeO>inf<2>/inf<based anode materials for direct methanol fuel cell applications. , 0, , .		0
247	Thermal Conductivity and Thermoelectric Properties of Novel Rare Earth Boron-Rich Cluster Compounds; Discovery of first undoped n-type B12 icosahedral compound. Materials Research Society Symposia Proceedings, 2005, 886, 1.	0.1	0
248	Inside Cover: Bulk and Surface Structure and Highâ€Temperature Thermoelectric Properties of Inverse Clathrateâ€III in the Siâ€Pâ€Te System (Chem. Eur. J. 42/2010). Chemistry - A European Journal, 2010, 16, 12494-12494.	3.3	0
249	Boson peak investigation of glassy glucose by terahertz time-domain spectroscopy and low-frequency raman scattering. , 2017, , .		0
250	Spectroscopic characterization at THz frequencies of glucose-based biomaterials: paramylon, paramylon-ester and cellulose. , 2019, , .		0
251	Magnetism of Higher Borides. Acta Physica Polonica A, 2008, 113, 231-234.	0.5	0
252	Preparation of mesoporous nitrogen-doped titania comprising large crystallites with low thermal conductivity. Nanoscale Advances, 0, , .	4.6	0

#	Article	IF	Citations
253	Thermoelectric properties of Cuâ€Doped Heusler compound Fe _{2â€•<i>x</i>} Cu _{<i>x</i>} VAl. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 0, , .	1.2	0