Ran Ang

List of Publications by Citations

108 papers	1,630 citations	21 h-index	34 g-index
111 ext. papers	1,970 ext. citations	4.6 avg, IF	4.5 L-index

#	Paper	IF	Citations
108	Thermoelectricity Generation and Electron-Magnon Scattering in a Natural Chalcopyrite Mineral from a Deep-Sea Hydrothermal Vent. *Angewandte Chemie - International Edition*, **2015**, 54, 12909-13	16.4	125
107	Superconductivity induced by Se-doping in layered charge-density-wave system 1T-TaS2□Sex. *Applied Physics Letters*, **2013**, 102, 192602	3.4	88
106	Real-space coexistence of the melted Mott state and superconductivity in Fe-substituted 1T-TaS2. *Physical Review Letters*, **2012**, 109, 176403	7.4	84
105	Fabrication and electronic transport properties of Bi nanotube arrays. *Applied Physics Letters*, **2006**, 88, 103119	3.4	84
104	Superconductivity and bandwidth-controlled Mott metal-insulator transition in 1T-TaS2□Sex. *Physical Review B*, **2013**, 88,	3.3	56
103	Tunning of microstructure and thermoelectric properties of Ca3Co4O9 ceramics by high-magnetic-field sintering. *Journal of Applied Physics*, **2011**, 110, 123713	2.5	50
102	Synthesis of amidoximated graphene oxide nanoribbons from unzipping of multiwalled carbon nanotubes for selective separation of uranium(VI). *RSC Advances*, **2015**, 5, 89309-89318	3.7	46
101	Enhanced Thermoelectric Performance and Room-Temperature Spin-State Transition of Co4+ Ions in the Ca3Co4□RhxO9 System. *Journal of Physical Chemistry C*, **2013**, 117, 11459-11470	3.8	45
100	Diamagnetism, transport, magnetothermoelectric power, and magnetothermal conductivity in electron-doped CaMn1□VxO3 manganites. *Journal of Applied Physics*, **2006**, 100, 063902	2.5	43
99	Enhanced electronic correlation and thermoelectric response by Cu-doping in Ca3Co4O9 single crystals. *Dalton Transactions*, **2012**, 41, 11176-86	4.3	41
98	Routes for advancing SnTe thermoelectrics. *Journal of Materials Chemistry A*, **2020**, 8, 16790-16813	13	39
97	Ga-Doping-Induced Carrier Tuning and Multiphase Engineering in n-type PbTe with Enhanced Thermoelectric Performance. *ACS Applied Materials & Interfaces*, **2018**, 10, 22401-22407	9.5	32
96	Atomistic origin of an ordered superstructure induced superconductivity in layered chalcogenides. *Nature Communications*, **2015**, 6, 6091	17.4	32
95	Structural, transport, and magnetic properties in the Ti-doped manganites LaMn1□TixO3 (0□□.2). *Solid State Communications*, **2005**, 136, 268-272	1.6	31
94	Extraordinary Role of Bi for Improving Thermoelectrics in Low-Solubility SnTe-CdTe Alloys. *ACS Applied Materials & Interfaces*, **2019**, 11, 26093-26099	9.5	27
93	Effects of Co doping in bilayered manganite LaSr2Mn2O7: Resistivity, thermoelectric power, and thermal conductivity. *Physical Review B*, **2005**, 72,	3.3	27
92	Studies of structural, magnetic, electrical and thermal properties in layered perovskite cobaltite SrLnCoO4(Ln = La, Ce, Pr, Nd, Eu, Gd and Tb). *Journal Physics D: Applied Physics*, **2008**, 41, 045404	3	24

91	Small-polaron hopping conduction in La0.9Te0.1MnO3 above the metal-insulator transition. *Materials Letters*, **2006**, 60, 3281-3285	3.3	24
90	Band and Phonon Engineering for Thermoelectric Enhancements of Rhombohedral GeTe. *ACS Applied Materials & Interfaces*, **2019**, 11, 30756-30762	9.5	23
89	Transport mechanism and magnetothermoelectric power of electron-doped manganites La0.85Te0.15Mn1−CuxO3 (0?x?0.20). *Journal of Applied Physics*, **2006**, 100, 073706	2.5	23
88	A narrow band contribution with Anderson localization in Ag-doped layered cobaltites Bi2Ba3Co2Oy. *Journal of Applied Physics*, **2007**, 102, 073721	2.5	21
87	The evidence of the glassy behavior in the layered cobaltites. *Applied Physics Letters*, **2008**, 92, 162508	3.4	20
86	Size dependence of electronic and magnetic properties of double- perovskite Sr2FeMoO6. *Solid State Communications*, **2008**, 145, 98-102	1.6	20
85	Microstructure and bubble formation of Al Si doped tungsten prepared by spark plasma sintering. *International Journal of Refractory Metals and Hard Materials*, **2016**, 54, 335-341	4.1	18
84	Thermoelectricity Generation and Electron Magnon Scattering in a Natural Chalcopyrite Mineral from a Deep-Sea Hydrothermal Vent. *Angewandte Chemie*, **2015**, 127, 13101-13105	3.6	17
83	Exchange bias in the layered cobaltite Sr1.5Pr0.5CoO4. *Journal of Applied Physics*, **2008**, 104, 023914	2.5	17
82	Optimized Strategies for Advancing n-Type PbTe Thermoelectrics: A Review. *ACS Applied Materials & Interfaces*, **2020**, 12, 49323-49334	9.5	17
81	Magnetic and transport properties of La0.7Sr0.3Mn1−TixO3(0 ?x? 0.5) films prepared by chemical solution deposition. *Journal Physics D: Applied Physics*, **2006**, 39, 625-630	3	16
80	The contribution of narrow band and modulation of thermoelectric performance in doped layered cobaltites Bi2Sr2Co2Oy. *Applied Physics Letters*, **2012**, 100, 173503	3.4	15
79	Effect of Mo substitution in the n=3 Ruddlesden-Popper compound Ca4Mn3O10. *Physical Review B*, **2007**, 75,	3.3	15
78	Growth of Ca3Co4O9 films: Simple chemical solution deposition and stress induced spontaneous dewetting. *Journal of Applied Physics*, **2007**, 102, 103519	2.5	15
77	Boosting the thermoelectric performance of misfit-layered (SnS)1.2(TiS2)2 by a Co- and Cu-substituted alloying effect. *Journal of Materials Chemistry A*, **2018**, 6, 22909-22914	13	15
76	Structure, magnetic and transport properties in Ca3Co4−SbxO9 ceramics. *Journal of Alloys and Compounds*, **2013**, 574, 233-239	5.7	14
75	Enhanced Thermoelectric Performance Induced by Cr Doping at Ca-Sites in Ca3Co4O9 System. *Journal of the American Ceramic Society*, **2014**, 97, 3589-3596	3.8	14
74	Reentrant metal-insulator transition in the Cu-doped manganites La1−PbxMnO3(x~0.14) single crystals. *Physical Review B*, **2005**, 72,	3.3	14

73	High-performance in n-type PbTe-based thermoelectric materials achieved by synergistically dynamic doping and energy filtering. *Nano Energy*, **2022**, 91, 106706	17.1	14
72	Mechanical alloying boosted SnTe thermoelectrics. *Materials Today Physics*, **2021**, 17, 100340	8	14
71	Exotic reinforcement of thermoelectric power driven by Ca doping in layered Bi2Sr2−xCaxCo2Oy. *Applied Physics Letters*, **2013**, 102, 141907	3.4	13
70	Enhanced Electron Correlation in the In-doped Misfit-Layered Cobaltite Ca3Co4O9 Ceramics. *Journal of the American Ceramic Society*, **2013**, 96, 791-797	3.8	13
69	Intriguing substitution of conducting layer triggered enhancement of thermoelectric performance in misfit-layered (SnS)1.2(TiS2)2. *Applied Physics Letters*, **2017**, 110, 043507	3.4	12
68	Thermoelectric transport properties in Bi-doped SnTe−SnSe alloys. *Applied Physics Letters*, **2020**, 116, 103901	3.4	12
67	Coexistence of superconductivity and commensurate charge density wave in 4Hb-TaS2−xSex single crystals. *Journal of Applied Physics*, **2014**, 115, 043915	2.5	12
66	Low-field magnetoresistance in nanostructured Sr2FeMoO6−δ/CeO2 composites. *Journal of Applied Physics*, **2008**, 103, 083711	2.5	12
65	In situ growth of -axis-oriented thin films on Si(001). *Solid State Communications*, **2007**, 141, 239-242	1.6	12
64	Influence of carbon intercalation on the structural and magnetic properties of Ni3Al. *Physica B: Condensed Matter*, **2006**, 371, 63-67	2.8	12
63	Improving near-room-temperature thermoelectrics in SnTe−MnTe alloys. *Applied Physics Letters*, **2020**, 116, 193902	3.4	11
62	Strengthening of Thermoelectric Performance via Ir Doping in Layered Ca3Co4O9 System. *Journal of the American Ceramic Society*, **2014**, 97, 798-804	3.8	11
61	Evolution of the thermoelectric performance in low Ca-doped layered cobaltite Bi2Sr2Co2Oy. *Solid State Communications*, **2013**, 158, 16-19	1.6	11
60	Individual-Layer Thickness Effects on the Preferred c-Axis-Oriented BiFeO3 Films by Chemical Solution Deposition. *Journal of the American Ceramic Society*, **2010**, 93, 1682	3.8	11
59	Thermoelectric properties of sol−gel derived cobaltite Bi2Ca2.4Co2Oy. *Physica B: Condensed Matter* , **2011**, 406, 2914-2918	2.8	11
58	Internal friction evidence of uncorrelated magnetic clusters in electron-doped manganite Sr0.8Ce0.2MnO3. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2005**, 346, 321-326	2.3	11
57	Structural Evolution of High-Performance Mn-Alloyed Thermoelectric Materials: A Case Study of SnTe. *Small*, **2021**, 17, e2100525	11	11
56	Thermoelectric properties of p-type MnSe. *Journal of Alloys and Compounds*, **2019**, 789, 953-959	5.7	10

55	The charge trapping and memory effect in SiO2thin films containing Ge nanocrystals. *Journal Physics D: Applied Physics*, **2010**, 43, 015102	3	10
54	Carrier tuning and multiple phonon scattering induced high thermoelectric performance in n-type Sb-doped PbTe alloys. *Applied Physics A: Materials Science and Processing*, **2019**, 125, 1	2.6	9
53	Tuning the charge density wave and superconductivity in 6R-TaS2−xSex. *Journal of Applied Physics*, **2015**, 117, 163912	2.5	9
52	Outstanding radiation tolerance and mechanical behavior in ultra-fine nanocrystalline Al1.5CoCrFeNi high entropy alloy films under He ion irradiation. *Applied Surface Science*, **2020**, 516, 146129	6.7	9
51	Structure and transport properties in Ca3Co4−xMxO9 (M=Re and Pt) ceramics. *Ceramics International*, **2014**, 40, 10545-10550	5.1	9
50	Texturization-Induced In-Plane High-Performance Thermoelectrics and Inapplicability of the Debye Model to Out-of-Plane Lattice Thermal Conductivity in Misfit-Layered Chalcogenides. *ACS Applied Materials & Interfaces*, **2019**, 11, 48079-48085	9.5	9
49	Charging effect and capacitance modulation of Ni-rich NiO thin film. *Applied Physics Letters*, **2009**, 95, 012104	3.4	8
48	Influence of K doping on the properties of perovskite molybdates Ba1−xKxMoO3 (0≤x≤0.2). *Journal of Alloys and Compounds*, **2009**, 479, 22-25	5.7	8
47	Effects of Cr doping in bilayered manganite LaSr2Mn2O7: Resistivity, thermoelectric power, and thermal conductivity. *Solid State Communications*, **2006**, 137, 492-497	1.6	8
46	Spin-state transition, magnetic, electrical and thermal transport properties of the perovskite cobalt oxide Gd0.7Sr0.3CoO3. *Solid State Communications*, **2006**, 138, 255-260	1.6	8
45	Achieving high-performance n-type PbTe via synergistically optimizing effective mass and carrier concentration and suppressing lattice thermal conductivity. *Chemical Engineering Journal*, **2022**, 428, 132601	14.7	8
44	Low lattice thermal conductivity by alloying SnTe with AgSbTe2 and CaTe/MnTe. *Applied Physics Letters*, **2019**, 115, 073903	3.4	7
43	Band engineering and precipitation enhance thermoelectric performance of SnTe with Zn-doping. *Chinese Physics B*, **2018**, 27, 047202	1.2	6
42	Transport Properties of CdSb Alloys with a Promising Thermoelectric Performance. *ACS Applied Materials & Interfaces*, **2019**, 11, 27098-27103	9.5	6
41	Enhancement of thermoelectric power in layered Bi2Sr2Co2−x Ir x O y single crystals. *Journal of Materials Science*, **2014**, 49, 4636-4642	4.3	6
40	Structural, magnetic, electrical and thermal transport properties in two-dimensional perovskite Sr1.05Ln0.95CoO4(Ln = La, Ce and Nd) compounds. *Journal Physics D: Applied Physics*, **2008**, 41, 215009	3	6
39	High Quality Factor Enabled by Multiscale Phonon Scattering for Enhancing Thermoelectrics in Low-Solubility n-Type PbTe-CuTe Alloys. *ACS Applied Materials & Interfaces*, **2020**, 12, 52952-52958	9.5	6
38	Thermoelectric modulation by intrinsic defects in superionic conductor AgxCrSe2. *Applied Physics Letters*, **2020**, 116, 163901	3.4	5

37	Coexistence of superconductivity and charge-density-wave domain in 1T-FexTa1−xSSe. *Applied Physics Letters*, **2014**, 104, 252601	3.4	5
36	Electronic structure of the iron chalcogenide KFeAgTe2 revealed by angle-resolved photoemission spectroscopy. *Physical Review B*, **2013**, 88,	3.3	5
35	Aging-Induced Strong Anomalous Hall Effect at Room Temperature for Cu(Co) Nanoparticle Film. *Journal of Physical Chemistry C*, **2008**, 112, 1837-1841	3.8	5
34	The magnetic, electrical and thermal transport studies in the layered cobalt oxide Nd1−xSr1+xCoO4(x= 0.25 and 0.33). *Journal Physics D: Applied Physics*, **2007**, 40, 5206-5212	3	5
33	Influence of Te doping on the perovskite manganite La0.5Ca0.5MnO3. *Solid State Communications*, **2006**, 138, 505-510	1.6	5
32	Structural, magnetic and transport properties in the manganites La0.7Sr0.3−xTexMnO3 (0≤x≤0.15). *Solid State Communications*, **2005**, 134, 443-447	1.6	5
31	Direct observation of melted Mott state evidenced from Raman scattering in 1T-TaS 2 single crystal. *Chinese Physics B*, **2018**, 27, 017104	1.2	4
30	Structure, magnetic properties, and electrical transport in layered cobaltites Sr2−xPrxCoO4. *Journal of Applied Physics*, **2008**, 103, 103707	2.5	4
29	Magnetic and transport properties in double-doping La(2+4x)/3Sr(1−4x)/3Mn1−xCuxO3 (0?x?0.20) systems. *Journal of Magnetism and Magnetic Materials*, **2006**, 305, 325-331	2.8	4
28	Studies of electrical and thermal transport properties of the electron-doped manganite Sr0.9Ce0.1MnO3. *Physica B: Condensed Matter*, **2005**, 367, 243-248	2.8	4
27	Evaluation of thermoelectric CdSnAs2 with intrinsically low effective mass. *Journal of Alloys and Compounds*, **2019**, 809, 151772	5.7	3
26	Advancing thermoelectrics by vacancy engineering and band manipulation in Sb-doped SnTeCdTe alloys. *Applied Physics Letters*, **2021**, 119, 172101	3.4	3
25	Synergistic tuning of carrier mobility, effective mass, and point defects scattering triggered high thermoelectric performance in n-type Ge-doped PbTe. *Journal of Applied Physics*, **2019**, 125, 055104	2.5	3
24	Enhancing Near-Room-Temperature GeTe Thermoelectrics through In/Pb Co-doping. *ACS Applied Materials & Interfaces*, **2021**, 13, 37273-37279	9.5	3
23	Enhanced thermoelectric performance of n-type Nb-doped PbTe by compensating resonant level and inducing atomic disorder. *Materials Today Physics*, **2022**, 24, 100677	8	3
22	Structural, magnetic, and transport properties in La(2+4x)/3Sr(1−4x)/3Mn1−xCuxO3 (0?x?0.20) system. *Journal of Magnetism and Magnetic Materials*, **2006**, 302, 473-478	2.8	2
21	The Young's modulus and electrical and magnetic properties of La0.5Ca0.5−xTexMnO3. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2005**, 342, 491-496	2.3	2
20	Study of the magnetization and transport properties of the La(2+x)/3Sr(1−)/3Mn1−CrxO3 (0≤≤0.2) system. *Solid State Communications*, **2005**, 135, 467-470	1.6	2

19	Jahn□Teller transition and electron□phonon interaction in Cr-doped manganites Sr0.9Ce0.1Mn1□CryO3. *Solid State Communications*, **2005**, 136, 196-200	1.6	2
18	Superconducting phase diagram and the evolution of electronic structure across charge density wave in underdoped 1T□Cu□TiSe2 under hydrostatic pressure. *Physical Review B*, **2021**, 104,	3.3	2
17	Reducing Effective Mass for Advancing Thermoelectrics in Sb/Bi-Doped AgCrSe Compounds. *ACS Applied Materials & Interfaces*, **2020**, 12, 36347-36354	9.5	2
16	Se substitution and micro-nano-scale porosity enhancing thermoelectric Cu 2 Te. *Chinese Physics B*, **2018**, 27, 047204	1.2	2
15	Boosting thermoelectrics by alloying Cu2Se in SnTe-CdTe compounds. *Journal of Materials Science and Technology*, **2021**, 89, 45-51	9.1	2
14	Remarkable electron and phonon transports in low-cost SnS: A new promising thermoelectric material. *Science China Materials*, **2022**, 65, 1143-1155	7.1	2
13	Parasitic memory effect induced by high erasing pulses in metal-oxide-semiconductor field-effect transistor device containing silicon nanocrystals. *Journal of Applied Physics*, **2009**, 105, 114501	2.5	1
12	Charging influence on current conduction in NiO thin film embedded with Ni nanocrystals. *Journal Physics D: Applied Physics*, **2009**, 42, 225104	3	1
11	The magnetothermoelectric power in the Y- and Ho-doped La0.9Te0.1MnO3. *Solid State Communications*, **2008**, 145, 337-340	1.6	1
10	Spin polarization and transport in the manganite La0.85Te0.15Mn0.9Cu0.1O3. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2006**, 359, 295-299	2.3	1
9	Diamagnetism and relative Young□ modulus in the perovskite manganites CaMn1□V xO3□(0□□0.08). *Solid State Communications*, **2006**, 140, 416-421	1.6	1
8	Superconductivity related to the suppression of exciton formation in 1T-TiSe. *Journal of Physics Condensed Matter*, **2020**, 32, 425602	1.8	1
7	Alloying Cr2/3Te in AgCrSe2 compound for improving thermoelectrics. *Applied Physics Letters*, **2021** , 118, 193902	3.4	1
6	Germanium isotope effect induced guest rattling and cage distortion in clathrates. *Journal of Materiomics*, **2018**, 4, 338-344	6.7	1
5	Strong Anisotropic Thermal Conductivity in Polycrystalline Layers of (AgxSn1-xS)1.2(TiS2)2 with Prospects Toward Improved Thermoelectric Performance. *Annalen Der Physik*, **2020**, 532, 1900551	2.6	0
4	Broadening temperature plateau of high zTs in PbTe doped Bi0□3Sb1□7Te3 through defect carrier regulation and multi-scale phonon scattering. *Materials Today Physics*, **2022**, 22, 100610	8	0
3	Effect of multisite alloying and chloride doping for realizing a high thermoelectric performance in misfit-layered chalcogenide. *Journal of Alloys and Compounds*, **2020**, 840, 155756	5.7	
2	Magnetic and Transport Properties Based on Transition-Metal Compounds. *Advances in Condensed Matter Physics*, **2014**, 2014, 1-2	1	

1 Magnetic, electrical, and thermal characterization of La0.9Te0.1Mn1−xCoxO3 (0≤x≤1). *Journal of Materials Research*, **2007**, 22, 2943-2952 2.5