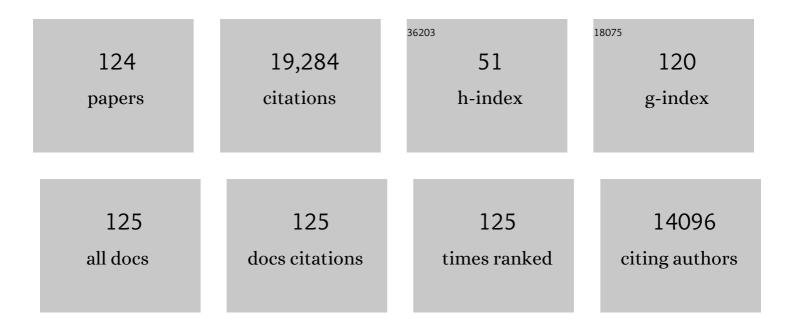
Qihao Zhang

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2790962/publications.pdf Version: 2024-02-01



Οιμλο ΖηλΝς

#	Article	IF	CITATIONS
1	Optimized thermoelectric properties of Bi _{0.48} Sb _{1.52} Te ₃ /BN composites. Journal of Materials Chemistry C, 2022, 10, 3172-3177.	2.7	5
2	A high-efficiency GeTe-based thermoelectric module for low-grade heat recovery. Journal of Materials Chemistry A, 2022, 10, 7677-7683.	5.2	9
3	Exceptionally Heavy Doping Boosts the Performance of Iron Silicide for Refractory Thermoelectrics. Advanced Energy Materials, 2022, 12, .	10.2	17
4	Singleâ€Solution Doping Enabling Dominant Integer Charge Transfer for Synergistically Improved Carrier Concentration and Mobility in Donor–Acceptor Polymers. Advanced Functional Materials, 2022, 32, .	7.8	12
5	In Situ Partial Pyrolysis of Sodium Carboxymethyl Cellulose Constructing Hierarchical Pores in the Silicon Anode for Lithium-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 380-386.	2.5	1
6	Boosting thermoelectric performance of BayCo4Sb12 by interlinking large aspect-ratio silver nanowires at the triple junction of grain boundaries. Materials Today Energy, 2022, , 101007.	2.5	1
7	High-Throughput Screening for Thermoelectric Semiconductors with Desired Conduction Types by Energy Positions of Band Edges. Journal of the American Chemical Society, 2022, 144, 8030-8037.	6.6	13
8	High-Performance and Stable (Ag, Cd)-Containing ZnSb Thermoelectric Compounds. ACS Applied Materials & Interfaces, 2022, 14, 26662-26670.	4.0	6
9	Mg ₃ (Bi,Sb) ₂ -based thermoelectric modules for efficient and reliable waste-heat utilization up to 750 K. Energy and Environmental Science, 2022, 15, 3265-3274.	15.6	26
10	Electric-induced devil's staircase in perovskite antiferroelectric. Journal of Applied Physics, 2022, 131, .	1.1	1
11	Micro-thermoelectric devices. Nature Electronics, 2022, 5, 333-347.	13.1	84
12	Design and fabrication of thermoelectric devices. , 2021, , 221-267.		2
13	Segmented modules. , 2021, , 469-492.		1
14	High efficiency GeTe-based materials and modules for thermoelectric power generation. Energy and Environmental Science, 2021, 14, 995-1003.	15.6	101
15	Refined band structure plus enhanced phonon scattering realizes thermoelectric performance optimization in Cul–Mn codoped SnTe. Journal of Materials Chemistry A, 2021, 9, 13065-13070.	5.2	30
16	Highâ€energy storage performance in BaTiO3â€based leadâ€free multilayer ceramic capacitors. Journal of Materials Research, 2021, 36, 1285-1294.	1.2	19
17	High-entropy-stabilized chalcogenides with high thermoelectric performance. Science, 2021, 371, 830-834.	6.0	546
18	pâ€Type Plastic Inorganic Thermoelectric Materials. Advanced Energy Materials, 2021, 11, 2100883.	10.2	40

#	Article	IF	CITATIONS
19	Recent Developments in Flexible Thermoelectric Devices. Small Science, 2021, 1, 2100005.	5.8	74
20	Enhanced Thermoelectric and Mechanical Performances in Sintered Bi _{0.48} Sb _{1.52} Te ₃ –AgSbSe ₂ Composite. ACS Applied Materials & Interfaces, 2021, 13, 24937-24944.	4.0	23
21	Ultrahigh energy density in short-range tilted NBT-based lead-free multilayer ceramic capacitors by nanodomain percolation. Energy Storage Materials, 2021, 38, 113-120.	9.5	139
22	Transparent Powerâ€Generating Windows Based on Solarâ€Thermalâ€Electric Conversion. Advanced Energy Materials, 2021, 11, 2101213.	10.2	21
23	Thermoelectrics: pâ€Type Plastic Inorganic Thermoelectric Materials (Adv. Energy Mater. 23/2021). Advanced Energy Materials, 2021, 11, 2170086.	10.2	4
24	In situ poling X-ray diffraction studies of lead-free BiFeO3–SrTiO3 ceramics. Materials Today Physics, 2021, 19, 100426.	2.9	24
25	Investigation on Low-Temperature Thermoelectric Properties of Ag ₂ Se Polycrystal Fabricated by Using Zone-Melting Method. Journal of Physical Chemistry Letters, 2021, 12, 8246-8255.	2.1	37
26	A low-cost and eco-friendly Br-doped Cu ₇ Sn ₃ S ₁₀ thermoelectric compound with <i>zT</i> around unity. Journal of Materials Chemistry A, 2021, 9, 7946-7954.	5.2	23
27	High-performance n-type Ta ₄ SiTe ₄ /polyvinylidene fluoride (PVDF)/graphdiyne organic–inorganic flexible thermoelectric composites. Energy and Environmental Science, 2021, 14, 6586-6594.	15.6	19
28	Optimized Thermoelectric Properties of Bi _{0.48} Sb _{1.52} Te ₃ through AgCuTe Doping for Low-Grade Heat Harvesting. ACS Applied Materials & Interfaces, 2021, 13, 57514-57520.	4.0	19
29	Unusually high Seebeck coefficient arising from temperature-dependent carrier concentration in PbSe–AgSbSe ₂ alloys. Journal of Materials Chemistry C, 2021, 9, 17365-17370.	2.7	5
30	Recent Advances in Liquid‣ike Thermoelectric Materials. Advanced Functional Materials, 2020, 30, 1903867.	7.8	148
31	Ultrahigh power factor and flexible silver selenide-based composite film for thermoelectric devices. Energy and Environmental Science, 2020, 13, 1240-1249.	15.6	165
32	Conformal organic–inorganic semiconductor composites for flexible thermoelectrics. Energy and Environmental Science, 2020, 13, 511-518.	15.6	67
33	Enhanced Thermoelectric Performance and Service Stability of Cu ₂ Se Via Tailoring Chemical Compositions at Multiple Atomic Positions. Advanced Functional Materials, 2020, 30, 1908315.	7.8	46
34	Highâ€Efficiency Thermoelectric Power Generation Enabled by Homogeneous Incorporation of MXene in (Bi,Sb) ₂ Te ₃ Matrix. Advanced Energy Materials, 2020, 10, 1902986.	10.2	109
35	Stacking faults modulation for scattering optimization in GeTe-based thermoelectric materials. Nano Energy, 2020, 68, 104347.	8.2	77
36	Conductive Polymers: Synergistically Improved Molecular Doping and Carrier Mobility by Copolymerization of Donor–Acceptor and Donor–Donor Building Blocks for Thermoelectric Application (Adv. Funct. Mater. 40/2020). Advanced Functional Materials, 2020, 30, 2070270.	7.8	7

#	Article	IF	CITATIONS
37	Discovery of high-performance thermoelectric copper chalcogenide using modified diffusion-couple high-throughput synthesis and automated histogram analysis technique. Energy and Environmental Science, 2020, 13, 3041-3053.	15.6	43
38	Novel BaTiO ₃ -Based, Ag/Pd-Compatible Lead-Free Relaxors with Superior Energy Storage Performance. ACS Applied Materials & Interfaces, 2020, 12, 43942-43949.	4.0	130
39	Synergistically Improved Molecular Doping and Carrier Mobility by Copolymerization of Donor–Acceptor and Donor–Donor Building Blocks for Thermoelectric Application. Advanced Functional Materials, 2020, 30, 2004378.	7.8	51
40	Superior energy density through tailored dopant strategies in multilayer ceramic capacitors. Energy and Environmental Science, 2020, 13, 2938-2948.	15.6	212
41	Halfâ€Heusler Thermoelectric Module with High Conversion Efficiency and High Power Density. Advanced Energy Materials, 2020, 10, 2000888.	10.2	85
42	Electrode interface optimization advances conversion efficiency and stability of thermoelectric devices. Nature Communications, 2020, 11, 2723.	5.8	101
43	Good stability and high thermoelectric performance of Fe doped Cu _{1.80} S. Physical Chemistry Chemical Physics, 2020, 22, 7374-7380.	1.3	22
44	Interfacial behaviors of p-type CeyFexCo4–xSb12/Nb thermoelectric joints. Functional Materials Letters, 2020, 13, 2051020.	0.7	2
45	Semiconducting polymer contributes favorably to the Seebeck coefficient in multi-component, high-performance n-type thermoelectric nanocomposites. Journal of Materials Chemistry A, 2020, 8, 9797-9805.	5.2	20
46	Thermoelectric Properties of Nanoâ€grained Mooihoekite Cu ₉ Fe ₉ S ₁₆ . Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2020, 646, 1116-1121.	0.6	11
47	Copper chalcogenide thermoelectric materials. Science China Materials, 2019, 62, 8-24.	3.5	111
48	Flexible thermoelectrics: from silver chalcogenides to full-inorganic devices. Energy and Environmental Science, 2019, 12, 2983-2990.	15.6	188
49	Thermoelectric properties of non-stoichiometric Cu2+ <i>x</i> Sn1â^' <i>x</i> S3 compounds. Journal of Applied Physics, 2019, 126, .	1.1	35
50	Flexible Thermoelectric Materials and Generators: Challenges and Innovations. Advanced Materials, 2019, 31, e1807916.	11.1	419
51	Microstructure and composition engineering Yb single-filled CoSb3 for high thermoelectric and mechanical performances. Journal of Materiomics, 2019, 5, 702-710.	2.8	23
52	Thermoelectric properties of n-type Cu ₄ Sn ₇ S ₁₆ -based compounds. RSC Advances, 2019, 9, 7826-7832.	1.7	26
53	Superior performance and high service stability for GeTe-based thermoelectric compounds. National Science Review, 2019, 6, 944-954.	4.6	96
54	A high-throughput strategy to screen interfacial diffusion barrier materials for thermoelectric modules. Journal of Materials Research, 2019, 34, 1179-1187.	1.2	15

#	Article	IF	CITATIONS
55	High performance n-type Ag2Se film on nylon membrane for flexible thermoelectric power generator. Nature Communications, 2019, 10, 841.	5.8	291
56	High-efficiency half-Heusler thermoelectric modules enabled by self-propagating synthesis and topologic structure optimization. Energy and Environmental Science, 2019, 12, 3390-3399.	15.6	135
57	Enhanced thermoelectric performance of CNT/P3HT composites with low CNT content. RSC Advances, 2018, 8, 33855-33863.	1.7	22
58	Oneâ€step Synthesis and Enhanced Thermoelectric Properties of Polymer–Quantum Dot Composite Films. Angewandte Chemie - International Edition, 2018, 57, 8037-8042.	7.2	38
59	Optimizing the Thermoelectric Performance of Poly(3â€hexylthiophene) through Molecularâ€Weight Engineering. Chemistry - an Asian Journal, 2018, 13, 3246-3253.	1.7	18
60	Understanding the Intrinsic Carrier Transport in Highly Oriented Poly(3-hexylthiophene): Effect of Side Chain Regioregularity. Polymers, 2018, 10, 815.	2.0	17
61	Realizing a thermoelectric conversion efficiency of 12% in bismuth telluride/skutterudite segmented modules through full-parameter optimization and energy-loss minimized integration. Energy and Environmental Science, 2017, 10, 956-963.	15.6	274
62	Engineering carrier scattering at the interfaces in polyaniline based nanocomposites for high thermoelectric performances. Materials Chemistry Frontiers, 2017, 1, 741-748.	3.2	107
63	Cu ₈ GeSe ₆ -based thermoelectric materials with an argyrodite structure. Journal of Materials Chemistry C, 2017, 5, 943-952.	2.7	93
64	High thermoelectric performance and low thermal conductivity in Cu2â^'yS1/3Se1/3Te1/3 liquid-like materials with nanoscale mosaic structures. Nano Energy, 2017, 42, 43-50.	8.2	73
65	Ultrahigh thermoelectric performance in Cu ₂ Se-based hybrid materials with highly dispersed molecular CNTs. Energy and Environmental Science, 2017, 10, 1928-1935.	15.6	298
66	Suppressed intrinsic excitation and enhanced thermoelectric performance in Ag _x Bi _{0.5} Sb _{1.5â^'x} Te ₃ . Journal of Materials Chemistry C, 2017, 5, 12619-12628.	2.7	49
67	Skutterudite with graphene-modified grain-boundary complexion enhances zT enabling high-efficiency thermoelectric device. Energy and Environmental Science, 2017, 10, 183-191.	15.6	252
68	Highly anisotropic P3HT films with enhanced thermoelectric performance via organic small molecule epitaxy. NPG Asia Materials, 2016, 8, e292-e292.	3.8	131
69	Influence of electronic type of SWNTs on the thermoelectric properties of SWNTs/PANI composite films. Organic Electronics, 2016, 39, 146-152.	1.4	22
70	High efficiency Bi ₂ Te ₃ -based materials and devices for thermoelectric power generation between 100 and 300 ŰC. Energy and Environmental Science, 2016, 9, 3120-3127.	15.6	358
71	Quaternary Pseudocubic Cu ₂ TMSnSe ₄ (TM = Mn, Fe, Co) Chalcopyrite Thermoelectric Materials. Advanced Electronic Materials, 2016, 2, 1600312.	2.6	39
72	Thermoelectric materials step up. Nature Materials, 2016, 15, 691-692.	13.3	236

#	Article	IF	CITATIONS
73	Reduction of thermal conductivity by low energy multi-Einstein optic modes. Journal of Materiomics, 2016, 2, 187-195.	2.8	53
74	Optimized thermoelectric properties in pseudocubic diamond-like CuGaTe ₂ compounds. Journal of Materials Chemistry A, 2016, 4, 1277-1289.	5.2	57
75	Study on the interfacial stability of p-type Ti/Ce Fe Co4Sb12 thermoelectric joints at high temperature. Journal of Alloys and Compounds, 2016, 671, 238-244.	2.8	33
76	Quick Fabrication and Thermoelectric Properties of Cu12Sb4S13 Tetrahedrite. Journal of Electronic Materials, 2016, 45, 2274-2277.	1.0	27
77	Cu-based thermoelectric materials. Energy Storage Materials, 2016, 3, 85-97.	9.5	247
78	Electrical and thermal transport properties of Y b <i>x</i> Co4Sb12 filled skutterudites with ultrahigh carrier concentrations. AIP Advances, 2015, 5, .	0.6	31
79	Ultrahigh Thermoelectric Performance in Mosaic Crystals. Advanced Materials, 2015, 27, 3639-3644.	11.1	195
80	Compound defects and thermoelectric properties in ternary CuAgSe-based materials. Journal of Materials Chemistry A, 2015, 3, 13662-13670.	5.2	58
81	Nitrogen-doped mesoporous carbon of extraordinary capacitance for electrochemical energy storage. Science, 2015, 350, 1508-1513.	6.0	1,821
82	(001)-oriented Cu2-ySe thin films with tunable thermoelectric performances grown by pulsed laser deposition. Ceramics International, 2015, 41, 7439-7445.	2.3	20
83	Black strontium titanate nanocrystals of enhanced solar absorption for photocatalysis. CrystEngComm, 2015, 17, 7528-7534.	1.3	40
84	Realizing high figure of merit in heavy-band p-type half-Heusler thermoelectric materials. Nature Communications, 2015, 6, 8144.	5.8	893
85	Thermoelectric transport properties of diamond-like Cu1â^'xFe1+xS2 tetrahedral compounds. Journal of Applied Physics, 2014, 116, .	1.1	104
86	Abnormally enhanced thermoelectric transport properties of SWNT/PANI hybrid films by the strengthened PANI molecular ordering. Energy and Environmental Science, 2014, 7, 3801-3807.	15.6	285
87	Oxidation Behavior of Filled Skutterudite CeFe4Sb12 in Air. Journal of Electronic Materials, 2014, 43, 1639-1644.	1.0	13
88	Structural evolvement and thermoelectric properties of Cu _{3â^'x} Sn _x Se ₃ compounds with diamond-like crystal structures. Dalton Transactions, 2014, 43, 16788-16794.	1.6	26
89	Large thermoelectric power factor in polyaniline/graphene nanocomposite films prepared by solution-assistant dispersing method. Journal of Materials Chemistry A, 2014, 2, 11107.	5.2	120
90	High-temperature thermoelectric properties of Cu1.97Ag0.03Se1+y. Materials for Renewable and Sustainable Energy, 2014, 3, 1.	1.5	36

#	Article	IF	CITATIONS
91	Microstructural evolution of the interfacial layer in the Ti–Al/Yb0.6Co4Sb12 thermoelectric joints at high temperature. Journal of Alloys and Compounds, 2014, 610, 665-670.	2.8	51
92	Visible-light photocatalytic, solar thermal and photoelectrochemical properties of aluminium-reduced black titania. Energy and Environmental Science, 2013, 6, 3007.	15.6	626
93	Interface Microstructure and Performance of Sb Contacts in Bismuth Telluride-Based Thermoelectric Elements. Journal of Electronic Materials, 2013, 42, 1219-1224.	1.0	9
94	Creation of Yb2O3 Nanoprecipitates Through an Oxidation Process in Bulk Yb-Filled Skutterudites. Journal of Electronic Materials, 2013, 42, 382-388.	1.0	15
95	Microstructures and thermoelectric properties of p-type Bi x Sb2â^x Te3 thin films with various compositions. Electronic Materials Letters, 2013, 9, 709-713.	1.0	7
96	Hâ€Doped Black Titania with Very High Solar Absorption and Excellent Photocatalysis Enhanced by Localized Surface Plasmon Resonance. Advanced Functional Materials, 2013, 23, 5444-5450.	7.8	621
97	Evaluating the potential for high thermoelectric efficiency of silver selenide. Journal of Materials Chemistry C, 2013, 1, 7568.	2.7	105
98	Temperature-dependent photoluminescence study of Pb ²⁺ doped strontium iodide. , 2013, , .		1
99	Microstructure and contact resistivity of (Bi, Sb)2Te3/Sb interface. , 2012, , .		5
100	Copper ion liquid-like thermoelectrics. Nature Materials, 2012, 11, 422-425.	13.3	1,700
101	Post-annealing Effect on Microstructures and Thermoelectric Properties of Bi0.45Sb1.55Te3 Thin Films Deposited by Co-sputtering. Journal of Electronic Materials, 2012, 41, 3068-3072.	1.0	12
102	Enhanced thermoelectric properties of CNT/PANI composite nanofibers by highly orienting the arrangement of polymer chains. Journal of Materials Chemistry, 2012, 22, 17612.	6.7	236
103	Thermoelectric Properties of Heavy Rare Earth Filled Skutterudites Dy y Fe x Co4â^'x Sb12. Journal of Electronic Materials, 2012, 41, 3402-3410.	1.0	1
104	Investigation of the thermal conductivities across metal-insulator transition in polycrystalline VO2. Science Bulletin, 2012, 57, 3393-3396.	1.7	16
105	High-Temperature Oxidation Behavior of Filled Skutterudites Yb y Co4Sb12. Journal of Electronic Materials, 2012, 41, 2225-2231.	1.0	22
106	Microstructure Contact Studies for Skutterudite Thermoelectric Devices. International Journal of Applied Ceramic Technology, 2012, 9, 733-741.	1.1	51
107	Optimized thermoelectric properties of Mo3Sb7â^'xTex with significant phonon scattering by electrons. Energy and Environmental Science, 2011, 4, 4086.	15.6	77
108	Multiple-Filled Skutterudites: High Thermoelectric Figure of Merit through Separately Optimizing Electrical and Thermal Transports. Journal of the American Chemical Society, 2011, 133, 7837-7846.	6.6	1,242

#	Article	IF	CITATIONS
109	Realization of high thermoelectric performance in n-type partially filled skutterudites. Journal of Materials Research, 2011, 26, 1745-1754.	1.2	112
110	Composition optimization of p-type skutterudites CeyFexCo4â^'xSb12 and YbyFexCo4â^'xSb12. Journal of Materials Research, 2011, 26, 1813-1819.	1.2	42
111	Low thermal conductivity and enhanced thermoelectric performance of Gd-filled skutterudites. Journal of Applied Physics, 2011, 109, 023719.	1.1	37
112	A general strategy to bismuth chalcogenide films by chemical vapor transport. Journal of Materials Chemistry, 2011, 21, 2351-2355.	6.7	18
113	Enhanced thermoelectric performance in In1â ^{~?} xGaxSb originating from the scattering of point defects and nanoinclusion. Journal of Materials Chemistry, 2011, 21, 12398.	6.7	39
114	Convergence of electronic bands for high performance bulk thermoelectrics. Nature, 2011, 473, 66-69.	13.7	3,306
115	Nano-scaled top-down of bismuth chalcogenides based on electrochemical lithium intercalation. Journal of Nanoparticle Research, 2011, 13, 6569-6578.	0.8	9
116	Low-Temperature Magnetic and Thermoelectric Properties of Layered Ca _{0.33} CoO ₂ Crystals. Journal of the Physical Society of Japan, 2011, 80, 074802.	0.7	9
117	Solution Route to PbSe Films with Enhanced Thermoelectric Transport Properties. European Journal of Inorganic Chemistry, 2010, 2010, 4321-4324.	1.0	8
118	Fabrication of a CoSb3-based thermoelectric module. Materials Science in Semiconductor Processing, 2010, 13, 221-224.	1.9	54
119	Enhanced Thermoelectric Performance of Single-Walled Carbon Nanotubes/Polyaniline Hybrid Nanocomposites. ACS Nano, 2010, 4, 2445-2451.	7.3	605
120	Enhancing thermoelectric performance of bismuth selenide films by constructing a double-layer nanostructure. CrystEngComm, 2010, 12, 2672.	1.3	21
121	Topotactic synthesis of alternately stacked Ca3Co4O9/γ-Na0.66CoO2 composite with nanoscale layer structure. CrystEngComm, 2010, 12, 4080.	1.3	5
122	Effect of antisite defects on band structure and thermoelectric performance of ZrNiSn half-Heusler alloys. Applied Physics Letters, 2010, 96, .	1.5	106
123	Enhanced thermoelectric performance by the combination of alloying and doping in TiCoSb-based half-Heusler compounds. Journal of Applied Physics, 2009, 106, .	1.1	92
124	High-energy storage performance in BaTiO ₃ -based lead-free multilayer ceramic capacitors. Journal of Materials Research, 0, , 1-10.	1.2	0