

# Mingyu Hu

## List of Publications by Year in descending order

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30  
papers

914  
citations

430874

18  
h-index

454955

30  
g-index

30  
all docs

30  
docs citations

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times ranked

1084  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced thermoelectric performance in inorganic CsSnI <sub>3</sub> perovskite by doping with PbI <sub>2</sub> . <i>Materials Letters</i> , 2022, 308, 131127.	2.6	8
2	Antioxidative solution processing yields exceptional Sn(II) stability for sub-1.4 eV bandgap inorganic perovskite solar cells. <i>Journal of Energy Chemistry</i> , 2022, .	12.9	8
3	Origins of high fracture toughness and glass-like thermal conductivity in Zr-Ta-O composites. <i>Journal of the American Ceramic Society</i> , 2022, 105, 6508-6516.	3.8	4
4	Features of crystal structures and thermo-mechanical properties of weberites RE <sub>3</sub> NbO <sub>7</sub> (RE=La, Nd, Sm, Eu, Gd) ceramics. <i>Journal of the American Ceramic Society</i> , 2021, 104, 404-412.	3.8	22
5	Achieved limit thermal conductivity and enhancements of mechanical properties in fluorite RE <sub>3</sub> NbO <sub>7</sub> via entropy engineering. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	19
6	High-performance methylammonium-free ideal-band-gap perovskite solar cells. <i>Matter</i> , 2021, 4, 1365-1376.	10.0	51
7	On the multiplying factor for the estimation of the average grain size in thin films. <i>Scripta Materialia</i> , 2021, 196, 113748.	5.2	4
8	Probing the mechanical properties of ordered and disordered Pt-Ir alloys by first-principles calculations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2021, 405, 127424.	2.1	17
9	Multiphonon scattering mechanisms to limit thermal conductivity in weberite RE <sub>3</sub> NbO <sub>7</sub> : A case study of (La <sub>1-x</sub> Gd <sub>x</sub> ) <sub>3</sub> NbO <sub>7</sub> ceramics. <i>Ceramics International</i> , 2021, 47, 23222-23233.	4.8	6
10	Sub-1.4eV bandgap inorganic perovskite solar cells with long-term stability. <i>Nature Communications</i> , 2020, 11, 151.	12.8	92
11	The effects of hydroxyl by water addition on the photoluminescence of zero-dimensional perovskites Cs <sub>4</sub> PbBr <sub>6</sub> nanocrystals. <i>Journal of Luminescence</i> , 2020, 221, 116986.	3.1	8
12	Mechanisms of exceptional grain growth and stability in formamidinium lead triiodide thin films for perovskite solar cells. <i>Acta Materialia</i> , 2020, 193, 10-18.	7.9	27
13	Investigation of the thermophysical properties of (Y <sub>1-x</sub> Yb <sub>x</sub> )TaO <sub>4</sub> ceramics. <i>Journal of the European Ceramic Society</i> , 2020, 40, 3111-3121.	5.7	18
14	Mechanical and thermal properties of RE <sub>2</sub> TaO <sub>4</sub> (RE = Yb, Lu, Sc) ceramics with monoclinic-prime phase. <i>Journal of Materials Science and Technology</i> , 2020, 52, 20-28.	10.7	40
15	Electron-beam-induced cracking in organic-inorganic halide perovskite thin films. <i>Scripta Materialia</i> , 2020, 187, 88-92.	5.2	16
16	Investigation on the stability, electronic, optical, and mechanical properties of novel calcium carbonate hydrates via first-principles calculations. <i>International Journal of Quantum Chemistry</i> , 2020, 120, e26219.	2.0	8
17	Effect of Grain Size on the Fracture Behavior of Organic-Inorganic Halide Perovskite Thin Films for Solar Cells. <i>Scripta Materialia</i> , 2020, 185, 47-50.	5.2	32
18	Enhanced Thermoelectric Performance in Lead-Free Inorganic CsSn <sub>1-x</sub> Ge <sub>x</sub> I <sub>3</sub> Perovskite Semiconductors. <i>Journal of Physical Chemistry C</i> , 2020, 124, 11749-11753.	3.1	45

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19	The effect of ZrO <sub>2</sub> alloying on the microstructures and thermal properties of DyTaO <sub>4</sub> for high-temperature application. <i>Journal of the American Ceramic Society</i> , 2019, 102, 889-895.	3.8	16
20	Thermal expansion performance and intrinsic lattice thermal conductivity of ferroelastic RETaO <sub>4</sub> ceramics. <i>Journal of the American Ceramic Society</i> , 2019, 102, 4809-4821.	3.8	88
21	Theoretical and experimental investigations of mechanical properties for polymorphous YTaO <sub>4</sub> ceramics. <i>Journal of the American Ceramic Society</i> , 2019, 102, 7656-7664.	3.8	30
22	Thermo-mechanical properties of fluorite Yb <sub>3</sub> TaO <sub>7</sub> and Yb <sub>3</sub> NbO <sub>7</sub> ceramics with glass-like thermal conductivity. <i>Journal of Alloys and Compounds</i> , 2019, 788, 1231-1239.	5.5	34
23	Tailoring the anisotropic mechanical properties of hexagonal M <sub>7</sub> X <sub>3</sub> (M=Fe, Cr, W, Mo; X=C, B) by multialloying. <i>Acta Materialia</i> , 2019, 169, 193-208.	7.9	74
24	A first-principles calculation of structural, mechanical, thermodynamic and electronic properties of binary Ni-Y compounds. <i>RSC Advances</i> , 2018, 8, 41575-41586.	3.6	17
25	Investigation on microstructures and thermo-physical properties of ferroelastic (Y <sub>1-x</sub> Dy <sub>x</sub> )TaO <sub>4</sub> ceramics. <i>Materialia</i> , 2018, 4, 478-486.	2.7	25
26	Ultralow Thermal Conductivity and Ultrahigh Thermal Expansion of Single-Crystal Organic-Inorganic Hybrid Perovskite CH <sub>3</sub> NH <sub>3</sub> PbX <sub>3</sub> (X = Cl, Br, I). <i>Journal of Physical Chemistry C</i> , 2018, 122, 15973-15978.	3.1	93
27	The rattler effect of phonon propagation in defect-fluorite Dy <sub>3</sub> (Nb <sub>1-x</sub> Ti <sub>x</sub> )O <sub>7-x/2</sub> . <i>Ceramics International</i> , 2018, 44, 21998-22002.	4.8	9
28	Exploring accurate structure, composition and thermophysical properties of $\hat{\Gamma}$ -carbides in 17.90 wt% W-4.15 wt% Cr-1.10 wt% V-0.69 wt% C steel. <i>Scripta Materialia</i> , 2018, 154, 149-153.	5.2	18
29	Mechanical and Optical Properties of Cs <sub>4</sub> BX <sub>6</sub> (B = Pb, Sn; X = Cl, Br, I) Zero-Dimension Perovskites. <i>Journal of Physical Chemistry C</i> , 2017, 121, 27053-27058.	3.1	61
30	Elaborating the phases and mechanical properties of multiphase alloy: Experimental two-dimensional mapping combined with theoretical calculations. <i>Materials Characterization</i> , 2017, 134, 347-353.	4.4	24