

# Xiaochao Zhang

## List of Publications by Year in descending order

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15  
papers

524  
citations

1040056

9  
h-index

996975

15  
g-index

15  
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15  
docs citations

15  
times ranked

612  
citing authors

#	ARTICLE	IF	CITATIONS
1	An engineering route to synthesize stable bulk nanocrystalline magnesium with an average grain size of 20 nm. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 843, 143134.	5.6	1
2	Facile synthesis of nitrogen-rich porous carbon spheres assisted by NaNH <sub>2</sub> as a bifunctional activator and nitrogen source for CO <sub>2</sub> capture. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106605.	6.7	3
3	Synergetic effect of Bi <sub>2</sub> WO <sub>6</sub> micro-spheres and activated carbon mm-spheres for enhancing photoreduction activity of CO <sub>2</sub> to CO. <i>Materials Letters</i> , 2020, 264, 127201.	2.6	17
4	Charge compensation weakening ionized impurity scattering and assessing the minority carrier contribution to the Seebeck coefficient in Pb-doped Mg <sub>3</sub> Sb <sub>2</sub> compounds. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 7012-7020.	2.8	10
5	Energy-Efficient Synthesis and Superior Thermoelectric Performance of Sb-doped Mg <sub>2</sub> Si <sub>0.3</sub> Sn <sub>0.7</sub> Solid Solutions by Rapid Thermal Explosion. <i>Materials Research Bulletin</i> , 2020, 128, 110885.	5.2	6
6	Fast and facile synthesis of Sb-doped Mg <sub>2</sub> Si <sub>0.5</sub> Sn <sub>0.5</sub> solid solutions with decent thermoelectric performance. <i>Materials Letters</i> , 2019, 252, 47-51.	2.6	2
7	Ultrafast and low-cost preparation of Mg <sub>2</sub> (Si <sub>0.3</sub> Sn <sub>0.7</sub> ) <sub>1-x</sub> Sb <sub>y</sub> with superior thermoelectric performance by self-propagating high-temperature synthesis. <i>Scripta Materialia</i> , 2019, 162, 507-511.	5.2	8
8	Isotropic Mg <sub>3</sub> Sb <sub>2</sub> compound prepared by solid-state reaction and ball milling combined with spark plasma sintering. <i>Journal of Materials Science</i> , 2018, 53, 8039-8048.	3.7	9
9	Enhancing the $\rho_{\text{eff}}$ Value of Bi-Doped Mg <sub>2</sub> Si <sub>0.6</sub> Sn <sub>0.4</sub> Materials through Reduction of Bipolar Thermal Conductivity. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 28635-28641.	8.0	26
10	Phase Segregation and Superior Thermoelectric Properties of Mg <sub>2</sub> Si <sub>1-x</sub> Sb <sub>x</sub> (0 ≤ x ≤ 0.025) Prepared by Ultrafast Self-Propagating High-Temperature Synthesis. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 3268-3276.	8.0	45
11	Enhanced power factor of Mg <sub>2</sub> Si <sub>0.3</sub> Sn <sub>0.7</sub> synthesized by a non-equilibrium rapid solidification method. <i>Scripta Materialia</i> , 2015, 96, 1-4.	5.2	58
12	Ultra-fast synthesis and thermoelectric properties of Te doped skutterudites. <i>Journal of Materials Chemistry A</i> , 2014, 2, 17914-17918.	10.3	90
13	Advanced thermoelectrics governed by a single parabolic band: Mg <sub>2</sub> Si <sub>0.3</sub> Sn <sub>0.7</sub> , a canonical example. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 6893-6897.	2.8	114
14	Low effective mass and carrier concentration optimization for high performance p-type Mg <sub>2</sub> (1-x)Li <sub>2x</sub> Si <sub>0.3</sub> Sn <sub>0.7</sub> solid solutions. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 23576-23583.	2.8	77
15	Thermoelectric Properties of Sb-Doped Mg <sub>2</sub> Si <sub>0.3</sub> Sn <sub>0.7</sub> . <i>Journal of Electronic Materials</i> , 2011, 40, 1062-1066.	2.2	58