

# Houwen Chen

## List of Publications by Year in descending order

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35  
papers

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citations

394421

19  
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377865

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36  
docs citations

36  
times ranked

2188  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced strength and ductility in a high-entropy alloy via ordered oxygen complexes. <i>Nature</i> , 2018, 563, 546-550.	27.8	988
2	Development of low-alloyed and rare-earth-free magnesium alloys having ultra-high strength. <i>Acta Materialia</i> , 2018, 149, 350-363.	7.9	287
3	Evolution of the degradation mechanism of pure zinc stent in the one-year study of rabbit abdominal aorta model. <i>Biomaterials</i> , 2017, 145, 92-105.	11.4	257
4	Interphase boundary segregation of Zn in Mg-Sn-Zn alloys. <i>Scripta Materialia</i> , 2016, 123, 5-8.	5.2	81
5	Direct observation and impact of co-segregated atoms in magnesium having multiple alloying elements. <i>Nature Communications</i> , 2019, 10, 3243.	12.8	78
6	Microstructural Control via Copious Nucleation Manipulated by In Situ Formed Nucleants: Large-Sized and Ductile Metallic Glass Composites. <i>Advanced Materials</i> , 2016, 28, 8156-8161.	21.0	63
7	Unusual solute segregation phenomenon in coherent twin boundaries. <i>Nature Communications</i> , 2021, 12, 722.	12.8	60
8	Machine learning assisted design of $\sigma$ -strengthened Co-base superalloys with multi-performance optimization. <i>Npj Computational Materials</i> , 2020, 6, .	8.7	56
9	Metastable precipitate phases in Mg-9.8wt%Sn alloy. <i>Acta Materialia</i> , 2018, 144, 590-600.	7.9	54
10	Highly reversible oxygen redox in layered compounds enabled by surface polyanions. <i>Nature Communications</i> , 2020, 11, 3411.	12.8	54
11	Unveiling the Semicoherent Interface with Definite Orientation Relationships between Reinforcements and Matrix in Novel Al <sub>3</sub> BC/Al Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 28194-28201.	8.0	53
12	Zn segregation in interface between Mg <sub>17</sub> Al <sub>12</sub> precipitate and Mg matrix in Mg-Al-Zn alloys. <i>Scripta Materialia</i> , 2019, 163, 91-95.	5.2	33
13	Unexpected partial dislocations within stacking faults in a cold deformed Mg-Bi alloy. <i>Acta Materialia</i> , 2020, 188, 328-343.	7.9	30
14	Revisiting building block ordering of long-period stacking ordered structures in Mg-Y-Al alloys. <i>Acta Materialia</i> , 2018, 152, 96-106.	7.9	24
15	Effects of Zn additions on the microstructure and hardness of Mg-9Al-6Sn alloy. <i>Materials Characterization</i> , 2016, 113, 214-221.	4.4	22
16	Atomic scale characterization of complex stacking faults and their configurations in cold deformed Fe <sub>42</sub> Mn <sub>38</sub> Co <sub>10</sub> Cr <sub>10</sub> high-entropy alloy. <i>Acta Materialia</i> , 2020, 199, 649-668.	7.9	22
17	Co-segregation of Mg and Zn atoms at the planar $\sigma$ -1-precipitate/Al matrix interface in an aged Al-Zn-Mg alloy. <i>Scripta Materialia</i> , 2020, 185, 51-55.	5.2	21
18	Atomic structure and evolution of a precursor phase of $\sigma$ precipitate in an Al-Cu-Mg-Ag alloy. <i>Acta Materialia</i> , 2022, 225, 117538.	7.9	21

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19	Heat-treatable Mg-9Al-6Sn-3Zn extrusion alloy. <i>Journal of Materials Science and Technology</i> , 2018, 34, 284-290.	10.7	20
20	Origin of profuse {111} deformation twins in Mg-Gd alloys. <i>Scripta Materialia</i> , 2021, 191, 62-66.	5.2	20
21	Martensitic transformation induced dislocation walls in Fe <sub>42</sub> Mn <sub>38</sub> Co <sub>10</sub> Cr <sub>10</sub> high-entropy alloy. <i>Scripta Materialia</i> , 2021, 201, 113929.	5.2	16
22	Exceptional thermal stability and enhanced hardness in a nanostructured Mg-Gd-Y-Zn-Zr alloy processed by high pressure torsion. <i>Journal of Magnesium and Alloys</i> , 2023, 11, 4589-4602.	11.9	16
23	Twin-like fault in Mg-9.8wt%Sn alloy. <i>Scripta Materialia</i> , 2018, 155, 89-93.	5.2	15
24	Enhanced gene delivery of low molecular weight PEI by flower-like ZnO microparticles. <i>Materials Science and Engineering C</i> , 2016, 69, 1367-1372.	7.3	14
25	Enhanced age-hardening response in Mg-Zn-Co alloys with Bi additions. <i>Journal of Alloys and Compounds</i> , 2020, 815, 152419.	5.5	12
26	Precipitation on stacking faults in Mg-9.8wt%Sn alloy. <i>Journal of Materials Science and Technology</i> , 2020, 45, 230-240.	10.7	12
27	On the Equilibrium Intermetallic Phase in Mg-Nd-Ag Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 1402-1415.	2.2	10
28	Electron beam irradiation induced metastable phase in a Mg-9.8 wt%Sn alloy. <i>Journal of Materials Science and Technology</i> , 2021, 84, 133-138.	10.7	9
29	Enhanced bonding strength of AZ31B/carbon-fiber-reinforced plastic laminates by anodization treatment in a saturated Na <sub>2</sub> SiO <sub>3</sub> solution. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 840, 142982.	5.6	7
30	Atomic-scale microstructure of Hf <sub>2</sub> Al <sub>4</sub> C <sub>5</sub> ceramic synthesized by spark plasma sintering. <i>Journal of the American Ceramic Society</i> , 2017, 100, 3208-3216.	3.8	3
31	B2O <sub>2</sub> characterization of precipitates in magnesium alloys using atomic resolution HAADF-STEM and EDS. <i>Microscopy (Oxford, England)</i> , 2015, 64, i47.2-i47.	1.5	1
32	Ordered Sn distribution adjacent to the precipitate-matrix interface in a Mg-9.8wt.%Sn alloy. <i>Journal of Magnesium and Alloys</i> , 2022, , .	11.9	1
33	Phase transformation generating coherent twin boundaries in titanium alloys. <i>Materials Letters</i> , 2022, 322, 132515.	2.6	1
34	Sandwich Structure in Al-Cu(-Au) Alloys Characterization by Atomic-Resolution HAADF-STEM and EDXS-STEM. <i>Microscopy and Microanalysis</i> , 2019, 25, 1700-1701.	0.4	0
35	Intermetallic Phase Formation in Mg-Ag-Nd (QE) and Mg-Ag-Nd-Zn (QEZ) Alloys. <i>Minerals, Metals and Materials Series</i> , 2020, , 71-78.	0.4	0