

# Hui Wang

## List of Publications by Year in descending order

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77  
papers

4,425  
citations

218381

26  
h-index

102304

66  
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77  
docs citations

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times ranked

6748  
citing authors

#	ARTICLE	IF	CITATIONS
1	Correlation between ordered solid solution and cellular structure of Sm <sub>2</sub> Co <sub>17</sub> type magnets with high iron content. Journal of Magnetism and Magnetic Materials, 2021, 519, 167477.	1.0	9
2	Morphology evolution of SmCo <sub>x</sub> permanent magnetic nanoparticles. Science China: Physics, Mechanics and Astronomy, 2021, 64, 1.	2.0	2
3	Influence of the final heat treatment temperature on the magnetic property losses of Sm(Co,Fe,Cu,Zr) <sub>z</sub> high temperature magnets. Journal of Magnetism and Magnetic Materials, 2021, 528, 167763.	1.0	7
4	Quantitative analysis of pinning-hardened intrinsic coercivity of Sm(CoFeCuZr) <sub>z</sub> (z=7.0~7.8) high-temperature permanent magnets. Journal of Alloys and Compounds, 2021, 872, 159622.	2.8	7
5	Grain boundary optimization induced substantial squareness enhancement and high performance in iron-rich Sm-Co-Fe-Cu-Zr magnets. Journal of Materials Science and Technology, 2021, 85, 56-61.	5.6	22
6	Chemical synthesis and characterization of SmCo <sub>5</sub> /Co magnetic nanocomposite particles. Rare Metals, 2021, 40, 1224-1231.	3.6	8
7	Low remanence temperature coefficient Sm <sub>1-x</sub> Er <sub>x</sub> (Co, Fe, Cu, Zr) <sub>z</sub> magnets operating up to 400°C. Rare Metals, 2020, 39, 70-75.	3.6	6
8	The formation mechanism of 1:5H phase in Sm(Co, Fe, Cu, Zr) <sub>z</sub> melt-spun ribbons with high iron content. Journal of Magnetism and Magnetic Materials, 2020, 496, 165939.	1.0	30
9	Nonvolatile Electric Control of the Anomalous Hall Effect in an Ultrathin Magnetic Metal. Advanced Electronic Materials, 2020, 6, 1901084.	2.6	15
10	High precision epidermal radio frequency antenna via nanofiber network for wireless stretchable multifunction electronics. Nature Communications, 2020, 11, 5629.	5.8	48
11	Dispersible and manipulable magnetic L10-FePt nanoparticles. Nanoscale, 2020, 12, 7843-7848.	2.8	14
12	Silicide coating stabilized high temperature performance and oxidation resistance mechanism of 2:17-type SmCo permanent magnets. Corrosion Science, 2020, 173, 108752.	3.0	5
13	First-principles study of site preferences for Fe in Sm <sub>2</sub> (Co <sub>1-x</sub> Fe <sub>x</sub> ) <sub>17</sub> permanent magnets. Physical Review Materials, 2020, 4, .	0.9	0
14	Microstructure investigation on magnetostrictive Fe <sub>100-x</sub> Ga <sub>x</sub> and (Fe <sub>100-x</sub> Ga <sub>x</sub> ) <sub>99.8</sub> Tb <sub>0.2</sub> alloys for 19~29% magnetostriction. Intermetallics, 2019, 115, 106628.	1.8	25
15	High electrocatalytic hydrogen evolution activity on a coupled Ru and CoO hybrid electrocatalyst. Journal of Energy Chemistry, 2019, 37, 143-147.	7.1	36
16	Dispersible SmCo <sub>5</sub> nanoparticles with huge coercivity. Nanoscale, 2019, 11, 16962-16967.	2.8	37
17	Ferroelectricity-induced performance enhancement of V-doped ZnO/Si photodetector by direct energy band modulation. Nano Energy, 2019, 65, 104046.	8.2	36
18	Initial Irreversible Losses and Enhanced High-Temperature Performance of Rare-Earth Permanent Magnets. Advanced Functional Materials, 2019, 29, 1900690.	7.8	40

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19	Fe-Ni-C electrocatalyst with dense active sites and efficient mass transport for high-performance proton exchange membrane fuel cells. <i>Nature Catalysis</i> , 2019, 2, 259-268.	16.1	958
20	A piezoelectric, strain-controlled antiferromagnetic memory insensitive to magnetic fields. <i>Nature Nanotechnology</i> , 2019, 14, 131-136.	15.6	150
21	Correlation of microstructure and magnetic properties in Sm(Co <sub>0.1</sub> Fe <sub>0.1</sub> Cu <sub>0.1</sub> Zr <sub>0.033</sub> ) <sub>6.93</sub> magnets solution-treated at different temperatures. <i>Rare Metals</i> , 2019, 38, 20-28.	3.6	27
22	Multiscale influence of trace Tb addition on the magnetostriction and ductility of $\langle 100 \rangle$ oriented directionally solidified Fe-Ga crystals. <i>Physical Review Materials</i> , 2019, 3, .		
23	Giant magnetostriction in nanoheterogeneous Fe-Al alloys. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	16
24	Interaction of Trace Rare-Earth Dopants and Nanoheterogeneities Induces Giant Magnetostriction in Fe-Ga Alloys. <i>Advanced Functional Materials</i> , 2018, 28, 1800858.	7.8	64
25	A Highly Stretchable Transparent Self-Powered Triboelectric Tactile Sensor with Metallized Nanofibers for Wearable Electronics. <i>Advanced Materials</i> , 2018, 30, e1706738.	11.1	315
26	Piezophototronic Effect Modulated Deep UV Photodetector Based on ZnO-Ga <sub>2</sub> O <sub>3</sub> Heterojunction Microwire. <i>Advanced Functional Materials</i> , 2018, 28, 1706379.	7.8	126
27	FePt/Co core/shell nanoparticle-based anisotropic nanocomposites and their exchange spring behavior. <i>Nanoscale</i> , 2018, 10, 4061-4067.	2.8	20
28	Improved kinetics of nanoparticle-decorated Mg-Ti-Zr nanocomposite for hydrogen storage at moderate temperatures. <i>Materials Chemistry and Physics</i> , 2018, 206, 21-28.	2.0	17
29	Exploring structural origin of the enhanced magnetostriction in Tb-doped Fe <sub>83</sub> Ga <sub>17</sub> ribbons: Tuning Tb solubility. <i>Scripta Materialia</i> , 2018, 150, 101-105.	2.6	26
30	Synthesis of SmCo <sub>5</sub> nanoparticles with small size and high performance by hydrogenation technique. <i>Rare Metals</i> , 2018, 37, 1021-1026.	3.6	17
31	Effect of ball milling process on coercivity of nanocrystalline SmCo <sub>5</sub> magnets. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 446, 200-205.	1.0	18
32	Effects of solution temperature and Cu content on the properties and microstructure of 2:17-type SmCo magnets. <i>Journal of Alloys and Compounds</i> , 2018, 735, 1971-1976.	2.8	37
33	High-performance lead-free piezoelectrics with local structural heterogeneity. <i>Energy and Environmental Science</i> , 2018, 11, 3531-3539.	15.6	188
34	Microstructure and creep properties of Ni-based single-crystal superalloys with Mo/Al addition at 760°C/850MPa. <i>Rare Metals</i> , 2018, , 1.	3.6	2
35	Large and Ultrastable All-Inorganic CsPbBr <sub>3</sub> Monocrystalline Films: Low-Temperature Growth and Application for High-Performance Photodetectors. <i>Advanced Materials</i> , 2018, 30, e1802110.	11.1	94
36	Preparation of low remanence temperature coefficient (RT $\approx$ 300°C) SmDy (Co, Fe, Cu, Zr) <sub>z</sub> magnets and molecular field analysis. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 466, 38-43.	1.0	5

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37	Atomically and Electronically Coupled Pt and CoO Hybrid Nanocatalysts for Enhanced Electrocatalytic Performance. <i>Advanced Materials</i> , 2017, 29, 1604607.	11.1	224
38	Tailoring the heterogeneous magnetostriction in Fe-Co alloys. <i>Journal of Alloys and Compounds</i> , 2017, 699, 200-209.	2.8	41
39	Ultrathin ternary semiconductor TlGaSe <sub>2</sub> phototransistors with broad-spectral response. <i>2D Materials</i> , 2017, 4, 035021.	2.0	22
40	Activating cobalt(II) oxide nanorods for efficient electrocatalysis by strain engineering. <i>Nature Communications</i> , 2017, 8, 1509.	5.8	361
41	Stable Stacking Faults Bounded by Frank Partial Dislocations in Al7075 Formed through Precipitate and Dislocation Interactions. <i>Crystals</i> , 2017, 7, 375.	1.0	6
42	Direct TEM Observation of Phase Separation and Crystallization in Cu <sub>45</sub> Zr <sub>45</sub> Ag <sub>10</sub> Metallic Glass. <i>Acta Metallurgica Sinica (English Letters)</i> , 2016, 29, 538-545.	1.5	9
43	Investigating enhanced mechanical properties in dual-phase Fe-Ga-Tb alloys. <i>Scientific Reports</i> , 2016, 6, 34258.	1.6	27
44	Bi deficiency-tuned functionality in multiferroic Bi <sub>1-x</sub> Fe <sub>0.95</sub> Mn <sub>0.05</sub> O <sub>3</sub> films. <i>Scientific Reports</i> , 2016, 6, 19385.	1.6	9
45	Enhanced Field-Induced Strain in the Textured Lead-Free Ceramic. <i>Journal of the American Ceramic Society</i> , 2016, 99, 3985-3992.	1.9	15
46	Fabrication of nanoporous silver by de-alloying Cu-Zr-Ag amorphous alloys. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2016, 23, 835-843.	2.4	3
47	Dislocation network with pair-coupling structure in {111} $\Sigma$ 3 interface of Ni-based single crystal superalloy. <i>Scientific Reports</i> , 2016, 6, 29941.	1.6	26
48	Engineering surface atomic structure of single-crystal cobalt (II) oxide nanorods for superior electrocatalysis. <i>Nature Communications</i> , 2016, 7, 12876.	5.8	568
49	Fast Preparation of Ultrathin FIB Lamellas for MEMs-Based <i>In Situ</i> TEM Experiments. <i>Materials Science Forum</i> , 2016, 850, 722-727.	0.3	2
50	Giant heterogeneous magnetostriction in Fe-Ga alloys: Effect of trace element doping. <i>Acta Materialia</i> , 2016, 109, 177-186.	3.8	112
51	Characteristics of giant piezoelectricity around the rhombohedral-tetragonal phase boundary in (K,Na)NbO <sub>3</sub> -based ceramics with different additives. <i>Journal of Materials Chemistry A</i> , 2015, 3, 15951-15961.	5.2	40
52	<i>In situ</i> electrical characterization of tapered InAs nanowires in a transmission electron microscope with ohmic contacts. <i>Nanotechnology</i> , 2015, 26, 155703.	1.3	4
53	Enhanced Hydrogen Storage Properties of Mg-Ti-V Nanocomposite at Moderate Temperatures. <i>Journal of Physical Chemistry C</i> , 2014, 118, 22419-22425.	1.5	22
54	Large-sized CuZr-based Bulk Metallic Glass Composite with Enhanced Mechanical Properties. <i>Journal of Materials Science and Technology</i> , 2014, 30, 590-594.	5.6	23

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55	Hierarchical ultrafine-grained network mediated high strength and large plasticity in an Al-based alloy. <i>Materials Letters</i> , 2014, 124, 28-31.	1.3	10
56	Bulk metallic glass composites ductilized by core-shell structured dual crystalline phases through controlled inoculation. <i>Intermetallics</i> , 2014, 45, 24-28.	1.8	11
57	Nano-scale lithography and in-situ electrical measurements based on the micro-chips in a transmission electron microscope. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2014, 63, 248105.	0.2	0
58	Local structure of Co <sub>55</sub> Ta <sub>10</sub> B <sub>35</sub> amorphous alloy investigated by ab-initio molecular dynamics. <i>Science China: Physics, Mechanics and Astronomy</i> , 2013, 56, 904-909.	2.0	3
59	Atomic, electronic and magnetic properties of Fe <sub>80</sub> P <sub>11</sub> C <sub>9</sub> amorphous alloy: A first-principles study. <i>Physica B: Condensed Matter</i> , 2013, 411, 161-165.	1.3	23
60	Local structure origin of higher glass forming ability in Ta doped Co <sub>65</sub> B <sub>35</sub> amorphous alloy. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	19
61	Hierarchical ultrafine-grained/nanocrystalline Al-based bulk alloy with high strength and large plasticity. <i>Intermetallics</i> , 2012, 23, 199-203.	1.8	12
62	Microstructure and mechanical properties of a spray-formed Ti-based metallic glass former alloy. <i>Journal of Alloys and Compounds</i> , 2012, 512, 241-245.	2.8	6
63	Microstructural tailoring and improvement of mechanical properties in CuZr-based bulk metallic glass composites. <i>Acta Materialia</i> , 2012, 60, 3128-3139.	3.8	146
64	Optimization of mechanical properties of bulk metallic glasses by residual stress adjustment using laser surface melting. <i>Scripta Materialia</i> , 2012, 66, 1057-1060.	2.6	32
65	Formation and mechanical properties of Ni-free Zr-based bulk metallic glasses. <i>Journal of Alloys and Compounds</i> , 2011, 509, S175-S178.	2.8	24
66	Nitrogen-doping effect on glass formation and primary phase selection in Cu-Zr-Al alloys. <i>Journal of Alloys and Compounds</i> , 2011, 509, 5033-5037.	2.8	26
67	Spray formed Al-based amorphous matrix nanocomposite plate. <i>Journal of Alloys and Compounds</i> , 2011, 509, L169-L173.	2.8	16
68	Influence of laser surface melting on glass formation and tribological behaviors of Zr <sub>55</sub> Al <sub>10</sub> Ni <sub>5</sub> Cu <sub>30</sub> alloy. <i>Journal of Materials Research</i> , 2011, 26, 2642-2652.	1.2	13
69	Effect of cooling rate on microstructure and mechanical properties of rapidly solidified Al-based bulk alloys. <i>Journal of Alloys and Compounds</i> , 2010, 504, S117-S122.	2.8	14
70	Hierarchical Domain Structure of Adaptive MBPhase in Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -32%PbTiO <sub>3</sub> Single Crystal. <i>Journal of the American Ceramic Society</i> , 2008, 91, 2382-2384.	1.9	29
71	Making Nanostructured Ceramics from Micrometer-Sized Powders via Grain Refinement During SPS Sintering. <i>Journal of the American Ceramic Society</i> , 2008, 91, 2475-2480.	1.9	20
72	Virus-mediated FCC iron nanoparticle induced synthesis of uranium dioxide nanocrystals. <i>Nanotechnology</i> , 2008, 19, 115608.	1.3	14

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73	Domain structure of adaptive orthorhombic phase in [110]-poled $\text{Pb}(\text{Mg}_{1-x}\text{Nb}_2\text{O}_3)_{30.5\%}\text{PbTiO}_3$ single crystal. <i>Applied Physics Letters</i> , 2008, 92, 132906.	1.5	36
74	Role of columnar grain size in magnetization of $\text{La}_{0.8}\text{MnO}_3$ thin films grown by pulsed laser deposition. <i>Applied Physics A: Materials Science and Processing</i> , 2005, 81, 1423-1426.	1.1	4
75	Effect of columnar structures on resistivity behavior of epitaxial $\text{La}_{0.8}\text{MnO}_3$ thin films. <i>Journal of Applied Physics</i> , 2005, 97, 086104.	1.1	1
76	c-axis textured $\text{La}_2\text{CuO}_4$ thin films prepared by $\text{NaClO}$ oxidation: I. Superconducting and structural properties. <i>Superconductor Science and Technology</i> , 2004, 17, 1046-1050.	1.8	5
77	c-axis textured $\text{La}_2\text{CuO}_4$ thin films prepared by $\text{NaClO}$ oxidation: II. Electron microscopic characterization. <i>Superconductor Science and Technology</i> , 2004, 17, 1051-1054.	1.8	2