

# Haipeng Wang

## List of Publications by Year in descending order

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papers

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citations

567281

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docs citations

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times ranked

501  
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#	ARTICLE	IF	CITATIONS
1	Deformation behavior and processing maps of Ni <sub>3</sub> Al-based superalloy during isothermal hot compression. <i>Journal of Alloys and Compounds</i> , 2017, 712, 687-695.	5.5	90
2	Effect of annealing treatment on microstructure evolution and creep behavior of a multiphase Ni <sub>3</sub> Al-based superalloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 743, 623-635.	5.6	68
3	Remarkable solute trapping within rapidly growing dendrites. <i>Applied Physics Letters</i> , 2006, 89, 201905.	3.3	32
4	Thermophysical properties of a highly superheated and undercooled Ni-Si alloy melt. <i>Applied Physics Letters</i> , 2004, 84, 4062-4064.	3.3	31
5	Composition, Microstructure, Phase Constitution and Fundamental Physicochemical Properties of Low-Melting-Point Multi-Component Eutectic Alloys. <i>Journal of Materials Science and Technology</i> , 2017, 33, 131-154.	10.7	28
6	Rapid dendritic growth and solute trapping within undercooled ternary Ni-5%Cu-5%Mo alloy. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 109, 139-143.	2.3	24
7	Influences of solution cooling rate on microstructural evolution of a multiphase Ni <sub>3</sub> Al-based intermetallic alloy. <i>Intermetallics</i> , 2019, 109, 48-59.	3.9	24
8	Rapid Eutectic Growth Kinetics of Undercooled Nb-Si Alloys at Electrostatic Levitation State. <i>Acta Materialia</i> , 2022, 237, 118157.	7.9	24
9	Heat transfer of micro-droplet during free fall in drop tube. <i>Science China Technological Sciences</i> , 2018, 61, 1021-1030.	4.0	23
10	Direct formation of peritectic phase but no primary phase appearance within Ni <sub>83.25</sub> Zr <sub>16.75</sub> peritectic alloy during free fall. <i>Scientific Reports</i> , 2016, 6, 22641.	3.3	22
11	Local atomic structure correlating to phase selection in undercooled liquid Ni-Zr peritectic alloy. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	20
12	Atomic structure of liquid refractory Nb <sub>5</sub> Si <sub>3</sub> intermetallic compound alloy based upon deep neural network potential. <i>Journal of Applied Physics</i> , 2021, 130, .	2.5	20
13	Electrostatic levitation under the single-axis feedback control condition. <i>Science China: Physics, Mechanics and Astronomy</i> , 2010, 53, 1438-1444.	5.1	17
14	Solidification mechanism transition of liquid Co-Cu-Ni ternary alloy. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 102, 141-145.	2.3	17
15	Surface tension measurement of metastable liquid Ti-Al-Nb alloys. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 105, 211-214.	2.3	17
16	Density and structure of undercooled liquid titanium. <i>Science Bulletin</i> , 2012, 57, 719-723.	1.7	17
17	Understanding atomic-scale phase separation of liquid Fe-Cu alloy. <i>Science Bulletin</i> , 2011, 56, 3416-3419.	1.7	16
18	Density Measurement and Atomic Structure Simulation of Metastable Liquid Ti-Ni Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 5488-5496.	2.2	16

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19	Dendritic morphology evolution and microhardness enhancement of rapidly solidified Ni-based superalloys. <i>Science China Technological Sciences</i> , 2019, 62, 1976-1986.	4.0	16
20	Competitive Nucleation and Growth Between the Primary and Peritectic Phases of Rapidly Solidifying Ni <sub>40</sub> Zr Hypoperitectic Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 789-803.	2.2	16
21	Evidence for the transition from primary to peritectic phase growth during solidification of undercooled Ni-Zr alloy levitated by electromagnetic field. <i>Scientific Reports</i> , 2016, 6, 39042.	3.3	15
22	Experimental modulation and theoretical simulation of zonal oscillation for electrostatically levitated metallic droplets at high temperatures. <i>Physical Review E</i> , 2018, 98, .	2.1	15
23	Formation and widening mechanisms of envelope structure and its effect on creep behavior of a multiphase Ni <sub>3</sub> Al-based intermetallic alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 763, 138158.	5.6	15
24	Effects of Undercooling and Cooling Rate on Peritectic Phase Crystallization Within Ni-Zr Alloy Melt. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 499-508.	2.1	14
25	Determining Thermophysical Properties of Normal and Metastable Liquid Zr-Fe Alloys by Electrostatic Levitation Method. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 4074-4085.	2.2	14
26	Molecular dynamics calculation of thermophysical properties for a highly reactive liquid. <i>Physical Review E</i> , 2008, 78, 041204.	2.1	13
27	Phase field simulation of monotectic transformation for liquid Ni-Cu-Pb alloys. <i>Science Bulletin</i> , 2009, 54, 183-188.	9.0	11
28	Specific heat measurement of stable and metastable liquid Ti-Al alloys. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 103, 135-137.	2.3	11
29	Simulated evolution process of core-shell microstructures. <i>Science in China Series G: Physics, Mechanics and Astronomy</i> , 2007, 50, 546-552.	0.2	10
30	Geometric optimization of electrostatic fields for stable levitation of metallic materials. <i>Science China Technological Sciences</i> , 2013, 56, 53-59.	4.0	10
31	Optimized Electromagnetic Fields Levitate Bulk Metallic Materials. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 2252-2260.	2.1	10
32	Precipitation of intersected plate-like $\beta$ phase in $\beta^2$ and its effect on creep behavior of multiphase Ni <sub>3</sub> Al-based intermetallic alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 767, 138439.	5.6	10
33	A CFD Study Assisted with Experimental Confirmation for Liquid Shape Control of Electromagnetically Levitated Bulk Materials. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 688-699.	2.1	10
34	Transition from Crystal to Metallic Glass and Micromechanical Property Change of Fe-B-Si Alloy During Rapid Solidification. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2020, 51, 327-337.	2.1	10
35	Rapid monotectic solidification during free fall in a drop tube. <i>Science Bulletin</i> , 2004, 49, 220-224.	1.7	7
36	Surface tension of liquid ternary Fe-Cu-Mo alloys measured by electromagnetic levitation oscillating drop method. <i>Journal of Chemical Physics</i> , 2008, 129, 124706.	3.0	7

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37	Thermophysical property of undercooled liquid binary alloy composed of metallic and semiconductor elements. Journal Physics D: Applied Physics, 2009, 42, 035414.	2.8	7
38	Thermophysical properties of stable and metastable liquid copper and nickel by molecular dynamics simulation. Applied Physics A: Materials Science and Processing, 2009, 95, 661-665.	2.3	7
39	An anomalous thermal expansion phenomenon induced by phase transition of Fe-Co-Ni alloys. Journal of Applied Physics, 2018, 124, 215107.	2.5	7
40	Combined Effects of High Undercooling and Large Cooling Rate on the Microstructure Evolution and Hardening Mechanism of Rapidly Solidified Ti-Al Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1242-1253.	2.2	6
41	Liquid Structure and Thermophysical Properties of Ternary Ni-Fe-Co Alloys Explored by Molecular Dynamics Simulations and Electrostatic Levitation Experiments. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 1732-1748.	2.2	6
42	Heat transfer analysis of feedthrough flange under high alternating current condition. Science China Technological Sciences, 2020, 63, 686-692.	4.0	5
43	Composition dependence of thermophysical properties for liquid Zr-V alloys determined at electrostatic levitation state. Journal of Applied Physics, 2022, 131, .	2.5	5
44	Effect of Microstructure Evolution on Micro/Nano-Mechanical Property of Fe-Co-Ni Ternary Alloys Solidified under Microgravity Condition. Steel Research International, 2018, 89, 1800053.	1.8	4
45	Peritectic solidification mechanism and accompanying microhardness enhancement of rapidly quenched Ni-Zr alloys. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	4
46	Peritectic Solidification Kinetics and Mechanical Property Enhancement in a Rapidly Solidified Ti-48at% Al-8at% Nb Alloy via Hierarchical Twin Microstructure. Advanced Engineering Materials, 2021, 23, 2100101.	3.5	4
47	Specific heat and related thermophysical properties of liquid Fe-Cu-Mo alloy. Science in China Series G: Physics, Mechanics and Astronomy, 2007, 50, 397-406.	0.2	3
48	Coupling effect of undercooling and cooling on Ti-Al-V alloy solidification. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	3
49	Effect of High Undercooling on Dendritic Morphology and Mechanical Properties of Rapidly Solidified Inconel X750 Alloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 1784-1794.	2.1	3
50	Specific heat of ternary Ag-Si-Ge alloys from 123ÅK to high temperatures: experiment and prediction. Journal of Thermal Analysis and Calorimetry, 2021, 145, 2287-2294.	3.6	3
51	Predicting macroscopic thermal expansion of metastable liquid metals with only one thousand atoms. Science China: Physics, Mechanics and Astronomy, 2014, 57, 2235-2241.	5.1	2
52	Note: Attenuation motion of acoustically levitated spherical rotor. Review of Scientific Instruments, 2016, 87, 116103.	1.3	2
53	Measurement and simulation of specific heat for metastable liquid Ni <sub>80</sub> Fe <sub>10</sub> Cu <sub>10</sub> alloy. Applied Physics A: Materials Science and Processing, 2011, 105, 987-990.	2.3	1
54	Experimental determination of the Ni-Ni <sub>5</sub> Zr eutectic point for binary Ni-Zr alloy phase diagram. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	1

#	ARTICLE	IF	CITATIONS
55	Liquid dripping dynamics and levitation stability control of molten Ti-Al-Nb alloy within electromagnetic fields. <i>Physics of Fluids</i> , 2022, 34, 055113.	4.0	1
56	Phase selection and microstructure evolution within eutectic Ti-Si alloy solidified at containerless state. <i>Science China Technological Sciences</i> , 2022, 65, 1587-1598.	4.0	1
57	Containerless processing by single-axis electrostatic levitation. <i>Science Bulletin</i> , 2010, 55, 2755-2755.	1.7	0
58	ç”µçŁæ, -æµ®èj#å...±æ™¶Al-Siâ•é†‘â^ç”Ÿç, åèšè;Æä,°ç”ç©¶. <i>Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica</i> , 2022, .		