Liang Wang

List of Publications by Year
in descending order

61 papers	588 citations	623188 14 h-index	713013 21 g-index
61 all docs	61 docs citations	61 times ranked	392 citing authors

#	Article	IF	Citations
1	Investigation and Improvement of Pushing Dislocation in Ceramsite Sand Three-Dimensional Printing. 3D Printing and Additive Manufacturing, 2023, 10, 289-297.	1.4	1
2	Microstructure Evolution and Toughening Mechanism of a Nb-18Si-5HfC Eutectic Alloy Created by Selective Laser Melting. Materials, 2022, 15, 1190.	1.3	0
3	Improvement of Microstructure and Mechanical Properties of Nearâ€Eutectic Alâ€“Mg₂Si Alloys by Eu Addition. Advanced Engineering Materials, 2021, 23, 2001447.	1.6	7
4	Impact of laser scanning speed on microstructure and mechanical properties of Inconel 718 alloys by selective laser melting. China Foundry, 2021, 18, 170-179.	0.5	8
5	Influence of laser parameters on segregation of Nb during selective laser melting of Inconel 718. China Foundry, 2021, 18, 379-388.	0.5	3
6	Evolution of Microstructure and Mechanical Properties in Alâ€“Znâ€“Mgâ€“Cu Alloy by Electric Pulse Aging Treatment. Transactions of the Indian Institute of Metals, 2021, 74, 2835-2842.	0.7	3
7	A Comparative Study on Microstructure and Mechanical Properties of Tiâ€43/46Alâ€“5Nbâ€“0.1B Alloys Modified by Mo. Advanced Engineering Materials, 2020, 22, 1901075.	1.6	6
8	Microstructures and mechanical properties of Tiâ€“44Alâ€“5Nbâ€“3Crâ€“1.5Zrâ€“xMoâ€“yB alloys. Journal of Materials Research, 2020, 35, 2756-2764.	1.2	4
9	Microstructural evolution of Al-Cu-Li alloys with different Li contents by coupling of near-rapid solidification and two-stage homogenization treatment. China Foundry, 2020, 17, 190-197.	0.5	10
10	Effect of hydrogen on interfacial reaction between Ti-6Al-4V alloy melt and graphite mold. Journal of Materials Research and Technology, 2020, 9, 6933-6939.	2.6	5
11	Microstructural Optimization of Feâ€Rich Intermetallic in Alâ€“12â€‰wt% Siâ€“2â€‰wt% Fe alloys by Adding Travelling Magnetic Fields. Advanced Engineering Materials, 2020, 22, 2000561.	1.6	0
12	Prediction Mechanical Strength of Sand Mold Samples Fabricated by Three-Dimensional Printing. Materials Transactions, 2020, 61, 1620-1628.	0.4	2
13	Microstructure and mechanical properties of NbZrTi and NbHfZrTi alloys. Rare Metals, 2019, 38, 840-847.	3.6	22
14	Microstructure and Mechanical Properties of Bioâ€Inspired Ti/Al/Alâ€C_f Multilayered Composites. Advanced Engineering Materials, 2019, 21, 1800722.	1.6	2
15	Microstructures and properties of Nbâ€“Si-based alloys with B addition. Rare Metals, 2019, , 1.	3.6	0
16	Effects of hydrogen on the interfacial reaction between Ti 6Al 4V alloy melt and Al2O3 ceramic shell. International Journal of Hydrogen Energy, 2018, 43, 5225-5230.	3.8	3
17	Creep Behavior of Highâ€Nb TiAl Alloy at 800â€“900â€‰Â°C by Directional Solidification. Advanced Engineering Materials, 2018, 20, 1700734.	1.6	6
18	Efficient Melt Stirring Induced by the Coupled Effects of Alternating Magnetic Field and Configuration of Cold Crucible. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 28-33.	1.0	1

#	Article	IF	Citations
19	Effects of Nb on Microstructure and Mechanical Properties of Ti42Al2.6C Alloys. Advanced Engineering Materials, 2018, 20, 1701112.	1.6	17
20	Microstructure, Mechanical Properties, and Crack Propagation Behavior in High-Nb TiAl Alloys by Directional Solidification. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 4555-4564.	1.1	39
21	Nanometer-scale gradient atomic packing structure surrounding soft spots in metallic glasses. Npj Computational Materials, 2018, 4, .	3.5	37
22	Effect of a Traveling Magnetic Field on Micropore Formation in Al-Cu Alloys. Metals, 2018, 8, 448.	1.0	4
23	Hydrogen induced softening and hardening for hot workability of (TiBÂ+ÂTiC)/Ti-6Al-4V composites. International Journal of Hydrogen Energy, 2017, 42, 3380-3388.	3.8	16
24	Effects and mechanism of ultrasonic irradiation on solidification microstructure and mechanical properties of binary TiAl alloys. Ultrasonics Sonochemistry, 2017, 38, 120-133.	3.8	55
25	Hydrogenation behavior of Tiâ€“44Alâ€“6Nb alloy and its effect on the microstructure and hot deformability. Journal of Materials Research, 2017, 32, 1304-1315.	1.2	1
26	Design of (Nb, Mo)40Ti30Ni30 alloy membranes for combined enhancement of hydrogen permeability and embrittlement resistance. Scientific Reports, 2017, 7, 209.	1.6	17
27	Numerical Research on Magnetic Field, Temperature Field and Flow Field During Melting and Directionally Solidifying TiAl Alloys by Electromagnetic Cold Crucible. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 3345-3358.	1.0	11
28	Detachment of secondary dendrite arm in a directionally solidified Sn-Ni peritectic alloy under deceleration growth condition. Scientific Reports, 2016, 6, 27682.	1.6	4
29	On oscillatory microstructure during cellular growth of directionally solidified Snâ€“36at.%Ni peritectic alloy. Scientific Reports, 2016, 6, 24315.	1.6	5
30	On migration of primary/peritectic interface during interrupted directional solidification of Sn-Ni peritectic alloy. Scientific Reports, 2016, 6, 24512.	1.6	8
31	Effect of growth rate on microstructures and microhardness in directionally solidified Tiâ€“47Alâ€“1.0Wâ€“0.5Si alloy. Journal of Materials Research, 2016, 31, 618-626.	1.2	3
32	Composition-dependent phase substitution in directionally solidified Sn-22at.%Ni peritectic alloy. Journal of Materials Science, 2016, 51, 1512-1521.	1.7	14
33	Effect of heat treatment on microstructure and mechanical properties of cast and directionally solidified high-Nb contained TiAl-based alloys. Journal of Materials Research, 2015, 30, 3331-3342.	1.2	5
34	Controllable 3D morphology and growth mechanism of quasicrystalline phase in directionally solidified Alâ€“Mnâ€“Be alloy. Journal of Materials Research, 2014, 29, 2547-2555.	1.2	8
35	Facetedâ€“nonfaceted growth transition and 3-D morphological evolution of primary Al₆Mn microcrystals in directionally solidified Alâ€“3 at.% Mn alloy. Journal of Materials Research, 2014, 29, 1256-1263.	1.2	18
36	Local melting/solidification during peritectic solidification in a steep temperature gradient: analysis of a directionally solidified Alâ€“25at%Ni. Applied Physics A: Materials Science and Processing, 2014, 116, 1821-1831.	1.1	9

#	Article	IF	Citations
37	Influence of initial solidâ€“liquid interface morphology on further microstructure evolution during directional solidification. Applied Physics A: Materials Science and Processing, 2013, 110, 443-451.	1.1	6
38	Effect of peritectic reaction on the migration of secondary dendrite arms in the presence of tertiary dendrites: analysis of a directionally solidified Snâ€“36Âat.%Ni peritectic alloy. Journal of Materials Science, 2013, 48, 2608-2617.	1.7	3
39	Optimization of Processing Parameters for WC-11Co Cemented Carbide Doped with Nano-Crystalline CeO2. Journal of Materials Engineering and Performance, 2013, 22, 112-117.	1.2	8
40	Prediction of the solidification path of Al-4.37Cu-27.02Mg ternary eutectic alloy with a unified microsegregation model coupled with Thermo-Calc. International Journal of Materials Research, 2013, 104, 244-254.	0.1	10
41	Secondary dendrite arm migration caused by temperature gradient zone melting in the directionally solidified Snâ€“40 at.% Mn peritectic alloy. Journal of Materials Research, 2013, 28, 1196-1202.	1.2	3
42	A lateral remelting phenomenon of the primary phase below the temperature of peritectic reaction in directionally solidified Cuâ€“Ge alloys. Journal of Materials Research, 2013, 28, 3261-3269.	1.2	11
43	Primary dendrite distribution in directionally solidified Snâ€“36 at.% Ni peritectic alloy. Journal of Materials Research, 2013, 28, 740-746.	1.2	10
44	Two-phase separated growth and peritectic reaction during directional solidification of Cuâ€“Ge peritectic alloys. Journal of Materials Research, 2013, 28, 1372-1377.	1.2	5
45	INVESTIGATIONS ON DEFECT STRUCTURE AND LIGHT-INDUCED SCATTERING OF Mg:Ho:LiNbO3 WITH VARIOUS Mg2+ CONCENTRATION. Modern Physics Letters B, 2012, 26, 1250127.	1.0	0
46	Characterization of hydrogen-induced structural changes in Zr-based bulk metallic glasses using positron annihilation spectroscopy. Journal of Materials Research, 2012, 27, 2587-2592.	1.2	4
47	Isothermal Peritectic Coupled Growth in Directionally Solidified Cu-20ÂwtÂpct Sn Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4219-4223.	1.1	4
48	Mechanical Properties and Thermal Shock Resistance of HVOF Sprayed NiCrAlY Coatings Without and With Nano Ceria. Journal of Thermal Spray Technology, 2012, 21, 818-824.	1.6	26
49	Directional Solidification of Ti6Al4V Ingots with an Electromagnetic Cold Crucible by Adjusting the Meniscus. ISIJ International, 2012, 52, 1296-1300.	0.6	4
50	Study on in situ Al-Si functionally graded materials produced by traveling magnetic field. Science and Engineering of Composite Materials, 2012, 19, 209-214.	0.6	4
51	Effect of peritectic reaction on dendrite coarsening in directionally solidified Snâ€“36Âat.%Ni alloy. Journal of Materials Science, 2012, 47, 6108-6117.	1.7	20
52	Tensile properties of an aluminum matrix composite reinforced by SnO2-coated Al18B4O33 whisker. Journal Wuhan University of Technology, Materials Science Edition, 2011, 26, 1166-1170.	0.4	0
53	Deoxidation of Tiâ€“Al intermetallics via hydrogen treatment. International Journal of Hydrogen Energy, 2010, 35, 9214-9217.	3.8	17
54	Effect of hydrogen on hot deformation behaviors of TiAl alloys. International Journal of Hydrogen Energy, 2010, 35, 13322-13328.	3.8	35

#	Article	IF	Citations
55	In doping effect on optical properties in Zn:In:Fe:LiNbO₃ crystals. Crystal Research and Technology, 2009, 44, 754-758.	0.6	4
56	A simple model for lamellar peritectic coupled growth with peritectic reaction. Science in China Series G: Physics, Mechanics and Astronomy, 2007, 50, 442-450.	0.2	4
57	Well-aligned in situ composites in directionally solidified Feâ€“Ni peritectic system. Applied Physics Letters, 2006, 89, 231918.	1.5	19
58	Evaporation loss of components during induction skull melting of Tiâ€"13Alâ€"29Nbâ€"2Â·5Mo. International Journal of Cast Metals Research, 2003, 16, 466-472.	0.5	1
59	The critical pressure and impeding pressure of Al evaporation during induction skull melting processing of TiAl. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 3249-3253.	1.1	12
60	Molding of temperature field for the induction skull melting process of Ti-47Ni-9Nb. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2001, 32, 2895-2902.	1.1	3
61	Evaporation behavior of aluminum during the cold crucible induction skull melting of titanium aluminum alloys. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2000, 31, 837-844.	1.0	21