Junfeng Xu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9557165/publications.pdf

Version: 2024-02-01

49 papers	349 citations	932766 10 h-index	940134 16 g-index
51 all docs	51 docs citations	51 times ranked	257 citing authors

#	Article	IF	Citations
1	Determination of nucleation and growth modes from evaluation of transformed fraction in solid-state transformation. Acta Materialia, 2008, 56, 6003-6012.	3.8	35
2	Crystallization kinetics of the Cu50Zr50 metallic glass under isothermal conditions. Journal of Solid State Chemistry, 2016, 244, 116-119.	1.4	26
3	Synthesis of Fe 75 Cr 5 (PBC) 20 bulk metallic glasses with a combination of desired merits using industrial ferro-alloys without high-purity materials. Journal of Alloys and Compounds, 2017, 699, 92-97.	2.8	22
4	Relation of cooling rate, undercooling and structure for rapid solidification of iron melt. Computational Materials Science, 2017, 128, 98-102.	1.4	21
5	Phase Selection in Undercooled Ni-3.3 Wt Pct B Alloy Melt. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 1401-1408.	1.1	17
6	Solidification of Highly Undercooled Hypereutectic Ni-Ni3B Alloy Melt. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4810-4819.	1.1	16
7	The recalescence rate of cooling curve for undercooled solidification. Scientific Reports, 2020, 10, 1380.	1.6	16
8	Determination of Solid Fraction from Cooling Curve. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1268-1276.	1.1	14
9	In situ observation of solidification of undercooled hypoeutectic Niâ€“Ni₃B alloy melt. Journal of Materials Research, 2013, 28, 1891-1902.	1.2	14
10	Glass formation and magnetic properties of Fe-based metallic glasses fabricated by low-purity industrial materials. Transactions of Nonferrous Metals Society of China, 2017, 27, 857-862.	1.7	12
11	In Situ Observation of the Competition Between Metastable and Stable Phases in Solidification of Undercooled Fe-17at.ÂpctB Alloy Melt. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 5232-5239.	1.1	10
12	Phase transformation kinetics of Ge23Se67Sb10 glass. Journal of Non-Crystalline Solids, 2010, 356, 2198-2202.	1.5	9
13	Effects of heat treatment on the properties of 99.5Ge23Se67Sb10-0.5CsCl glass. Optik, 2016, 127, 8379-8385.	1.4	9
14	Effect of phosphorus and heat treatment on microstructure of Al-25%Si alloy. China Foundry, 2017, 14, 10-15.	0.5	9
15	Application of recipes for isothermal and isochronal solid-state transformations. Journal of Non-Crystalline Solids, 2010, 356, 1236-1245.	1.5	8
16	Simple approach for description of undercooled solidification. Materials Science and Technology, 2012, 28, 274-281.	0.8	7
17	An analytical model for solidification of undercooled metallic melts. Journal of Thermal Analysis and Calorimetry, 2015, 119, 273-280.	2.0	7
18	Phase Selection and Microstructure Evolution in Nonequilibrium Solidification of Fe40Ni40B20 Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1578-1587.	1.1	6

#	Article	IF	Citations
19	Phase selection of undercooled solidification of Niâ€“4.5 wt% B alloy. Journal of Materials Research, 2013, 28, 3347-3354.	1.2	6
20	In situ observations of the rapid solidification for undercooled Al₃₀Si₇₀ alloy melt. Journal of Materials Research, 2016, 31, 222-231.	1.2	6
21	Effects of rare-earth element addition and heat treatment on the microstructures and mechanical properties of Al-25 % Si alloy. International Journal of Materials Research, 2017, 108, 269-274.	0.1	6
22	Microstructure refinement of Fe₄₀Ni₄₀B₂₀ alloy in non-equilibrium solidification: possibility of nanostructure formation. Materials Science and Technology, 2012, 28, 844-849.	0.8	5
23	An application of box counting method for measuring phase fraction. Measurement: Journal of the International Measurement Confederation, 2017, 100, 297-300.	2.5	5
24	Solidification Behavior and Cooling Curves for Hypereutectic Fe-21 At. Pct B Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 1817-1826.	1.1	5
25	Effects of local nonequilibrium in rapid eutectic solidificationâ€”Part 1: Statement of the problem and general solution. Mathematical Methods in the Applied Sciences, 2021, 44, 12211-12220.	1.2	5
26	The effect of phosphorus on solidification behaviour of undercooled Alâ€“70Âwt.%Si alloys. Scientific Reports, 2020, 10, 18230.	1.6	5
27	Undercooled solidification of Niâ€“3Â·3 wt-%B alloy and cooling curve description. Materials Science and Technology, 2013, 29, 36-42.	0.8	4
28	Rapid eutectic growth: from rod growth to diffusionless solidification. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20200305.	1.6	4
29	Comparison of baseline method and DSC measurement for determining phase fractions. Materials Science and Technology, 2012, 28, 1420-1425.	0.8	3
30	Multi-transformations in rapid solidification of highly undercooled hypoeutectic Niâ€“Ni3B alloy melt. Journal of Materials Research, 2015, 30, 3307-3315.	1.2	3
31	Solidification of the Undercooled Al-Si Alloy Containing 1.0ÂPctRE. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 789-795.	1.1	3
32	Calorimetric studies on Ge23Se67Sb10-0.5%RbI glass. Optik, 2017, 142, 529-535.	1.4	3
33	Effect of Melt Superheating Treatment on the Latent Heat Release of Sn. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 1133-1138.	1.1	3
34	Specific heat measurement of Ge7.4Se92.6 glass. Journal of Thermal Analysis and Calorimetry, 2018, 131, 3133-3138.	2.0	3
35	Effects of the iodine incorporation on the structure and physical properties of Ge-Sb-Se chalcogenide glasses. Infrared Physics and Technology, 2018, 88, 70-73.	1.3	3
36	Rapid solidification of cobalt melt by molecular dynamics simulation. Journal of Thermal Analysis and Calorimetry, 2019, 138, 287-296.	2.0	3

#	Article	IF	Citations
37	Effects of local nonequilibrium in rapid eutectic solidificationâ€"Part 2: Analysis of effects and comparison to experiment. Mathematical Methods in the Applied Sciences, 2021, 44, 12271.	1.2	3
38	Effects of RbI on the Optical and Mechanical Properties of Ge₂₃Se₆₇Sb₁₀ Glass. Advanced Materials Research, 0, 873, 273-278.	0.3	2
39	Influence of a rare-earth element on the solidification behaviour and mechanical properties of undercooled Alâ€"Si alloys. International Journal of Materials Research, 2018, 109, 729-734.	0.1	2
40	Rod eutectic growth in bulk undercooled melts. Mathematical Methods in the Applied Sciences, 0, , .	1.2	2
41	Parameter determination of critical nucleation frequency in solidification of undercooled metallic melts. Materials Science and Technology, 2012, 28, 690-694.	0.8	1
42	Observations of fractal patterns induced on surface of chalcogenide glass. Optik, 2016, 127, 11258-11262.	1.4	1
43	Calorimetric study on Ge23Se67Sb10â€"0.5CsCl glass. Journal of Thermal Analysis and Calorimetry, 2018, 132, 103-111.	2.0	1
44	Relation between superheated temperature and cooling rate for deep supercooled niobium melt. RSC Advances, 2019, 9, 5815-5824.	1.7	1
45	Observe the temperature curve for solidification from high-speed video image. Journal of Thermal Analysis and Calorimetry, 2021, 146, 2273-2277.	2.0	1
46	The effect of superheat on the nucleation undercooling of metallic melts. Mathematical Methods in the Applied Sciences, 2021, 44, 12351-12359.	1.2	1
47	On the eutectic transition of undercooled hypoeutectic Ni-B alloy in the differing heat extraction process. Materials Letters: X, 2022, 13, 100128.	0.3	1
48	Different Interfaces of Primary Transition and Eutectic Transition. Lecture Notes in Mechanical Engineering, 2018, , 811-817.	0.3	0
49	Critical undercooling of growth mode transition in undercooled Al-80%Si-1.0%P alloy. Materials Science and Technology, 2022, 38, 1645-1650.	0.8	0