Mingjun Li

List of Publications by Year
in descending order

54 papers	800 citations	516681 16 h-index	580810 25 g-index
55 all docs	55 docs citations	55 times ranked	422 citing authors

#	Article	IF	Citations
1	Controlling microstructures of AZ31 magnesium alloys by an electromagnetic vibration technique during solidification: From experimental observation to theoretical understanding. Acta Materialia, 2007, 55, 4635-4643.	7.9	98
2	Nucleation-controlled microstructures and anomalous eutectic formation in undercooled Co-Sn and Ni-Si eutectic melts. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 2999-3008.	2.2	57
3	Grain refinement of AZCa912 alloys solidified by an optimized electromagnetic stirring technique. Journal of Materials Processing Technology, 2016, 235, 114-120.	6.3	47
4	Effects of magnetic field and electric current on the solidification of AZ91D magnesium alloys using an electromagnetic vibration technique. Journal of Alloys and Compounds, 2009, 487, 187-193.	5.5	46
5	The solidification behavior of the AZ61 magnesium alloy during electromagnetic vibration processing. Journal of Alloys and Compounds, 2010, 494, 116-122.	5.5	37
6	Microtexture and macrotexture formation in the containerless solidification of undercooled Niâ€“18.7 at.% Sn eutectic melts. Acta Materialia, 2005, 53, 731-741.	7.9	34
7	Microstructure evolution and metastable phase formation in undercooled Feâ€“30 at.% Co melt. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 268, 90-96.	5.6	32
8	A comparative EBSP study of microstructure and microtexture formation from undercooled Ni99B1 melts solidified on an electrostatic levitator and an electromagnetic levitator. Acta Materialia, 2006, 54, 3791-3799.	7.9	26
9	Effects of Mechanical Vibration on Macrostructure and Mechanical Properties of AC4C Aluminum Alloy Castings. Materials Transactions, 2009, 50, 2578-2583.	1.2	24
10	On determining the phase-selection principle in solidification from undercooled meltsâ€"competitive nucleation or competitive growth?. Philosophical Magazine Letters, 2004, 84, 483-493.	1.2	22
11	Microstructure formation and in situ phase identification from undercooled Coâ€“61.8at.% Si melts solidified on an electromagnetic levitator and an electrostatic levitator. Acta Materialia, 2008, 56, 2514-2525.	7.9	22
12	Free Solidification of Undercooled Eutectics. Materials Transactions, 2006, 47, 2889-2897.	1.2	19
13	On the origin of recalescence behaviors of undercooled single-phase mullite and double-phase Al2O3â€“ZrO2 eutectic melts. Scripta Materialia, 2002, 47, 213-218.	5.2	18
14	On the role of vibration frequency on the solidification of AZ91D magnesium alloys during electromagnetic vibration. Journal of Materials Research, 2009, 24, 145-155.	2.6	18
15	Refinement of intermetallic compounds and aluminum matrix in 3xxx aluminum alloys solidified by an electromagnetic vibration technique. Journal of Alloys and Compounds, 2014, 610, 606-613.	5.5	18
16	Containerless solidification of highly undercooled Al2O3â€“ZrO2 eutectic melts on an aero-acoustic levitator. Journal of Crystal Growth, 2003, 249, 625-633.	1.5	16
17	Microstructual evolution and magnetic properties of the Ndâ€“Feâ€“B alloys solidified from undercooled melt by containerless solidification. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 382, 295-300.	5.6	15
18	Growth kinetics of highly undercooled Al2O3 melts. Journal of Applied Physics, 2004, 95, 2342-2347.	2.5	14

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19	Effects of processing variables on microstructure formation in AZ31 magnesium alloys solidified with an electromagnetic vibration technique. Journal of Materials Research, 2007, 22, 3465-3474.	2.6	14
20	Microstructure and Microtexture Formation of AZ91D Magnesium Alloys Solidified in a Static Magnetic Field. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 1422-1435.	2.2	14
21	Phase selection in the containerless solidification of undercooled CaO Â· 6Al2O3 melts. Acta Materialia, 2004, 52, 3639-3647.	7.9	13
22	A comparative study of the primary phase formation in Alâ€“7 wt% Si and Alâ€“17â€¯wt% Si alloys solidified by electromagnetic stirring processing. Materials Today Communications, 2020, 24, 101146.	1.9	13
23	Microstructure formation and grain refinement of Mg-based alloys by electromagnetic vibration technique. Transactions of Nonferrous Metals Society of China, 2010, 20, 1192-1198.	4.2	12
24	Influencing factors on the amorphous phase formation in Feâ€“7.7 at% Sm alloys solidified by high-speed melt spinning. Journal of Alloys and Compounds, 2020, 826, 154010.	5.5	12
25	Nucleation behaviour and anomalous eutectic formation in highly undercooled Fe2O3-La2O3eutectic melts. Philosophical Magazine, 2003, 83, 1095-1109.	1.6	11
26	Experimental evidence of crystal fragmentation from highly undercooled Ni99B1 melts processed on an electrostatic levitator. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 3254-3257.	2.2	11
27	On occurrence of multiple-site crystallization in undercooled mullite melts. Scripta Materialia, 2001, 45, 1431-1437.	5.2	10
28	Containerless solidification of undercooled oxide and metallic eutectic melts. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 375-377, 528-533.	5.6	10
29	Imposition Time Dependent Microstructure Formation in 7150 Aluminum Alloy Solidified by an Electromagnetic Stirring Technique. Materials Transactions, 2018, 59, 1603-1609.	1.2	10
30	Effect of Vibration Timing on the Microstructure and Microtexture Formation of AZ91D Magnesium Alloys during Electromagnetic Vibration. Materials Transactions, 2009, 50, 2015-2020.	1.2	9
31	Direct Crystallization of the Nd₂Fe₁₄B Peritectic Phase by Containerless Solidification in a Drop Tube. Materials Transactions, 2003, 44, 806-810.	1.2	8
32	Containerless Solidification and Net Shaping by Splat Quenching of Undercooled Nd₂Fe₁₄B Melts. Materials Transactions, 2003, 44, 853-860.	1.2	8
33	Solidification Behavior of AZ31 Magnesium Alloys Using an Electromagnetic Vibration Technique. ISIJ International, 2008, 48, 320-329.	1.4	8
34	Magnetic properties of metastable phase from undercooled Ndâ€“Feâ€“B melts. Journal of Applied Physics, 2004, 95, 8478-8480.	2.5	7
35	Direct observation of fragments of primary dendrite from undercooled Feâ€“Co alloys. Journal of Crystal Growth, 1999, 204, 413-417.	1.5	6
36	Containerless solidification of highly undercooled mullite melts: Crystal growth behavior and microstructure formation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 2677-2683.	2.2	6

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37	Effect of Vibration during Solidification to Obtain High Potential Metallic Materials. Materials Science Forum, 0, 690, 162-165.	0.3	6
38	Effect of the metastable b.c.c phase from undercooled Fe-30 at.% Co alloy on mechanical and magnetic properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 279, 16-24.	5.6	5
39	Further discussion on the free growth behavior in the solidification of undercooled eutectic melts. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 1393-1396.	2.2	5
40	On the optimization of solidification structures and magnetic properties of Nd70Cu30â€"50Âwt% Nd2Fe14B alloys by electromagnetic vibration. Journal of Alloys and Compounds, 2021, 883, 160915.	5.5	5
41	Effect of the primary phase on grain coarsening in undercooled Fe-Co alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 2941-2949.	2.2	4
42	Microstructure formation and phase selection in the solidification of Al2O3â€"5 at% SiO2 melts by splat quenching. Journal of Materials Research, 2002, 17, 2026-2032.	2.6	4
43	Comments on the work by Wei and co-workers on free eutectic and dendritic solidification from undercooled metallic melts. Scripta Materialia, 2006, 54, 1427-1432.	5.2	4
44	Crystalline orientation control of the platelet Nd2Fe14B phase to produce magnetic anisotropy via electromagnetic vibration processing. Scientific Reports, 2019, 9, 5733.	3.3	4
45	Segmentation and Alignment of Nd2Fe14B Platelets in Nd-Cu Eutectic Alloys Using the Electromagnetic Vibration Technique. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 2939-2956.	2.2	3
46	Comments on â€˜Solidification modes and microstructure of Feâ€"Cr alloys solidified at different undercoolingsâ€™. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 270, 267-269.	5.6	2
47	Influence of static magnetic field intensity on the separation and migration of Fe-rich bulks in an immiscible (Feâ€"C)â€"Cu alloy. Philosophical Magazine, 2019, 99, 2221-2235.	1.6	2
48	Microstructure and magnetic properties of rare earth Nd-Fe system alloys produced by containerless processing. Microgravity Science and Technology, 2005, 16, 89-93.	1.4	1
49	Microtexture formation of Ni99B1 alloys solidified on an ESL and an EMLâ€"a study based on the EBSP technique. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 449-451, 684-688.	5.6	1
50	Microstructure refinement of 7150 aluminum alloy ingot with rectangular section by applying forward-reverse electromagnetic stirring. Keikinzoku/Journal of Japan Institute of Light Metals, 2019, 69, 30-35.	0.4	1
51	Refinement of Microstructure of JIS A7204 and A6022 Aluminum Alloys Solidified by Electromagnetic Vibration Technique. Materials Transactions, 2022, 63, 923-930.	1.2	1
52	Creation of Fine Structure in Magnesium Alloys by Electromagnetic Vibration Process. Materials Science Forum, 2010, 638-642, 1453-1458.	0.3	0
53	Creation of the NdFeB Anisotropic Cast Magnet Using the Electromagnetic Vibration Process. Materia Japan, 2019, 58, 520-521.	0.1	0
54	Quantitative Analysis of Breakdown Criteria of Nd2Fe14B Compounds During Electromagnetic Vibration and Their Frequency-Dependent Solidification Structures/Magnetic Properties. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 0, , 1.	2.2	0