Zhong-Ming Ren

List of Publications by Year
in descending order

154 papers	2,813 citations	236925 25 h-index	223800 46 g-index
157 all docs	157 docs citations	157 times ranked	1809 citing authors

#	Article	IF	Citations
1	Enhanced strengthâ€“ductility synergy in ultrafine-grained eutectic high-entropy alloys by inheriting microstructural lamellae. Nature Communications, 2019, 10, 489.	12.8	505
2	Influence of thermoelectric effects on the solidâ€“liquid interface shape and cellular morphology in the mushy zone during the directional solidification of Alâ€“Cu alloys under a magnetic field. Acta Materialia, 2007, 55, 3803-3813.	7.9	148
3	Magnetic properties and promising magnetocaloric performances in the antiferromagnetic GdFe2Si2 compound. Science China Materials, 2022, 65, 1345-1352.	6.3	116
4	Investigation of thermoelectric magnetic convection and its effect on solidification structure during directional solidification under a low axial magnetic field. Acta Materialia, 2009, 57, 2180-2197.	7.9	90
5	Dendrite fragmentation and columnar-to-equiaxed transition during directional solidification at lower growth speed under a strong magnetic field. Acta Materialia, 2012, 60, 3321-3332.	7.9	82
6	Excellent magnetocaloric properties in RE2Cu2Cd (REâ€‰=â€‰Dy and Tm) compounds and its composite materials. Scientific Reports, 2016, 6, 34192.	3.3	65
7	Influence of an axial high magnetic field on the liquidâ€“solid transformation in Alâ€“Cu hypoeutectic alloys and on the microstructure of the solid. Acta Materialia, 2007, 55, 1377-1386.	7.9	63
8	First- and second-order phase transitions in RE6Co2Ga (RE = Ho, Dy or Gd) cryogenic magnetocaloric materials. Science China Materials, 2021, 64, 2846-2857.	6.3	62
9	On the texture, phase and tensile properties of commercially pure Ti produced via selective laser melting assisted by static magnetic field. Materials Science and Engineering C, 2017, 70, 405-407.	7.3	53
10	Magnetic-field-assisted solvothermal growth of single-crystalline bismuth nanowires. Nanotechnology, 2008, 19, 115602.	2.6	48
11	Effect of high magnetic field on the primary dendrite arm spacing and segregation of directionally solidified superalloy DZ417G. Journal of Alloys and Compounds, 2009, 487, 612-617.	5.5	42
12	Columnar-to-equiaxed transitions in al-based alloys during directional solidification under a high magnetic field. Journal of Crystal Growth, 2010, 312, 267-272.	1.5	40
13	Influence of a high magnetic field on columnar dendrite growth during directional solidification. Acta Materialia, 2007, 55, 5333-5347.	7.9	36
14	Microstructure, crystallization, and magnetization behaviors inMnBiâ^'Bicomposites aligned by applied magnetic field. Physical Review B, 2005, 72, .	3.2	35
15	Reaction diffusion in Niâ€“Al diffusion couples in steady magnetic fields. Journal of Alloys and Compounds, 2015, 641, 7-13.	5.5	34
16	Effect of a high magnetic field on the morphological instability and irregularity of the interface of a binary alloy during directional solidification. Acta Materialia, 2009, 57, 1689-1701.	7.9	32
17	Strengthened Peening Effect on Metallurgical Bonding Formation in Cold Spray Additive Manufacturing. Journal of Thermal Spray Technology, 2019, 28, 769-779.	3.1	32
18	Tuning the crystal structure and magnetic properties of Fe doped In2O3 nanocrystals. Applied Physics Letters, 2007, 91, .	3.3	31

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19	Effect of Multi-Scale Thermoelectric Magnetic Convection on Solidification Microstructure in Directionally Solidified Al-Si Alloys Under a Transverse Magnetic Field. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 5584-5600.	2.2	31
20	Effect of a magnetic field on macro segregation of the primary silicon phase in hypereutectic Al-Si alloy during directional solidification. Journal of Alloys and Compounds, 2017, 722, 108-115.	5.5	31
21	Enhanced mechanical properties of Ti6Al4V alloy fabricated by laser additive manufacturing under static magnetic field. Materials Research Letters, 2022, 10, 530-538.	8.7	31
22	Effect of a high magnetic field on microstructures of Ni-based superalloy during directional solidification. Journal of Alloys and Compounds, 2015, 620, 10-17.	5.5	30
23	Modification of liquid/solid interface shape in directionally solidifying Alâ€“Cu alloys by a transverse magnetic field. Journal of Materials Science, 2013, 48, 213-219.	3.7	27
24	Preparation of textured porous Al₂O₃ ceramics by slip casting in a strong magnetic field and its mechanical properties. Crystal Research and Technology, 2015, 50, 645-653.	1.3	27
25	Structure, glass-forming ability, magnetic and cryogenic magneto-caloric properties in the amorphous Ni30Co10RE60 (REâ€‰=â€‰Ho and Tm) ribbons. Journal of Materials Science, 2018, 53, 9816-9822.	3.7	27
26	Application of differential thermal analysis to investigation of magnetic field effect on solidification of Alâ€“Cu hypereutectic alloy. Journal of Alloys and Compounds, 2010, 505, 108-112.	5.5	26
27	The effect of magnetic field on precipitation phases of single-crystal nickel-base superalloy during directional solidification. Materials Letters, 2013, 100, 223-226.	2.6	26
28	Effects of a high-gradient magnetic field on the migratory behavior of primary crystal silicon in hypereutectic Alâ€“Si alloy. Science and Technology of Advanced Materials, 2008, 9, 024202.	6.1	25
29	Synthesis and room-temperature ferromagnetic properties of single-crystalline Co-doped SnO2 nanocrystals via a high magnetic field. Journal of Alloys and Compounds, 2009, 481, 837-840.	5.5	24
30	Effect of high magnetic field on diffusion behavior of aluminum in Niâ€“Al alloy. Materials Letters, 2013, 108, 340-342.	2.6	24
31	Interfacial microstructure and mechanical characterization of silicon nitride/nickel-base superalloy joints by partial transient liquid phase bonding. Ceramics International, 2016, 42, 1633-1639.	4.8	24
32	Strong magnetic field-dual-assisted fabrication of heterogeneous sulfide-based hollow nanochain electrodes for high-rate supercapacitors. Journal of Materials Chemistry A, 2019, 7, 19733-19744.	10.3	24
33	Effect of Current Frequency on Droplet Evolution During Magnetic-Field-Controlled Electroslag Remelting Process Via Visualization Method. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 655-663.	2.1	23
34	Strong Magnetic-Field-Engineered Porous Template for Fabricating Hierarchical Porous Niâ€“Coâ€“Znâ€“P Nanoplate Arrays as Battery-Type Electrodes of Advanced All-Solid-State Supercapacitors. ACS Applied Materials & Interfaces, 2022, 14, 2782-2793.	8.0	21
35	Structure and magnetic properties of MnZn nanoferrites synthesized under a high magnetic field. Journal of Applied Physics, 2011, 110, .	2.5	19
36	Microstructure and mechanical properties of partial transient liquid phase bonded Si3N4â€“DZ483 superalloy joints. Materials Letters, 2014, 121, 223-226.	2.6	18

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37	Interfacial microstructure of partial transient liquid phase bonding of Si 3 N 4 to nickel-base superalloy using Ti/Au/Ni interlayers. Vacuum, 2016, 130, 105-108.	3.5	18
38	Columnar-to-Equiaxed Transition and Equiaxed Grain Alignment in Directionally Solidified Ni3Al Alloy Under an Axial Magnetic Field. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 4193-4203.	2.2	18
39	Revealing the influence of high magnetic field on the solute distribution during directional solidification of Al-Cu alloy. Journal of Materials Science and Technology, 2021, 88, 226-232.	10.7	18
40	Fabrication of textured Si3N4 ceramics with Î²-Si3N4 powders as raw material by gel-casting under strong magnetic field. Materials Letters, 2014, 135, 218-221.	2.6	17
41	Effect of high static magnetic field on the microstructure and mechanical properties of directionally solidified alloy 2024. Journal of Alloys and Compounds, 2018, 749, 978-989.	5.5	17
42	Study on the modification of inclusions by Ca treatment in GCr18Mo bearing steel. Advances in Manufacturing, 2019, 7, 438-447.	6.1	17
43	Effect of final electromagnetic stirring on solidification microstructure of GCr15 bearing steel in simulated continuous casting. Journal of Iron and Steel Research International, 2020, 27, 141-147.	2.8	17
44	Effects of Thermoelectric Magnetic Convection on the Solidification Structure During Directional Solidification under Lower Transverse Magnetic Field. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3459-3471.	2.2	16
45	Magnetic-field dependence of nucleation undercoolings in non-magnetic metallic melts. Philosophical Magazine Letters, 2015, 95, 37-43.	1.2	16
46	Evolution of microsegregation in directionally solidified Alâ€"Cu alloys under steady magnetic field. Journal of Alloys and Compounds, 2019, 800, 41-49.	5.5	16
47	Application of ring method to measure surface tensions of liquids in high magnetic field. Review of Scientific Instruments, 2012, 83, 043906.	1.3	15
48	Alternating-magnetic-field induced enhancement of diffusivity in Ni-Cr alloys. Scientific Reports, 2017, 7, 18085.	3.3	15
49	Grain Refinement During Directionally Solidifying GCr18Mo Steel at Low Pulling Speeds Under an Axial Static Magnetic Field. Acta Metallurgica Sinica (English Letters), 2018, 31, 681-691.	2.9	15
50	Influence of an Axial Magnetic Field on Microstructures and Alignment in Directionally Solidified Ni-based Superalloy. ISIJ International, 2017, 57, 337-342.	1.4	14
51	The mechanism of inclusion removal from molten steel by dissolved gas flotation. Ironmaking and Steelmaking, 2018, 45, 648-654.	2.1	14
52	Nondestructive effect of the cusp magnetic field on the dendritic microstructure during the directional solidification of Nickel-based single crystal superalloy. Journal of Materials Science and Technology, 2021, 62, 52-59.	10.7	14
53	Surface tensions of non-polar liquids in high magnetic fields. Journal of Molecular Liquids, 2013, 181, 51-54.	4.9	13
54	Enhanced diffusivity in Ni-Al system by alternating magnetic field. Applied Physics Letters, 2017, 110, .	3.3	13

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55	Improvement in creep life of a nickel-based single-crystal superalloy via composition homogeneity on the multiscales by magnetic-field-assisted directional solidification. Scientific Reports, 2018, 8, 1452.	3.3	13
56	Reduced Wettability of Solids by a Liquid Gaâ€“Inâ€“Sn Alloy in a Steady Magnetic Field. Journal of Physical Chemistry C, 2018, 122, 27451-27455.	3.1	13
57	Evolution of microstructure and microsegregation in Ni-Mn-Ga alloys directionally solidified under axial magnetic field. Journal of Alloys and Compounds, 2018, 758, 54-61.	5.5	13
58	Effect of interdendritic thermoelectric magnetic convection on evolution of tertiary dendrite during directional solidification. Journal of Crystal Growth, 2016, 439, 66-73.	1.5	12
59	Effect of Primary Dendrite Orientation on Stray Grain Formation in Cross-Section Change Region During the Directional Solidification of Ni-Based Superalloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 394-405.	2.1	12
60	Steel/Slag Interface Behavior under Multifunction Electromagnetic Driving in a Continuous Casting Slab Mold. Metals, 2019, 9, 983.	2.3	12
61	Electrocatalytic Oxidation and Sensitive Determination of Paracetamol Based on Nanosheets Selfâ€assembled Lindgrenite Microflowers. Electroanalysis, 2020, 32, 978-985.	2.9	12
62	Magnetic properties, magnetocaloric effect and refrigeration performance in <i>RE</i>60Al20Ni20 (<i>RE</i>â€‰=â€‰Tm, Er and Ho) amorphous ribbons. Journal of Applied Physics, 2020, 127, .	2.5	12
63	Preparation of c-axis textured TiB2 ceramics by a strong magnetic field of 6â€¯T assisted slip-casting process. Materials Letters, 2018, 217, 96-99.	2.6	11
64	Evolutions of the Micro- and Macrostructure and Tensile Property of Cu-15Ni-8Sn Alloy During Electromagnetic Stirring-Assisted Horizontal Continuous Casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 2111-2120.	2.1	11
65	Solute trapping in Al-Cu alloys caused by a 29 Tesla super high static magnetic field. Scientific Reports, 2019, 9, 266.	3.3	11
66	Preparation of silica ceramic cores by the preceramic pyrolysis technology using silicone resin as precursor and binder. Materials Chemistry and Physics, 2019, 223, 676-682.	4.0	11
67	Influence of yttrium oxide addition and sintering temperature on properties of aluminaâ€based ceramic cores. International Journal of Applied Ceramic Technology, 2020, 17, 685-694.	2.1	11
68	Effect of strong magnetic field on solid solubility and microsegregation during directional solidification of Alâ€“Cu alloy. Journal of Materials Research, 2013, 28, 2810-2818.	2.6	10
69	Fabrication and Characterization of Porous Alumina-Based Ceramics Using Silicone Resin as Binder. Transactions of the Indian Ceramic Society, 2016, 75, 40-46.	1.0	10
70	Preparation of c-axis textured SiC ceramics by a strong magnetic field of 6 T assisted gel-casting process. Ceramics International, 2016, 42, 6168-6177.	4.8	10
71	Effects of a High Magnetic Field on the Microstructure of Ni-Based Single-Crystal Superalloys During Directional Solidification. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 3804-3813.	2.2	10
72	Mechanism of Desulfurization from Liquid Iron by Hydrogen Plasma Arc Melting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 2951-2955.	2.1	10

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73	An Electromagnetic Compounding Technique for Counteracting the Thermoelectric Magnetic Effect During Directional Solidification Under a Transverse Static Magnetic Field. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 3373-3382.	2.2	10
74	Microstructure and Mechanical Properties of Ni-based Superalloy K418 Produced by the Continuous Unidirectional Solidification Process. Journal of Materials Engineering and Performance, 2019, 28, 6483-6491.	2.5	10
75	Structural, optical, and magnetic properties of Fe-doped In₂O₃ nanocubes. Journal of Materials Research, 2008, 23, 2597-2601.	2.6	9
76	Effect of thermoelectric magnetic force on the array of dendrites during directional solidification of Alâ€“Cu alloys in a high magnetic field. Philosophical Magazine Letters, 2012, 92, 675-682.	1.2	9
77	Measurement of contact angles at room temperature in high magnetic field. Review of Scientific Instruments, 2017, 88, 115110.	1.3	9
78	Experimental and Numerical Investigations of the Multi-scale Thermoelectromagnetic Convection on the Microstructure during Directionally Solidified Sn-5wt%Pb Alloys. ISIJ International, 2017, 57, 833-840.	1.4	9
79	Effect of Static Magnetic Field on the Evolution of Residual Stress and Microstructure of Laser Remelted Inconel 718 Superalloy. Journal of Thermal Spray Technology, 2020, 29, 1410-1423.	3.1	9
80	Microstructure and mechanical properties of directionally solidified Al-rich Ni3Al-based alloy under static magnetic field. Journal of Materials Science and Technology, 2022, 110, 117-127.	10.7	9
81	Effect of a weak transverse magnetic field on the microstructure in directionally solidified peritectic alloys. Scientific Reports, 2016, 6, 37872.	3.3	8
82	Effects of directional solidification parameters and crystal selector on microstructure of single crystal of Ni-base superalloys. Journal of Central South University, 2018, 25, 1-8.	3.0	8
83	Fabrication of porous Al2O3-based ceramics using ball-shaped powders by preceramic polymer process in N2 atmosphere. Ceramics International, 2018, 44, 5915-5920.	4.8	8
84	Enhanced undercooling of para- and diamagnetic metal melts in steady magnetic field. Japanese Journal of Applied Physics, 2018, 57, 080301.	1.5	8
85	Columnar to Equiaxed Transition during Directionally Solidifying GCr18Mo Steel Affected by Thermoelectric Magnetic Force under an Axial Static Magnetic Field. ISIJ International, 2019, 59, 60-68.	1.4	8
86	Preparation, mechanical, and leaching properties of CaZrO₃ ceramic cores. International Journal of Applied Ceramic Technology, 2021, 18, 1490-1497.	2.1	8
87	Magnetic anisotropy and spin disorder in textured MnBi crystals synthesized by a field-inducing approach at a high temperature. Journal of Applied Physics, 2008, 104, 043901.	2.5	7
88	Effect of a high axial magnetic field on the structure of directionally solidified Alâ€“Si alloys. Journal of Materials Research, 2015, 30, 1043-1055.	2.6	7
89	Effect of a high magnetic field on the morphology of the primary dendrite in directionally solidified Pb-25 at% Bi peritectic alloy. Materials Letters, 2015, 160, 366-370.	2.6	7
90	Preparation of porous Al2O3 ceramics with in situ formed C-nanowires derived form silicone resin. Materials Letters, 2018, 212, 271-274.	2.6	7

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91	Microsegregation Formation in Alâ€“Cu Alloy under Action of Steady Magnetic Field. ISIJ International, 2018, 58, 899-904.	1.4	7
92	Thermal and numerical simulation of mould electromagnetic stirring of GCr15 bearing steel. Materials Science and Technology, 2019, 35, 2173-2180.	1.6	7
93	Manganese Removal from Liquid Nickel by Hydrogen Plasma Arc Melting. Materials, 2019, 12, 33.	2.9	7
94	Fabrication and Properties of Porous Alumina-based Ceramic Core. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2012, 27, 239-244.	1.3	7
95	Effect of a Transverse Magnetic Field on Stray Grain Formation of Ni-Based Single Crystal Superalloy During Directional Solidification. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 3231-3236.	2.1	6
96	Microstructure evolution and room temperature fracture toughness of directionally solidified NiAlâ€“31Cr3Moâ€“0.2Si near-eutectic alloy at different withdrawal rates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 678, 243-251.	5.6	6
97	Interfacial microstructure and high-temperature strength in silicon nitride/nickel-based superalloy bonding. Journal of Adhesion Science and Technology, 2016, 30, 1430-1440.	2.6	6
98	Effect of a high magnetic field on the microstructure in directionally solidified two-phase Ni3Al alloys. Materials Letters, 2017, 189, 131-135.	2.6	6
99	Deep deoxidization from liquid iron by hydrogen plasma arc melting. International Journal of Hydrogen Energy, 2018, 43, 12153-12157.	7.1	6
100	Effect of Heat Treatment Combined with an Alternating Magnetic Field on Microstructure and Mechanical Properties of a Ni-Based Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 1837-1850.	2.2	6
101	Enhanced Dendrite Coarsening and Microsegregation in Alâ€“Cu Alloy under a Steady Magnetic Field. Materials Transactions, 2019, 60, 1921-1927.	1.2	6
102	Application of Heat Absorption Method to Improve Quality of Large Steel Ingot. ISIJ International, 2021, 61, 865-870.	1.4	6
103	Application of Synchrotron X-Ray Imaging and Diffraction in Additive Manufacturing: A Review. Acta Metallurgica Sinica (English Letters), 2022, 35, 25-48.	2.9	6
104	Application of heat absorption method to reduce macrosegregation during solidification of bearing steel ingot. Journal of Iron and Steel Research International, 2022, 29, 1915-1926.	2.8	6
105	Faceted growth of primary Al2Cu crystals during directional solidification in high magnetic field. Journal of Applied Physics, 2013, 114, .	2.5	5
106	Study on the liquid metal flow field in FC-mold of slab continuous casting. Advances in Manufacturing, 2015, 3, 212-220.	6.1	5
107	Effect of Î²-Si₃N₄ Initial Powder Size on Texture Development of Porous Si3N4 Ceramics Prepared by Gel-Casting in a Magnetic Field. Transactions of the Indian Ceramic Society, 2016, 75, 256-262.	1.0	5
108	Reduction in Microsegregation in Alâ€“Cu Alloy by Alternating Magnetic Field. Acta Metallurgica Sinica (English Letters), 2020, 33, 267-274.	2.9	5

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109	Magnetic field-assisted solvothermal synthesis and the magnetic properties of Fe-doped CeO2 nanoparticles. Journal of Asian Ceramic Societies, 2020, 8, 615-623.	2.3	5
110	Revealing the Diversity of Dendritic Morphology Evolution During Solidification of Magnesium Alloys using Synchrotron X-ray Imaging: A Review. Acta Metallurgica Sinica (English Letters), 2022, 35, 177-200.	2.9	5
111	Selective Laser Melting of Carbon-Free Mar-M509 Co-Based Superalloy: Microstructure, Micro-Cracks, and Mechanical Anisotropy. Acta Metallurgica Sinica (English Letters), 2022, 35, 501-516.	2.9	5
112	Effect of seed particles content on texture formation of Si3N4 ceramics by gel-casting in a strong magnetic field. Advances in Manufacturing, 2015, 3, 193-201.	6.1	4
113	Facile Synthesis of Elementâ€Substituted Hydroxyapatite Whiskers Using Î±â€Tricalcium Phosphate as Precursors. International Journal of Applied Ceramic Technology, 2015, 12, 1000-1007.	2.1	4
114	Modification of the Primary and Peritectic Phases in Directionally Solidified Cu-20 wt.% Sn Alloy by Magnetic Field. ISIJ International, 2018, 58, 505-514.	1.4	4
115	Effect of steady magnetic field on undercooling of Al-Cu alloy melts. Europhysics Letters, 2019, 126, 46001.	2.0	4
116	Microstructure and mechanical characterization of Si₃N₄/nickel-based superalloy joints with Ti/Au/Ni interlayers. Journal of Adhesion Science and Technology, 2019, 33, 1858-1869.	2.6	4
117	Enhanced Degradation in Grain Refinement of Inoculated 2024 Al Alloy in Steady Magnetic field. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 4584-4591.	2.2	4
118	Precipitation Behavior of Nitride Inclusions in K418 Alloy under the Continuous Unidirectional Solidification Process. ISIJ International, 2021, 61, 229-238.	1.4	4
119	High magnetic field induction of the formation of twinned dendrites during directional solidification of Alâ€“4.5wt%Cu alloy. Philosophical Magazine Letters, 2014, 94, 118-126.	1.2	3
120	A Method of Stray Grain Suppression for Single-Crystal Superalloy During Seed Melt-Back. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5691-5697.	2.2	3
121	Preferred Orientation of Porous Si₃N₄ Ceramics by Gelâ€Casting in a Longitudinal Rotating Magnetic Field. Crystal Research and Technology, 2018, 53, 1700147.	1.3	3
122	Effect of a High Magnetic Field on Î³â€² Phase for Ni-Based Single Crystal Superalloy During Directional Solidification. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 1919-1924.	2.1	3
123	Cell-to-Dendrite Transition Induced by a Static Transverse Magnetic Field During Lasering Remelting of the Nickel-Based Superalloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 3211-3219.	2.1	3
124	Effect of Thermoelectric Magnetic Convection on Shrinkage Porosity at the Final Stage of Solidification of GCr18Mo Steel Under Axial Static Magnetic Field. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 881-889.	2.1	3
125	Magnetic fieldâ€“dependent microstructure evolution and magnetic property of Feâ€“6.5 Siâ€“0.05 B alloy during solidification. Journal of Materials Research, 2019, 34, 4076-4084.	2.6	3
126	Magnetic-Field-Induced Liquidâ€“Solid Interface Transformation and Its Effect on Microsegregation in Directionally Solidified Ni-Cr Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 4592-4601.	2.2	3

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127	Microstructural Evolution and Solute Migration in the Mushy Zone of Peritectic Al-18 At. Pct Ni Alloy in High Magnetic Fields. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 726-740.	2.2	3
128	Effect of distribution of magnetic flux density on purifying liquid metal by travelling magnetic field. Journal of Shanghai University, 1999, 3, 157-161.	0.1	2
129	Solidification structures of Bi-Mn alloys under a high magnetic field. Journal of Shanghai University, 2006, 10, 74-77.	0.1	2
130	Progress in Research on Solidification in a Strong Static Magnetic Field. Steel Research International, 2007, 78, 373-378.	1.8	2
131	Formation Mechanism of Stray Grain of Nickel-Based Single-Crystal Superalloy Under a High Magnetic Field During Directional Solidification. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 27-31.	2.1	2
132	Influences of mullite fibers on mechanical and thermal properties of silicaâ€based ceramic cores. International Journal of Applied Ceramic Technology, 2021, 18, 2284-2292.	2.1	2
133	Evolution mechanism of recrystallization in a nickel-based single crystal superalloy under various cooling rates during heat treatment. China Foundry, 2022, 19, 27.	1.4	2
134	Effect of Spheroidizing Annealing in Combination with Alternating Magnetic Field on Microstructure and Mechanical Properties of GCr15 Bearing Steel. ISIJ International, 2022, 62, 1275-1282.	1.4	2
135	Theoretical model for particle behavior at solidifying front in electromagnetic force field. Journal of Shanghai University, 2000, 4, 246-249.	0.1	1
136	Study on meniscus temperature fluctuation during mold oscillation in continuous casting by modeling experiments. Journal of Shanghai University, 2002, 6, 236-239.	0.1	1
137	High-magnetic-field-induced formation of aligned equiaxed grains during directional solidification. Philosophical Magazine Letters, 2015, 95, 425-432.	1.2	1
138	Synthesis of cerium oxalate hydrate by precipitation technique under external magnetic field. Rare Metals, 2017, , 1.	7.1	1
139	The Effect of Static Magnetic Field on the Channel Formation during Directional Solidification of Aqueous Ammonium Chloride Solution. Crystal Research and Technology, 2018, 53, 1800113.	1.3	1
140	Effect of sintering aids on microstructure and properties of textured SiC ceramics prepared in 6 T. Journal of Asian Ceramic Societies, 2021, 9, 85-95.	2.3	1
141	Molecular Dynamics Simulations of the Thermally and Stress-Activated Glide of a âŸ¨0001âŸ©{11Ì…00} Screw Dislocation in AlN. Crystal Growth and Design, 0, , .	3.0	1
142	The influence of a magnet field on sulfur removal from liquid iron by hydrogen plasma arc melting. Modern Physics Letters B, 2021, 35, .	1.9	1
143	Glide Mobility of a-Type Edge Dislocations in Aluminum Nitride by Molecular Dynamics Simulation. ACS Omega, 2022, 7, 2015-2022.	3.5	1
144	Improvement of the structure and the electromagnetic characteristics of an induction ladle furnace. Journal of Shanghai University, 1999, 3, 153-156.	0.1	0

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145	STRUCTURE AND MAGNETIC PROPERTIES OF NANOCRYSTALLINE MnZn FERRITES BY A PHASE TRANSFORMATION METHOD. International Journal of Modern Physics B, 2008, 22, 3433-3438.	2.0	0
146	Development and application of an apparatus for high-temperature measurement of magnetic susceptibility. Review of Scientific Instruments, 2015, 86, 065105.	1.3	0
147	Fabrication of Co-based composites with in-situ formed ceramic grains by preceramic polymer technology assisted of SPS. Composites Communications, 2018, 10, 217-220.	6.3	0
148	Effects of ZrB₂ addition on texture development and properties of porous Si₃N₄-ZrB₂ composites by magnetic field alignment. Journal of Asian Ceramic Societies, 2019, 7, 368-376.	2.3	0
149	Effect of TiB 2 addition on grain orientation of porous Si 3 N 4 â€‘TiB 2 composites by magnetic field alignment technology. International Journal of Applied Ceramic Technology, 2019, 16, 1381-1389.	2.1	0
150	Preparation of Al2O3 Ceramic Cores by Dry-Pressing Assisted of Precursor-Derived Ceramic Technology. Springer Proceedings in Physics, 2019, , 1-8.	0.2	0
151	Effects of axial static magnetic field on columnar to equiaxed transition in directionally solidified low carbon steel. Ironmaking and Steelmaking, 2020, 47, 398-404.	2.1	0
152	Evolution Mechanism of Microporosity of Nickel-Based Single-Crystal Superalloy During Solution Heat Treatment Under an Alternating Magnetic Field. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 30-35.	2.1	0
153	Refining Mechanism of Pure Aluminum under Local Electromagnetic Vibration. ISIJ International, 2009, 49, 1150-1155.	1.4	0
154	Influence of Compaction Pressure on the Properties of Silica Ceramic Cores. , 2018, , 515-521.		0