

# Zhong-Ming Ren

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4285889/publications.pdf>

Version: 2024-02-01

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	Revealing the Diversity of Dendritic Morphology Evolution During Solidification of Magnesium Alloys using Synchrotron X-ray Imaging: A Review. <i>Acta Metallurgica Sinica (English Letters)</i> , 2022, 35, 177-200.	2.9	5
2	Application of Synchrotron X-Ray Imaging and Diffraction in Additive Manufacturing: A Review. <i>Acta Metallurgica Sinica (English Letters)</i> , 2022, 35, 25-48.	2.9	6
3	Microstructure and mechanical properties of directionally solidified Al-rich Ni <sub>3</sub> Al-based alloy under static magnetic field. <i>Journal of Materials Science and Technology</i> , 2022, 110, 117-127.	10.7	9
4	Selective Laser Melting of Carbon-Free Mar-M509 Co-Based Superalloy: Microstructure, Micro-Cracks, and Mechanical Anisotropy. <i>Acta Metallurgica Sinica (English Letters)</i> , 2022, 35, 501-516.	2.9	5
5	Strong Magnetic-Field-Engineered Porous Template for Fabricating Hierarchical Porous Ni-Co-Zn-P Nanoplate Arrays as Battery-Type Electrodes of Advanced All-Solid-State Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 2782-2793.	8.0	21
6	Evolution mechanism of recrystallization in a nickel-based single crystal superalloy under various cooling rates during heat treatment. <i>China Foundry</i> , 2022, 19, 27.	1.4	2
7	Magnetic properties and promising magnetocaloric performances in the antiferromagnetic GdFe <sub>2</sub> Si <sub>2</sub> compound. <i>Science China Materials</i> , 2022, 65, 1345-1352.	6.3	116
8	Application of heat absorption method to reduce macrosegregation during solidification of bearing steel ingot. <i>Journal of Iron and Steel Research International</i> , 2022, 29, 1915-1926.	2.8	6
9	Glide Mobility of a-Type Edge Dislocations in Aluminum Nitride by Molecular Dynamics Simulation. <i>ACS Omega</i> , 2022, 7, 2015-2022.	3.5	1
10	Enhanced mechanical properties of Ti <sub>6</sub> Al <sub>4</sub> V alloy fabricated by laser additive manufacturing under static magnetic field. <i>Materials Research Letters</i> , 2022, 10, 530-538.	8.7	31
11	Effect of Spheroidizing Annealing in Combination with Alternating Magnetic Field on Microstructure and Mechanical Properties of GCr15 Bearing Steel. <i>ISIJ International</i> , 2022, 62, 1275-1282.	1.4	2
12	Nondestructive effect of the cusp magnetic field on the dendritic microstructure during the directional solidification of Nickel-based single crystal superalloy. <i>Journal of Materials Science and Technology</i> , 2021, 62, 52-59.	10.7	14
13	Effect of sintering aids on microstructure and properties of textured SiC ceramics prepared in 6 T. <i>Journal of Asian Ceramic Societies</i> , 2021, 9, 85-95.	2.3	1
14	Evolution Mechanism of Microporosity of Nickel-Based Single-Crystal Superalloy During Solution Heat Treatment Under an Alternating Magnetic Field. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2021, 52, 30-35.	2.1	0
15	Precipitation Behavior of Nitride Inclusions in K418 Alloy under the Continuous Unidirectional Solidification Process. <i>ISIJ International</i> , 2021, 61, 229-238.	1.4	4
16	Microstructural Evolution and Solute Migration in the Mushy Zone of Peritectic Al-18 At. Pct Ni Alloy in High Magnetic Fields. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 726-740.	2.2	3
17	Preparation, mechanical, and leaching properties of CaZrO <sub>3</sub> ceramic cores. <i>International Journal of Applied Ceramic Technology</i> , 2021, 18, 1490-1497.	2.1	8
18	Application of Heat Absorption Method to Improve Quality of Large Steel Ingot. <i>ISIJ International</i> , 2021, 61, 865-870.	1.4	6

#	ARTICLE	IF	CITATIONS
19	Influences of mullite fibers on mechanical and thermal properties of silica-based ceramic cores. International Journal of Applied Ceramic Technology, 2021, 18, 2284-2292.	2.1	2
20	First- and second-order phase transitions in RE <sub>6</sub> Co <sub>2</sub> Ga (RE = Ho, Dy or Gd) cryogenic magnetocaloric materials. Science China Materials, 2021, 64, 2846-2857.	6.3	62
21	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
22	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
23	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
24	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
25	Reduction in Microsegregation in Al-Cu Alloy by Alternating Magnetic Field. Acta Metallurgica Sinica (English Letters), 2020, 33, 267-274.	2.9	5
26	Electrocatalytic Oxidation and Sensitive Determination of Paracetamol Based on Nanosheets Self-assembled Lindgrenite Microflowers. Electroanalysis, 2020, 32, 978-985.	2.9	12
27	Influence of yttrium oxide addition and sintering temperature on properties of alumina-based ceramic cores. International Journal of Applied Ceramic Technology, 2020, 17, 685-694.	2.1	11
28	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
29	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
30	Magnetic field-assisted solvothermal synthesis and the magnetic properties of Fe-doped CeO <sub>2</sub> nanoparticles. Journal of Asian Ceramic Societies, 2020, 8, 615-623.	2.3	5
31	Magnetic-Field-Induced Liquid-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
32	Magnetic properties, magnetocaloric effect and refrigeration performance in RE <sub>60</sub> Al <sub>20</sub> Ni <sub>20</sub> (RE = Tm, Er and Ho) amorphous ribbons. Journal of Applied Physics, 2020, 127, .	2.5	12
33	Effects of ZrB <sub>2</sub> addition on texture development and properties of porous Si <sub>3</sub> N <sub>4</sub> -ZrB <sub>2</sub> composites by magnetic field alignment. Journal of Asian Ceramic Societies, 2019, 7, 368-376.	2.3	0
34	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
35	Effect of steady magnetic field on undercooling of Al-Cu alloy melts. Europhysics Letters, 2019, 126, 46001.	2.0	4
36	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

#	ARTICLE	IF	CITATIONS
37	Steel/Slag Interface Behavior under Multifunction Electromagnetic Driving in a Continuous Casting Slab Mold. <i>Metals</i> , 2019, 9, 983.	2.3	12
38	Evolutions of the Micro- and Macrostructure and Tensile Property of Cu-15Ni-8Sn Alloy During Electromagnetic Stirring-Assisted Horizontal Continuous Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 2111-2120.	2.1	11
39	Study on the modification of inclusions by Ca treatment in GCr18Mo bearing steel. <i>Advances in Manufacturing</i> , 2019, 7, 438-447.	6.1	17
40	Thermal and numerical simulation of mould electromagnetic stirring of GCr15 bearing steel. <i>Materials Science and Technology</i> , 2019, 35, 2173-2180.	1.6	7
41	Effect of Thermoelectric Magnetic Convection on Shrinkage Porosity at the Final Stage of Solidification of GCr18Mo Steel Under Axial Static Magnetic Field. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 881-889.	2.1	3
42	Enhanced strength-ductility synergy in ultrafine-grained eutectic high-entropy alloys by inheriting microstructural lamellae. <i>Nature Communications</i> , 2019, 10, 489.	12.8	505
43	Effect of TiB <sub>2</sub> addition on grain orientation of porous Si <sub>3</sub> N <sub>4</sub> /TiB <sub>2</sub> composites by magnetic field alignment technology. <i>International Journal of Applied Ceramic Technology</i> , 2019, 16, 1381-1389.	2.1	0
44	Solute trapping in Al-Cu alloys caused by a 29 Tesla super high static magnetic field. <i>Scientific Reports</i> , 2019, 9, 266.	3.3	11
45	Microstructure and mechanical characterization of Si <sub>3</sub> N <sub>4</sub> /nickel-based superalloy joints with Ti/Au/Ni interlayers. <i>Journal of Adhesion Science and Technology</i> , 2019, 33, 1858-1869.	2.6	4
46	Evolution of microsegregation in directionally solidified Al-Cu alloys under steady magnetic field. <i>Journal of Alloys and Compounds</i> , 2019, 800, 41-49.	5.5	16
47	Strengthened Peening Effect on Metallurgical Bonding Formation in Cold Spray Additive Manufacturing. <i>Journal of Thermal Spray Technology</i> , 2019, 28, 769-779.	3.1	32
48	Effect of Heat Treatment Combined with an Alternating Magnetic Field on Microstructure and Mechanical Properties of a Ni-Based Superalloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 1837-1850.	2.2	6
49	Preparation of Al <sub>2</sub> O <sub>3</sub> Ceramic Cores by Dry-Pressing Assisted of Precursor-Derived Ceramic Technology. <i>Springer Proceedings in Physics</i> , 2019, , 1-8.	0.2	0
50	Enhanced Dendrite Coarsening and Microsegregation in Al-Cu Alloy under a Steady Magnetic Field. <i>Materials Transactions</i> , 2019, 60, 1921-1927.	1.2	6
51	Magnetic field-dependent microstructure evolution and magnetic property of Fe-6.5 Si-0.05 B alloy during solidification. <i>Journal of Materials Research</i> , 2019, 34, 4076-4084.	2.6	3
52	Columnar to Equiaxed Transition during Directionally Solidifying GCr18Mo Steel Affected by Thermoelectric Magnetic Force under an Axial Static Magnetic Field. <i>ISIJ International</i> , 2019, 59, 60-68.	1.4	8
53	Formation Mechanism of Stray Grain of Nickel-Based Single-Crystal Superalloy Under a High Magnetic Field During Directional Solidification. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 27-31.	2.1	2
54	Manganese Removal from Liquid Nickel by Hydrogen Plasma Arc Melting. <i>Materials</i> , 2019, 12, 33.	2.9	7

#	ARTICLE	IF	CITATIONS
55	Preparation of silica ceramic cores by the preceramic pyrolysis technology using silicone resin as precursor and binder. <i>Materials Chemistry and Physics</i> , 2019, 223, 676-682.	4.0	11
56	Grain Refinement During Directionally Solidifying GCr18Mo Steel at Low Pulling Speeds Under an Axial Static Magnetic Field. <i>Acta Metallurgica Sinica (English Letters)</i> , 2018, 31, 681-691.	2.9	15
57	Effects of directional solidification parameters and crystal selector on microstructure of single crystal of Ni-base superalloys. <i>Journal of Central South University</i> , 2018, 25, 1-8.	3.0	8
58	Improvement in creep life of a nickel-based single-crystal superalloy via composition homogeneity on the multiscales by magnetic-field-assisted directional solidification. <i>Scientific Reports</i> , 2018, 8, 1452.	3.3	13
59	Preparation of c-axis textured TiB <sub>2</sub> ceramics by a strong magnetic field of 6â€T assisted slip-casting process. <i>Materials Letters</i> , 2018, 217, 96-99.	2.6	11
60	Fabrication of porous Al <sub>2</sub> O <sub>3</sub> -based ceramics using ball-shaped powders by preceramic polymer process in N <sub>2</sub> atmosphere. <i>Ceramics International</i> , 2018, 44, 5915-5920.	4.8	8
61	Preferred Orientation of Porous Si <sub>3</sub> N <sub>4</sub> Ceramics by Gelâ€Casting in a Longitudinal Rotating Magnetic Field. <i>Crystal Research and Technology</i> , 2018, 53, 1700147.	1.3	3
62	Structure, glass-forming ability, magnetic and cryogenic magneto-caloric properties in the amorphous Ni <sub>30</sub> Co <sub>10</sub> RE <sub>60</sub> (REâ€‰=â€‰Ho and Tm) ribbons. <i>Journal of Materials Science</i> , 2018, 53, 9816-9822.	3.7	27
63	Effect of high static magnetic field on the microstructure and mechanical properties of directionally solidified alloy 2024. <i>Journal of Alloys and Compounds</i> , 2018, 749, 978-989.	5.5	17
64	The mechanism of inclusion removal from molten steel by dissolved gas flotation. <i>Ironmaking and Steelmaking</i> , 2018, 45, 648-654.	2.1	14
65	Preparation of porous Al <sub>2</sub> O <sub>3</sub> ceramics with in situ formed C-nanowires derived from silicone resin. <i>Materials Letters</i> , 2018, 212, 271-274.	2.6	7
66	Fabrication of Co-based composites with in-situ formed ceramic grains by preceramic polymer technology assisted of SPS. <i>Composites Communications</i> , 2018, 10, 217-220.	6.3	0
67	Reduced Wettability of Solids by a Liquid Gaâ€Inâ€Sn Alloy in a Steady Magnetic Field. <i>Journal of Physical Chemistry C</i> , 2018, 122, 27451-27455.	3.1	13
68	Mechanism of Desulfurization from Liquid Iron by Hydrogen Plasma Arc Melting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 2951-2955.	2.1	10
69	Microsegregation Formation in Alâ€Cu Alloy under Action of Steady Magnetic Field. <i>ISIJ International</i> , 2018, 58, 899-904.	1.4	7
70	Effect of a High Magnetic Field on Î³â€Phase for Ni-Based Single Crystal Superalloy During Directional Solidification. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 1919-1924.	2.1	3
71	Modification of the Primary and Peritectic Phases in Directionally Solidified Cu-20 wt.% Sn Alloy by Magnetic Field. <i>ISIJ International</i> , 2018, 58, 505-514.	1.4	4
72	Deep deoxidization from liquid iron by hydrogen plasma arc melting. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 12153-12157.	7.1	6

#	ARTICLE	IF	CITATIONS
73	Enhanced undercooling of para- and diamagnetic metal melts in steady magnetic field. Japanese Journal of Applied Physics, 2018, 57, 080301.	1.5	8
74	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
75	Cell-to-Dendrite Transition Induced by a Static Transverse Magnetic Field During Laser Remelting of the Nickel-Based Superalloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 3211-3219.	2.1	3
76	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
77	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
78	Influence of Compaction Pressure on the Properties of Silica Ceramic Cores. , 2018, , 515-521.		0
79	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
80	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
81	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
82	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
83	Enhanced diffusivity in Ni-Al system by alternating magnetic field. Applied Physics Letters, 2017, 110, .	3.3	13
84	Measurement of contact angles at room temperature in high magnetic field. Review of Scientific Instruments, 2017, 88, 115110.	1.3	9
85	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
86	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
87	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
88	Alternating-magnetic-field induced enhancement of diffusivity in Ni-Cr alloys. Scientific Reports, 2017, 7, 18085.	3.3	15
89	Synthesis of cerium oxalate hydrate by precipitation technique under external magnetic field. Rare Metals, 2017, , 1.	7.1	1
90	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

#	ARTICLE	IF	CITATIONS
91	Experimental and Numerical Investigations of the Multi-scale Thermo-electromagnetic Convection on the Microstructure during Directionally Solidified Sn-5wt%Pb Alloys. ISIJ International, 2017, 57, 833-840.	1.4	9
92	Effect of $\text{Si}_3\text{N}_4$ Initial Powder Size on Texture Development of Porous $\text{Si}_3\text{N}_4$ Ceramics Prepared by Gel-Casting in a Magnetic Field. Transactions of the Indian Ceramic Society, 2016, 75, 256-262.	1.0	5
93	Excellent magnetocaloric properties in $\text{RE}_2\text{Cu}_2\text{Cd}$ ( $\text{RE} = \text{Dy}$ and $\text{Tm}$ ) compounds and its composite materials. Scientific Reports, 2016, 6, 34192.	3.3	65
94	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
95	Effect of a weak transverse magnetic field on the microstructure in directionally solidified peritectic alloys. Scientific Reports, 2016, 6, 37872.	3.3	8
96	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
97	Interfacial microstructure of partial transient liquid phase bonding of $\text{Si}_3\text{N}_4$ to nickel-base superalloy using Ti/Au/Ni interlayers. Vacuum, 2016, 130, 105-108.	3.5	18
98	Microstructure evolution and room temperature fracture toughness of directionally solidified $\text{Ni}_{31}\text{Cr}_3\text{Mo}_{0.2}\text{Si}$ near-eutectic alloy at different withdrawal rates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 678, 243-251.	5.6	6
99	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
100	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
101	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
102	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
103	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
104	Study on the liquid metal flow field in FC-mold of slab continuous casting. Advances in Manufacturing, 2015, 3, 212-220.	6.1	5
105	Development and application of an apparatus for high-temperature measurement of magnetic susceptibility. Review of Scientific Instruments, 2015, 86, 065105.	1.3	0
106	Effect of seed particles content on texture formation of $\text{Si}_3\text{N}_4$ ceramics by gel-casting in a strong magnetic field. Advances in Manufacturing, 2015, 3, 193-201.	6.1	4
107	Facile Synthesis of Element-Substituted Hydroxyapatite Whiskers Using $\text{Ca}$ -Tricalcium Phosphate as Precursors. International Journal of Applied Ceramic Technology, 2015, 12, 1000-1007.	2.1	4
108	Preparation of textured porous $\text{Al}_2\text{O}_3$ ceramics by slip casting in a strong magnetic field and its mechanical properties. Crystal Research and Technology, 2015, 50, 645-653.	1.3	27

#	ARTICLE	IF	CITATIONS
109	High-magnetic-field-induced formation of aligned equiaxed grains during directional solidification. Philosophical Magazine Letters, 2015, 95, 425-432.	1.2	1
110	Magnetic-field dependence of nucleation undercoolings in non-magnetic metallic melts. Philosophical Magazine Letters, 2015, 95, 37-43.	1.2	16
111	Effect of a high axial magnetic field on the structure of directionally solidified Al-Si alloys. Journal of Materials Research, 2015, 30, 1043-1055.	2.6	7
112	Reaction diffusion in Ni-Al diffusion couples in steady magnetic fields. Journal of Alloys and Compounds, 2015, 641, 7-13.	5.5	34
113	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
114	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
115	High magnetic field induction of the formation of twinned dendrites during directional solidification of Al-4.5wt%Cu alloy. Philosophical Magazine Letters, 2014, 94, 118-126.	1.2	3
116	Microstructure and mechanical properties of partial transient liquid phase bonded Si <sub>3</sub> N <sub>4</sub> /DZ483 superalloy joints. Materials Letters, 2014, 121, 223-226.	2.6	18
117	Fabrication of textured Si <sub>3</sub> N <sub>4</sub> ceramics with $\beta$ -Si <sub>3</sub> N <sub>4</sub> powders as raw material by gel-casting under strong magnetic field. Materials Letters, 2014, 135, 218-221.	2.6	17
118	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
119	Surface tensions of non-polar liquids in high magnetic fields. Journal of Molecular Liquids, 2013, 181, 51-54.	4.9	13
120	Effect of high magnetic field on diffusion behavior of aluminum in Ni-Al alloy. Materials Letters, 2013, 108, 340-342.	2.6	24
121	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
122	Faceted growth of primary Al <sub>2</sub> Cu crystals during directional solidification in high magnetic field. Journal of Applied Physics, 2013, 114, .	2.5	5
123	Modification of liquid/solid interface shape in directionally solidifying Al-Cu alloys by a transverse magnetic field. Journal of Materials Science, 2013, 48, 213-219.	3.7	27
124	Effect of strong magnetic field on solid solubility and microsegregation during directional solidification of Al-Cu alloy. Journal of Materials Research, 2013, 28, 2810-2818.	2.6	10
125	Effect of thermoelectric magnetic force on the array of dendrites during directional solidification of Al-Cu alloys in a high magnetic field. Philosophical Magazine Letters, 2012, 92, 675-682.	1.2	9
126	Application of ring method to measure surface tensions of liquids in high magnetic field. Review of Scientific Instruments, 2012, 83, 043906.	1.3	15



#	ARTICLE	IF	CITATIONS
127	Dendrite fragmentation and columnar-to-equiaxed transition during directional solidification at lower growth speed under a strong magnetic field. <i>Acta Materialia</i> , 2012, 60, 3321-3332.	7.9	82
128	Fabrication and Properties of Porous Alumina-based Ceramic Core. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2012, 27, 239-244.	1.3	7
129	Effects of Thermoelectric Magnetic Convection on the Solidification Structure During Directional Solidification under Lower Transverse Magnetic Field. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011, 42, 3459-3471.	2.2	16
130	Structure and magnetic properties of MnZn nanoferrites synthesized under a high magnetic field. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	19
131	Columnar-to-equiaxed transitions in Al-based alloys during directional solidification under a high magnetic field. <i>Journal of Crystal Growth</i> , 2010, 312, 267-272.	1.5	40
132	Application of differential thermal analysis to investigation of magnetic field effect on solidification of Al-Cu hypereutectic alloy. <i>Journal of Alloys and Compounds</i> , 2010, 505, 108-112.	5.5	26
133	Effect of a high magnetic field on the morphological instability and irregularity of the interface of a binary alloy during directional solidification. <i>Acta Materialia</i> , 2009, 57, 1689-1701.	7.9	32
134	Investigation of thermoelectric magnetic convection and its effect on solidification structure during directional solidification under a low axial magnetic field. <i>Acta Materialia</i> , 2009, 57, 2180-2197.	7.9	90
135	Synthesis and room-temperature ferromagnetic properties of single-crystalline Co-doped SnO <sub>2</sub> nanocrystals via a high magnetic field. <i>Journal of Alloys and Compounds</i> , 2009, 481, 837-840.	5.5	24
136	Effect of high magnetic field on the primary dendrite arm spacing and segregation of directionally solidified superalloy DZ417G. <i>Journal of Alloys and Compounds</i> , 2009, 487, 612-617.	5.5	42
137	Refining Mechanism of Pure Aluminum under Local Electromagnetic Vibration. <i>ISIJ International</i> , 2009, 49, 1150-1155.	1.4	0
138	Magnetic-field-assisted solvothermal growth of single-crystalline bismuth nanowires. <i>Nanotechnology</i> , 2008, 19, 115602.	2.6	48
139	STRUCTURE AND MAGNETIC PROPERTIES OF NANOCRYSTALLINE $MnZn$ FERRITES BY A PHASE TRANSFORMATION METHOD. <i>International Journal of Modern Physics B</i> , 2008, 22, 3433-3438.	2.0	0
140	Structural, optical, and magnetic properties of Fe-doped In <sub>2</sub> O <sub>3</sub> nanocubes. <i>Journal of Materials Research</i> , 2008, 23, 2597-2601.	2.6	9
141	Effects of a high-gradient magnetic field on the migratory behavior of primary crystal silicon in hypereutectic Al-Si alloy. <i>Science and Technology of Advanced Materials</i> , 2008, 9, 024202.	6.1	25
142	Magnetic anisotropy and spin disorder in textured MnBi crystals synthesized by a field-inducing approach at a high temperature. <i>Journal of Applied Physics</i> , 2008, 104, 043901.	2.5	7
143	Tuning the crystal structure and magnetic properties of Fe doped In <sub>2</sub> O <sub>3</sub> nanocrystals. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	31
144	Progress in Research on Solidification in a Strong Static Magnetic Field. <i>Steel Research International</i> , 2007, 78, 373-378.	1.8	2

#	ARTICLE	IF	CITATIONS
145	Influence of an axial high magnetic field on the liquidâ€“solid transformation in Alâ€“Cu hypoeutectic alloys and on the microstructure of the solid. <i>Acta Materialia</i> , 2007, 55, 1377-1386.	7.9	63
146	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. <i>Acta Materialia</i> , 2007, 55, 3803-3813.	7.9	148
147	Influence of a high magnetic field on columnar dendrite growth during directional solidification. <i>Acta Materialia</i> , 2007, 55, 5333-5347.	7.9	36
148	Solidification structures of Bi-Mn alloys under a high magnetic field. <i>Journal of Shanghai University</i> , 2006, 10, 74-77.	0.1	2
149	Microstructure, crystallization, and magnetization behaviors in MnBiâˆ“B composites aligned by applied magnetic field. <i>Physical Review B</i> , 2005, 72, .	3.2	35
150	Study on meniscus temperature fluctuation during mold oscillation in continuous casting by modeling experiments. <i>Journal of Shanghai University</i> , 2002, 6, 236-239.	0.1	1
151	Theoretical model for particle behavior at solidifying front in electromagnetic force field. <i>Journal of Shanghai University</i> , 2000, 4, 246-249.	0.1	1
152	Improvement of the structure and the electromagnetic characteristics of an induction ladle furnace. <i>Journal of Shanghai University</i> , 1999, 3, 153-156.	0.1	0
153	Effect of distribution of magnetic flux density on purifying liquid metal by travelling magnetic field. <i>Journal of Shanghai University</i> , 1999, 3, 157-161.	0.1	2
154	Molecular Dynamics Simulations of the Thermally and Stress-Activated Glide of a $\{11\bar{1}0\}$ Screw Dislocation in AlN. <i>Crystal Growth and Design</i> , 0, , .	3.0	1