## **Zhongming Ren**

# List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/10211782/zhongming-ren-publications-by-year.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

280
papers

3,827
citations

47
g-index

284
ext. papers

4,959
ext. citations

31
h-index

5.86
L-index

#	Paper	IF	Citations
280	Magnetic properties and giant cryogenic magnetocaloric effect in B-site ordered antiferromagnetic Gd2MgTiO6 double perovskite oxide. <i>Acta Materialia</i> , <b>2022</b> , 226, 117669	8.4	15
279	4D synchrotron X-ray tomographic study of the influence of transverse magnetic field on iron intermetallic compounds precipitation behavior during solidification of AlBiEe alloy. <i>Intermetallics</i> , 2022, 143, 107471	3.5	2
278	Controlled moderative sulfidation-fabricated hierarchical heterogeneous nickel sulfides-based electrocatalyst with tripartite Mo doping for efficient oxygen evolution. <i>Journal of Energy Chemistry</i> , <b>2022</b> , 68, 780-788	12	O
277	Effects of laser scanning speed and building direction on the microstructure and mechanical properties of selective laser melted Inconel 718 superalloy. <i>Materials Today Communications</i> , <b>2022</b> , 30, 103095	2.5	0
276	Electrodeposition-derived defect-rich heterogeneous trimetallic sulfide/hydroxide nanotubes/nanobelts for efficient electrocatalytic oxygen production. <i>Chemical Engineering Journal</i> , 2022, 430, 133073	14.7	1
275	Achievement of giant cryogenic refrigerant capacity in quinary rare-earths based high-entropy amorphous alloy. <i>Journal of Materials Science and Technology</i> , <b>2022</b> , 102, 66-71	9.1	26
274	Magnetic properties and promising magnetocaloric performances in the antiferromagnetic GdFe2Si2 compound. <i>Science China Materials</i> , <b>2022</b> , 65, 1345-1352	7.1	11
273	Microstructure evolution and mechanical properties of laser additive manufactured Ti6Al4V alloy under nitrogen-argon reactive atmosphere. <i>Materials Science &amp; Discourse amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2022</b> , 841, 143076	5.3	1
272	Glide Mobility of a-Type Edge Dislocations in Aluminum Nitride by Molecular Dynamics Simulation <i>ACS Omega</i> , <b>2022</b> , 7, 2015-2022	3.9	
271	Enhanced mechanical properties of Ti6Al4V alloy fabricated by laser additive manufacturing under static magnetic field. <i>Materials Research Letters</i> , <b>2022</b> , 10, 530-538	7.4	7
270	Effect of a constant laser energy density on the evolution of microstructure and mechanical properties of NiTi shape memory alloy fabricated by laser powder bed fusion. <i>Optics and Laser Technology</i> , <b>2022</b> , 152, 108182	4.2	O
269	Strength-ductility synergy of CoCrNi medium-entropy alloy processed with laser powder bed fusion. <i>Materials and Design</i> , <b>2022</b> , 219, 110774	8.1	1
268	Glass forming ability, magnetic properties and cryogenic magnetocaloric effects in RE60Co20Al20 (RE = Ho, Er, Tm) amorphous ribbons. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 895, 162633	5.7	1
267	Effects of Static Magnetic Field on the Microstructure of Selective Laser Melted Inconel 625 Superalloy: Numerical and Experiment Investigations. <i>Metals</i> , <b>2021</b> , 11, 1846	2.3	2
266	Microstructure and mechanical properties of directionally solidified Al-rich Ni3Al-based alloy under static magnetic field. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 110, 117-117	9.1	2
265	Application of Heat Absorption Method to Improve Quality of Large Steel Ingot. <i>ISIJ International</i> , <b>2021</b> , 61, 865-870	1.7	1
264	Numerical Simulation of In-mold Electromagnetic Stirring on Slide Gate Caused Bias Flow and Solidification in Slab Continuous Casting. <i>ISIJ International</i> , <b>2021</b> , 61, 1860-1871	1.7	1

### (2021-2021)

263	Microstructure evolution and mechanical behavior of Ni-rich Ni-Mn-Ga alloys under compressive and tensile stresses. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 97, 113-113	9.1	2	
262	Cryogenic magnetic properties and magnetocaloric effects (MCE) in B-site disordered RE2CuMnO6 (RE = Gd, Dy, Ho and Er) double perovskites (DP) compounds. <i>Ceramics International</i> , <b>2021</b> , 47, 18205-	18272	10	
261	Effect of substrate cooling on the epitaxial growth of Ni-based single-crystal superalloy fabricated by direct energy deposition. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 62, 148-161	9.1	11	
260	Effect of Iphase on mechanical behavior and detwinning evolution of directionally solidified Ni-Mn-Ga alloys under uniaxial compression. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 66, 91-	96 <sup>9.1</sup>	4	
259	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> , <b>2021</b> , 62, 52-59	9.1	3	
258	Nucleation kinetics of paramagnetic and diamagnetic metal melts under a high magnetic field. Journal of Materials Science and Technology, <b>2021</b> , 73, 165-170	9.1	1	
257	Structure, magnetic properties and cryogenic magneto-caloric effect (MCE) in RE2FeAlO6 (RE = Gd, Dy, Ho) oxides. <i>Ceramics International</i> , <b>2021</b> , 47, 6290-6297	5.1	56	
256	Effect of sintering aids on microstructure and properties of textured SiC ceramics prepared in 6 T. <i>Journal of Asian Ceramic Societies</i> , <b>2021</b> , 9, 85-95	2.4	Ο	
255	Cold spray additive manufacturing of Invar 36 alloy: microstructure, thermal expansion and mechanical properties. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 72, 39-51	9.1	9	
254	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> , <b>2021</b> , 52, 30-35	2.5		
253	Precipitation Behavior of Nitride Inclusions in K418 Alloy under the Continuous Unidirectional Solidification Process. <i>ISIJ International</i> , <b>2021</b> , 61, 229-238	1.7	2	
252	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</i> <i>Materials Science</i> , <b>2021</b> , 52, 726-740	2.3	O	
251	Preparation, mechanical, and leaching properties of CaZrO3 ceramic cores. <i>International Journal of Applied Ceramic Technology</i> , <b>2021</b> , 18, 1490-1497	2	1	
250	Influences of mullite fibers on mechanical and thermal properties of silica-based ceramic cores. <i>International Journal of Applied Ceramic Technology</i> , <b>2021</b> , 18, 2284	2		
249	First- and second-order phase transitions in RE6Co2Ga (RE = Ho, Dy or Gd) cryogenic magnetocaloric materials. <i>Science China Materials</i> , <b>2021</b> , 64, 2846-2857	7.1	25	
248	Al matrix composites fabricated by solid-state cold spray deposition: A critical review. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 86, 20-55	9.1	15	
247	Mechanism of improved intermediate temperature plasticity of nickel-base single crystal superalloy with hot isostatic pressing. <i>Journal of Materials Research and Technology</i> , <b>2021</b> , 14, 1609-1617	5.5	3	
246	In-situ nitrogen strengthening of selective laser melted Ti6Al4V with superior mechanical performance. <i>Additive Manufacturing</i> , <b>2021</b> , 46, 102142	6.1	2	

245	Effect of annealing treatment on microstructure and mechanical properties of cold sprayed TiB2/AlSi10Mg composites. <i>Surfaces and Interfaces</i> , <b>2021</b> , 26, 101341	4.1	2
244	Revealing the influence of high magnetic field on the solute distribution during directional solidification of Al-Cu alloy. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 88, 226-232	9.1	2
243	Investigation of the properties and leaching characteristics of ceramic cores fabricated using BaZrO3 as the raw material. <i>Materials Chemistry and Physics</i> , <b>2021</b> , 272, 124925	4.4	0
242	Magnetic properties and promising cryogenic magneto-caloric performances of Gd20Ho20Tm20Cu20Ni20 amorphous ribbons. <i>Chinese Physics B</i> , <b>2021</b> , 30, 017501	1.2	16
241	Enhanced creep properties of nickel-base single crystal superalloy CMSX-4 by high magnetic field. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 803, 140729	5.3	4
240	Effect of Static Magnetic Field on the Evolution of Residual Stress and Microstructure of Laser Remelted Inconel 718 Superalloy. <i>Journal of Thermal Spray Technology</i> , <b>2020</b> , 29, 1410-1423	2.5	3
239	Enhanced Degradation in Grain Refinement of Inoculated 2024 Al Alloy in Steady Magnetic field. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2020</b> , 51, 4584-459	2.3	0
238	Magnetic field-assisted solvothermal synthesis and the magnetic properties of Fe-doped CeO2 nanoparticles. <i>Journal of Asian Ceramic Societies</i> , <b>2020</b> , 8, 615-623	2.4	3
237	The effect of static magnetic field on solidliquid interfacial free energy of Alliu alloy system. <i>Scripta Materialia</i> , <b>2020</b> , 187, 232-236	5.6	8
236	Structural, magnetic and magnetocaloric properties in RE2Ni1.5Ga2.5 (RE = Dy, Ho, Er and Tm) compounds. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 830, 154666	5.7	6
235	Wetting Transition in a Molten Metal and Solid Substrate System in High Magnetic Fields.  Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 2333-234	3 <sup>2.3</sup>	2
234	Magnetic-Field-Induced LiquidBolid Interface Transformation and Its Effect on Microsegregation in Directionally Solidified Ni-Cr Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2020</b> , 51, 4592-4601	2.3	O
233	Structural, magnetic properties and magneto-caloric performances in the antiferromagnetic RECoSi2 (RE: Er and Tm) compounds. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 843, 156016	5.7	0
232	Tribological properties of Al/diamond composites produced by cold spray additive manufacturing. <i>Additive Manufacturing</i> , <b>2020</b> , 36, 101434	6.1	6
231	Magnetic properties, magnetocaloric effect and refrigeration performance in RE60Al20Ni20 (RE = Tm, Er and Ho) amorphous ribbons. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 033905	2.5	5
230	Suppression of phase and its effect on mechanical behavior of melt-spun and annealed NiMnCa high-temperature shape memory alloys. <i>Materials Today Communications</i> , <b>2020</b> , 24, 101165	2.5	
229	Numerical Simulation for the Influence of EMS Position on Fluid Flow and Inclusion Removal in a Slab Continuous Casting Mold. <i>ISIJ International</i> , <b>2020</b> , 60, 1204-1212	1.7	4
228	Table-like shape magnetocaloric effect and large refrigerant capacity in dual-phase HoNi/HoNi2 composite. <i>Chinese Physics B</i> , <b>2020</b> , 29, 107502	1.2	3

227	Electrocatalytic Oxidation and Sensitive Determination of Paracetamol Based on Nanosheets Self-assembled Lindgrenite Microflowers. <i>Electroanalysis</i> , <b>2020</b> , 32, 978-985	3	8
226	Microstructure and properties of SiO2-based ceramic cores with ball-shaped powders by the preceramic polymer technique in N2 atmosphere. <i>Materials Chemistry and Physics</i> , <b>2020</b> , 243, 122609	4.4	2
225	Influence of yttrium oxide addition and sintering temperature on properties of alumina-based ceramic cores. <i>International Journal of Applied Ceramic Technology</i> , <b>2020</b> , 17, 685-694	2	1
224	Some new observations on interface reaction between nickel-based single crystal superalloy CMSX-4 and silicon oxide ceramic core. <i>Corrosion Science</i> , <b>2020</b> , 177, 108969	6.8	O
223	Study of the microstructure and mechanical performance of C-X stainless steel processed by selective laser melting (SLM). <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 781, 139227	5.3	28
222	Control of microstructure using magnetic fields and study of the mechanical behavior of Ni-rich Ni-Mn-Ga alloys. <i>Acta Materialia</i> , <b>2020</b> , 199, 383-396	8.4	10
221	Study of pore defect and mechanical properties in selective laser melted Ti6Al4V alloy based on X-ray computed tomography. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 797, 139981	5.3	40
220	Influence of static magnetic field on the heterogeneous nucleation behavior of Al on single crystal Al2O3 substrate. <i>Materialia</i> , <b>2020</b> , 13, 100847	3.2	2
219	Effects of axial static magnetic field on columnar to equiaxed transition in directionally solidified low carbon steel. <i>Ironmaking and Steelmaking</i> , <b>2020</b> , 47, 398-404	1.3	
218	Tuning the structural and magnetic properties of MnZn nano-ferrites synthesized under a high magnetic field. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2020</b> , 495, 165832	2.8	5
217	Morphologies and magnetic properties of La-doped CeO2 nanoparticles by the solvothermal method in a low magnetic field. <i>Materials Chemistry and Physics</i> , <b>2020</b> , 240, 122148	4.4	8
216	Microstructure and bending strength improvement of alumina-based ceramic cores by liquid silicone resin infiltration. <i>Materials Chemistry and Physics</i> , <b>2020</b> , 239, 122041	4.4	4
215	In-situ observation of solid-liquid interface transition during directional solidification of Al-Zn alloy via X-ray imaging. <i>Journal of Materials Science and Technology</i> , <b>2020</b> , 39, 113-123	9.1	11
214	Influence of the pore size and porosity of selective laser melted Ti6Al4V ELI porous scaffold on cell proliferation, osteogenesis and bone ingrowth. <i>Materials Science and Engineering C</i> , <b>2020</b> , 106, 110289	8.3	76
213	Magnetic properties and magneto-caloric performances in RECo2B2C (RE = Gd, Tb and Dy) compounds. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 817, 152780	5.7	38
212	Steel/Slag Interface Behavior under Multifunction Electromagnetic Driving in a Continuous Casting Slab Mold. <i>Metals</i> , <b>2019</b> , 9, 983	2.3	4
211	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> , <b>2019</b> , 50, 2111-2120	2.5	2
<b>2</b> 10	Polymorphic microstructure of a MnCu damping alloy solidified under magnetic field. <i>Materials Research Express</i> , <b>2019</b> , 6, 0865h2	1.7	3

209	A novel non-enzymatic glucose electrochemical sensor based on CNF@Ni-Co layered double hydroxide modified glassy carbon electrode. <i>Microchemical Journal</i> , <b>2019</b> , 150, 104106	4.8	21
208	Thermal and numerical simulation of mould electromagnetic stirring of GCr15 bearing steel. <i>Materials Science and Technology</i> , <b>2019</b> , 35, 2173-2180	1.5	5
207	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> , <b>2019</b> , 50, 881-889	2.5	1
206	Enhanced strength-ductility synergy in ultrafine-grained eutectic high-entropy alloys by inheriting microstructural lamellae. <i>Nature Communications</i> , <b>2019</b> , 10, 489	17.4	251
205	Effect of TiB2 addition on grain orientation of porous Si3N4-TiB2 composites by magnetic field alignment technology. <i>International Journal of Applied Ceramic Technology</i> , <b>2019</b> , 16, 1381-1389	2	
204	Solute trapping in Al-Cu alloys caused by a 29 Tesla super high static magnetic field. <i>Scientific Reports</i> , <b>2019</b> , 9, 266	4.9	10
203	Cold sprayed WC reinforced maraging steel 300 composites: Microstructure characterization and mechanical properties. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 785, 499-511	5.7	17
202	Microstructure and mechanical characterization of Si3N4/nickel-based superalloy joints with Ti/Au/Ni interlayers. <i>Journal of Adhesion Science and Technology</i> , <b>2019</b> , 33, 1858-1869	2	3
201	Improvement of tribological performance by micro-arc oxidation treatment on selective laser melting Ti6Al4V alloy. <i>Materials Research Express</i> , <b>2019</b> , 6, 096509	1.7	8
200	Evolution of microsegregation in directionally solidified Alfu alloys under steady magnetic field. Journal of Alloys and Compounds, <b>2019</b> , 800, 41-49	5.7	9
199	Influence of annealing treatment on microstructure and magnetic properties of cold sprayed Ni-coated FeSiAl soft magnetic composite coating. <i>Surface and Coatings Technology</i> , <b>2019</b> , 374, 476-484	4.4	14
198	Dual-effects of 6 T strong magnetic field on interdiffusion behavior of Fe-FeSi diffusion couple. <i>Materials Characterization</i> , <b>2019</b> , 151, 280-285	3.9	2
197	Effects of substrate heat accumulation on the cold sprayed Ni coating quality: Microstructure evolution and tribological performance. <i>Surface and Coatings Technology</i> , <b>2019</b> , 371, 185-193	4.4	6
196	A special single variant zone in directionally solidified Ni-Mn-Ga alloy. Scripta Materialia, 2019, 167, 105-	1509	1
195	Strengthened Peening Effect on Metallurgical Bonding Formation in Cold Spray Additive Manufacturing. <i>Journal of Thermal Spray Technology</i> , <b>2019</b> , 28, 769-779	2.5	22
194	Effect of Co substitution and magnetic field on the morphologies and magnetic properties of CeO2 nanoparticles. <i>Ceramics International</i> , <b>2019</b> , 45, 11927-11933	5.1	5
193	Effect of a transverse weak magnetic field on the texture evolution and magnetic property of Fe-1.0 wt.% Si alloy during bulk solidification. <i>Materials Research Express</i> , <b>2019</b> , 6, 066105	1.7	1
192	Three dimensional dendritic morphology and orientation transition induced by high static magnetic field in directionally solidified Al-10 wt.%Zn alloy. <i>Journal of Materials Science and Technology</i> , <b>2019</b> , 35, 1587-1592	9.1	9

191	Effect of hot isostatic pressing (HIP) on microstructure and mechanical properties of Ti6Al4V alloy fabricated by cold spray additive manufacturing. <i>Additive Manufacturing</i> , <b>2019</b> , 27, 595-605	6.1	61
190	Microstructural and mechanical properties of high-performance Inconel 718 alloy by cold spraying. Journal of Alloys and Compounds, <b>2019</b> , 792, 456-467	5.7	48
189	Revealing influence mechanism of a transverse static magnetic field on the refinement of primary dendrite spacing during directional solidification. <i>Journal of Crystal Growth</i> , <b>2019</b> , 517, 54-58	1.6	4
188	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> , <b>2019</b> , 50, 1837-1850	2.3	5
187	Effect of an axial high static magnetic field on the crystal orientation and magnetic property of Fe-4.5 wt% Si alloy during bulk solidification. <i>Materials Letters</i> , <b>2019</b> , 247, 189-192	3.3	4
186	Influence of a static magnetic field on the distribution of solute Cu and interdendritic constitutional undercooling in directionally solidified Al-4.5wt.%Cu alloy. <i>Materials Letters</i> , <b>2019</b> , 248, 73-77	3.3	4
185	Giant refrigerant capacity in equi-atomic HoErGdCuNi amorphous ribbons. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 792, 180-184	5.7	5
184	Effects of ZrB2 addition on texture development and properties of porous Si3N4-ZrB2 composites by magnetic field alignment. <i>Journal of Asian Ceramic Societies</i> , <b>2019</b> , 7, 368-376	2.4	
183	Investigation on microstructure and creep properties of nickel based single crystal superalloys PWA1483 during heat treatment under an alternating magnetic field. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing,</i> <b>2019</b> , 762, 138087	5.3	7
182	Enhanced high temperature elongation of nickel based single crystal superalloys by hot isostatic pressing. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 805, 78-83	5.7	10
181	Strong magnetic field-dual-assisted fabrication of heterogeneous sulfide-based hollow nanochain electrodes for high-rate supercapacitors. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 19733-19744	13	15
180	Effect of steady magnetic field on undercooling of Al-Cu alloy melts. <i>Europhysics Letters</i> , <b>2019</b> , 126, 460	<b>0</b> 116	2
179	Microstructure and Mechanical Properties of Ni-based Superalloy K418 Produced by the Continuous Unidirectional Solidification Process. <i>Journal of Materials Engineering and Performance</i> , <b>2019</b> , 28, 6483-6491	1.6	7
178	Preparation of Al2O3 Ceramic Cores by Dry-Pressing Assisted of Precursor-Derived Ceramic Technology. <i>Springer Proceedings in Physics</i> , <b>2019</b> , 1-8	0.2	
177	Explicit Dynamics Simulation of High-Speed Railway Bearing Based On ANSYS/LS-DYNA. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2019</b> , 612, 032011	0.4	
176	Effect of annealing treatment on the microstructure and mechanical properties of Fe-18Mn-0.8C-0.2 V TWIP steel. <i>Materials Research Express</i> , <b>2019</b> , 6, 1265h4	1.7	2
175	Influence of EMS on Asymmetric Flow with Different SEN Clogging Rates in a Slab Continuous Casting Mold. <i>Metals</i> , <b>2019</b> , 9, 1288	2.3	2
174	Enhanced Dendrite Coarsening and Microsegregation in Al <b>C</b> u Alloy under a Steady Magnetic Field.  Materials Transactions, <b>2019</b> , 60, 1921-1927	1.3	1

173	Physical Modeling of Asymmetrical Flow in Slab Continuous Casting Mold due to Submerged Entry Nozzle Clogging with the Effect of Electromagnetic Stirring. <i>ISIJ International</i> , <b>2019</b> , 59, 2264-2271	1.7	10
172	Magnetic fielddependent microstructure evolution and magnetic property of FeB.5 SiD.05 B alloy during solidification. <i>Journal of Materials Research</i> , <b>2019</b> , 34, 4076-4084	2.5	1
171	Columnar to Equiaxed Transition during Directionally Solidifying GCr18Mo Steel Affected by Thermoelectric Magnetic Force under an Axial Static Magnetic Field. <i>ISIJ International</i> , <b>2019</b> , 59, 60-68	1.7	5
170	Mechanical and in vitro study of an isotropic Ti6Al4V lattice structure fabricated using selective laser melting. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 782, 209-223	5.7	66
169	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> , <b>2019</b> , 50, 27-31	2.5	1
168	Selective laser melting of WC reinforced maraging steel 300: Microstructure characterization and tribological performance. <i>Surface and Coatings Technology</i> , <b>2019</b> , 371, 355-365	4.4	21
167	Microstructure evolution and mechanical properties of maraging steel 300 fabricated by cold spraying. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 743, 482-493	5.3	19
166	Comparative investigation of microstructure and properties of Ni-coated FeSiAl soft magnetic composite coatings produced by cold spraying and HVOF. <i>Surface and Coatings Technology</i> , <b>2019</b> , 371, 224-234	4.4	14
165	Formation of novel microstructures in quenched Al Cu alloys in steady magnetic field. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 776, 353-356	5.7	3
164	Effect of silicone resin as precursor and binder on the properties of alumina-based ceramic cores using ball-shaped powders. <i>Ceramics International</i> , <b>2019</b> , 45, 2170-2177	5.1	6
163	Preparation of silica ceramic cores by the preceramic pyrolysis technology using silicone resin as precursor and binder. <i>Materials Chemistry and Physics</i> , <b>2019</b> , 223, 676-682	4.4	8
162	Evolution of the microstructure and solute distribution of Sn-10wt% Bi alloys during electromagnetic field-assisted directional solidification. <i>Journal of Materials Science and Technology</i> , <b>2019</b> , 35, 568-577	9.1	6
161	Motion of Solid Grains During Magnetic Field-Assisted Directional Solidification. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2018</b> , 49, 861-865	2.5	6
160	Correlation between microstructures and mechanical properties in Ni-rich NiMnta high-temperature shape-memory alloys. <i>Materials Science and Technology</i> , <b>2018</b> , 34, 712-717	1.5	4
159	Metallization of polyether ether ketone (PEEK) by copper coating via cold spray. <i>Surface and Coatings Technology</i> , <b>2018</b> , 342, 209-219	4.4	37
158	Effect of the simultaneous application of a high static magnetic field and a low alternating current on grain structure and grain boundary of pure aluminum. <i>Journal of Materials Science and Technology</i> , <b>2018</b> , 34, 2431-2438	9.1	11
157	A novel approach for fabricating Ni-coated FeSiAl soft magnetic composite via cold spraying. Journal of Alloys and Compounds, <b>2018</b> , 749, 523-533	5.7	19
156	Detwinning process of martensite in Ni58Mn25Ga17 as a high temperature shape memory alloy under uniaxial compression. <i>International Journal of Plasticity</i> , <b>2018</b> , 103, 203-213	7.6	12

#### (2018-2018)

155	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> , <b>2018</b> , 8, 1452	4.9	7
154	Preparation of c-axis textured TiB2 ceramics by a strong magnetic field of 6 T assisted slip-casting process. <i>Materials Letters</i> , <b>2018</b> , 217, 96-99	3.3	8
153	Fabrication of porous Al2O3-based ceramics using ball-shaped powders by preceramic polymer process in N2 atmosphere. <i>Ceramics International</i> , <b>2018</b> , 44, 5915-5920	5.1	5
152	Metamagnetic transition and magnetocaloric properties in antiferromagnetic Ho 2 Ni 2 Ga and Tm 2 Ni 2 Ga compounds. <i>Intermetallics</i> , <b>2018</b> , 94, 17-21	3.5	39
151	Structure and cryogenic magnetic properties in Ho2BaCuO5 cuprate. <i>Ceramics International</i> , <b>2018</b> , 44, 1991-1994	5.1	47
150	Preferred Orientation of Porous Si3N4 Ceramics by Gel-Casting in a Longitudinal Rotating Magnetic Field. <i>Crystal Research and Technology</i> , <b>2018</b> , 53, 1700147	1.3	3
149	Structure, glass-forming ability, magnetic and cryogenic magneto-caloric properties in the amorphous Ni30Co10RE60 (RE = Ho and Tm) ribbons. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 9816-9822	4.3	25
148	Effect of high static magnetic field on the microstructure and mechanical properties of directionally solidified alloy 2024. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 749, 978-989	5.7	13
147	Orientation of Magnetized MnBi in a Strong Static Magnetic Field. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2018</b> , 49, 1981-1985	2.3	5
146	Formation of highly porous NiCo2S4 discs with enhanced pseudocapacitive properties through sequential ion-exchange. <i>Materials and Design</i> , <b>2018</b> , 145, 135-143	8.1	19
145	The mechanism of inclusion removal from molten steel by dissolved gas flotation. <i>Ironmaking and Steelmaking</i> , <b>2018</b> , 45, 648-654	1.3	10
144	Preparation of porous Al2O3 ceramics with in situ formed C-nanowires derived form silicone resin. <i>Materials Letters</i> , <b>2018</b> , 212, 271-274	3.3	5
143	On the role of oxide film cleaning effect into the metallurgical bonding during cold spray. <i>Materials Letters</i> , <b>2018</b> , 210, 199-202	3.3	40
142	Correlation of microsegregation and variant distribution in directionally solidified Ni-Mn-Ga alloys. <i>Scripta Materialia</i> , <b>2018</b> , 156, 95-100	5.6	5
141	Compression properties enhancement of Al-Cu alloy solidified under a 29 T high static magnetic field. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 733, 170-178	5.3	10
140	Coupled 3D Numerical Model of Droplet Evolution Behaviors during the Magnetically Controlled Electroslag Remelting Process. <i>Jom</i> , <b>2018</b> , 70, 2917-2926	2.1	7
139	Influence of a transverse static magnetic field on the orientation and peritectic reaction of Cu-10.5 at.% Sn peritectic alloy. <i>Scientific Reports</i> , <b>2018</b> , 8, 10641	4.9	4
138	Evolution of microstructure and microsegregation in Ni-Mn-Ga alloys directionally solidified under axial magnetic field. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 758, 54-61	5.7	8

137	Cell-to-Dendrite Transition Induced by a Static Transverse Magnetic Field During Lasering Remelting of the Nickel-Based Superalloy. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2018</b> , 49, 3211-3219	2.5	О
136	Cryogenic magnetic properties and magnetocaloric performance in double perovskite Pr2NiMnO6 and Pr2CoMnO6 compounds. <i>Ceramics International</i> , <b>2018</b> , 44, 20762-20767	5.1	15
135	The Effect of Static Magnetic Field on the Channel Formation during Directional Solidification of Aqueous Ammonium Chloride Solution. <i>Crystal Research and Technology</i> , <b>2018</b> , 53, 1800113	1.3	1
134	An Electromagnetic Compounding Technique for Counteracting the Thermoelectric Magnetic Effect During Directional Solidification Under a Transverse Static Magnetic Field. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2018</b> , 49, 3373-3382	2.3	5
133	Synchrotron tomographic quantification of the influence of Zn concentration on dendritic growth in Mg-Zn alloys. <i>Acta Materialia</i> , <b>2018</b> , 156, 287-296	8.4	36
132	6.5 wt% Si high silicon steel sheets prepared by composite electrodeposition in magnetic field. Journal of Materials Science and Technology, <b>2018</b> , 34, 2492-2497	9.1	7
131	Manganese Removal from Liquid Nickel by Hydrogen Plasma Arc Melting. <i>Materials</i> , <b>2018</b> , 12,	3.5	1
130	Low field induced large magnetic entropy change in the amorphousized Tm60Co20Ni20 ribbon. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 733, 40-44	5.7	52
129	Effect of a high magnetic field on solidification structure in directionally solidified NiAl-Cr(Mo)-Hf eutectic alloy. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 737, 74-82	5.7	6
128	Two Paradigms on Study Slab Continuous Casting Process with Mold Electromagnetic Stirring. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2018</b> , 424, 012035	0.4	
127	Fabrication of Co-based composites with in-situ formed ceramic grains by preceramic polymer technology assisted of SPS. <i>Composites Communications</i> , <b>2018</b> , 10, 217-220	6.7	
126	Reduced Wettability of Solids by a Liquid GalhBn Alloy in a Steady Magnetic Field. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 27451-27455	3.8	6
125	Mechanism of Desulfurization from Liquid Iron by Hydrogen Plasma Arc Melting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2018</b> , 49, 2951-2955	2.5	5
124	High Magnetic Field Processing of Metal Alloys. Springer Series in Materials Science, 2018, 195-242	0.9	
123	Martensitic transformation, twin boundary and phase interface mobility of directionally solidified Ni-Mn-Ga alloys during compression by EBSD tracing. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2018</b> , 375, 012023	0.4	
122	Double-shelled hollow hetero-MnCo2S4/CoS1.097 spheres with carbon coating for advanced supercapacitors. <i>Journal of Power Sources</i> , <b>2018</b> , 408, 65-73	8.9	43
121	Cold spraying of thermally softened Ni-coated FeSiAl composite powder: Microstructure characterization, tribological performance and magnetic property. <i>Materials and Design</i> , <b>2018</b> , 160, 270	)-28 <sup>7</sup> 3	19
120	Effects of Y addition on the microstructure and properties of Cu-Cr-Zr alloy during the directional solidification process. <i>Materials Research Express</i> , <b>2018</b> , 5, 116505	1.7	О

119	In-situ fabrication of graded material with the application of a horizontal magnetic field during directional solidification. <i>Materials Characterization</i> , <b>2018</b> , 141, 423-432	3.9	2
118	Microsegregation Formation in Altu Alloy under Action of Steady Magnetic Field. <i>ISIJ International</i> , <b>2018</b> , 58, 899-904	1.7	7
117	Droplet Evolution and Refinement During Liquidliquid Decomposition of Zn-6 Wt Pct Bi Immiscible Alloy Under High Static Magnetic Fields. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2018</b> , 49, 3333-3345	2.3	5
116	Effect of a High Magnetic Field on 🛭 Phase for Ni-Based Single Crystal Superalloy During Directional Solidification. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2018</b> , 49, 1919-1924	2.5	2
115	Cryogenic magnetic properties in the pyrochlore RE2TiMnO7 (RE = Dy and Ho) compounds. <i>Ceramics International</i> , <b>2018</b> , 44, 15681-15685	5.1	4
114	Preparation of textured TiB2-(Ti,Zr)B2 composites by gel-casting in a magnetic field of 6 T. <i>Materials Letters</i> , <b>2018</b> , 228, 431-434	3.3	2
113	Modification of the Primary and Peritectic Phases in Directionally Solidified Cu-20 wt.% Sn Alloy by Magnetic Field. <i>ISIJ International</i> , <b>2018</b> , 58, 505-514	1.7	3
112	Deep deoxidization from liquid iron by hydrogen plasma arc melting. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 12153-12157	6.7	3
111	Enhanced undercooling of para- and diamagnetic metal melts in steady magnetic field. <i>Japanese Journal of Applied Physics</i> , <b>2018</b> , 57, 080301	1.4	6
110	Effect of a high magnetic field on the microstructure in directionally solidified two-phase Ni3Al alloys. <i>Materials Letters</i> , <b>2017</b> , 189, 131-135	3.3	4
109	Magnetism and magnetocaloric effect in the RE2CuSi3 (REI Dy and Ho) compounds. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 702, 546-550	5.7	18
108	Refinement of primary Si in the bulk solidified Al-20 wt. Si alloy assisting by high static magnetic field and phosphorus addition. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 714, 39-46	5.7	24
107	Formation mechanism of axial macrosegregation of primary phases induced by a static magnetic field during directional solidification. <i>Scientific Reports</i> , <b>2017</b> , 7, 45834	4.9	9
106	Effect of Current Frequency on Droplet Evolution During Magnetic-Field-Controlled Electroslag Remelting Process Via Visualization Method. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2017</b> , 48, 655-663	2.5	19
105	Effects of a High Magnetic Field on the Microstructure of Ni-Based Single-Crystal Superalloys During Directional Solidification. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2017</b> , 48, 3804-3813	2.3	7
104	Magnetic properties and magnetocaloric effect in the aluminide RE NiAl 2 ( RE ⊞Ho and Er) compounds. <i>Intermetallics</i> , <b>2017</b> , 88, 61-64	3.5	13
103	Chemical segregation and coarsening of 2 precipitates in Ni-based superalloy during heat treatment in alternating magnetic field. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 720, 272-276	5.7	18
102	Effect of a magnetic field on macro segregation of the primary silicon phase in hypereutectic Al-Si alloy during directional solidification. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 722, 108-115	5.7	23

101	Enhanced diffusivity in Ni-Al system by alternating magnetic field. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 074102	3.4	10
100	Detwinning of hierarchically structured martensitic variants in a directionally solidified non-modulated Ni-Mn-Ga alloy under uniaxial loading. <i>Scripta Materialia</i> , <b>2017</b> , 134, 85-90	5.6	12
99	Microstructure and mechanical properties of a Ni-based superalloy after heat treatment in a steady magnetic field. <i>Journal of Materials Processing Technology</i> , <b>2017</b> , 246, 176-184	5.3	8
98	Experimental and Numerical Investigations of the Multi-scale Thermoelectromagnetic Convection on the Microstructure during Directionally Solidified Sn-5wt%Pb Alloys. <i>ISIJ International</i> , <b>2017</b> , 57, 83:	3- <b>ई</b> 4 <b>7</b> 0	6
97	Influences of the Transverse Static Magnetic Field on the Droplet Evolution Behaviors during the Low Frequency Electroslag Remelting Process. <i>ISIJ International</i> , <b>2017</b> , 57, 2157-2164	1.7	13
96	Determination of structural and magnetic properties in directionally solidified Ni-Mn-Ga rod with an axial compositional variation. <i>Materials and Design</i> , <b>2017</b> , 134, 469-475	8.1	6
95	Effect of a transverse magnetic field on primary-Si distribution during directional solidification in hypereutectic Al-Si alloy. <i>Europhysics Letters</i> , <b>2017</b> , 118, 59001	1.6	1
94	Measurement of contact angles at room temperature in high magnetic field. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 115110	1.7	7
93	Martensitic transformation and detwinning in directionally solidified two-phase Ni-Mn-Ga alloys under uniaxial compression. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 722, 721-728	5.7	8
92	Columnar-to-Equiaxed Transition and Equiaxed Grain Alignment in Directionally Solidified Ni3Al Alloy Under an Axial Magnetic Field. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2017</b> , 48, 4193-4203	2.3	13
91	Effect of Primary Dendrite Orientation on Stray Grain Formation in Cross-Section Change Region During the Directional Solidification of Ni-Based Superalloy. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2017</b> , 48, 394-405	2.5	9
90	A novel spiral trajectory for damage component recovery with cold spray. <i>Surface and Coatings Technology</i> , <b>2017</b> , 309, 719-728	4.4	30
89	On the texture, phase and tensile properties of commercially pure Ti produced via selective laser melting assisted by static magnetic field. <i>Materials Science and Engineering C</i> , <b>2017</b> , 70, 405-407	8.3	31
88	Magnetic and magnetocaloric properties of the ternary cadmium based intermetallic compounds of Gd2Cu2Cd and Er2Cu2Cd. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 692, 665-669	5.7	52
87	Alternating-magnetic-field induced enhancement of diffusivity in Ni-Cr alloys. <i>Scientific Reports</i> , <b>2017</b> , 7, 18085	4.9	9
86	Influence of an Axial Magnetic Field on Microstructures and Alignment in Directionally Solidified Ni-based Superalloy. <i>ISIJ International</i> , <b>2017</b> , 57, 337-342	1.7	10
85	Magnetic properties and magnetocaloric effect in TmZnAl and TmAgAl compounds. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 656, 635-639	5.7	73
84	EBSD Study of the Influence of a High Magnetic Field on the Microstructure and Orientation of the Al-Si Eutectic During Directional Solidification. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2016</b> , 47, 2952-2963	2.3	9

83	Effect of silicone resin on the properties of silica ceramic cores by heating treatment. <i>Journal of Adhesion Science and Technology</i> , <b>2016</b> , 30, 2667-2677	2	7
82	Effect of a High Magnetic Field on Microstructures of Ni-Based Single Crystal Superalloy During Seed Melt-Back. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2016</b> , 47, 828-833	2.5	16
81	Effect of interdendritic thermoelectric magnetic convection on evolution of tertiary dendrite during directional solidification. <i>Journal of Crystal Growth</i> , <b>2016</b> , 439, 66-73	1.6	10
80	Interfacial microstructure and mechanical characterization of silicon nitride/nickel-base superalloy joints by partial transient liquid phase bonding. <i>Ceramics International</i> , <b>2016</b> , 42, 1633-1639	5.1	17
79	Thermoelectric Magnetohydrodynamic Flows and Their Induced Change of Solidliquid Interface Shape in Static Magnetic Field-Assisted Directional Solidification. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2016</b> , 47, 1169-1179	2.3	23
78	Large reversible magnetocaloric effect in RE2Cu2In (RE = Er and Tm) and enhanced refrigerant capacity in its composite materials. <i>Journal Physics D: Applied Physics</i> , <b>2016</b> , 49, 145002	3	42
77	Preparation of c-axis textured SiC ceramics by a strong magnetic field of 6 T assisted gel-casting process. <i>Ceramics International</i> , <b>2016</b> , 42, 6168-6177	5.1	8
76	Study of the magnetic phase transitions and magnetocaloric effect in Dy2Cu2In compound. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 667, 130-133	5.7	40
75	Interfacial microstructure and high-temperature strength in silicon nitride/nickel-based superalloy bonding. <i>Journal of Adhesion Science and Technology</i> , <b>2016</b> , 30, 1430-1440	2	4
74	Effect of a Transverse Magnetic Field on Solidification Structures in Unmodified and Sr-Modified Al-7wtpctSi Alloys During Directional Solidification. <i>Metallurgical and Materials Transactions A:</i> Physical Metallurgy and Materials Science, <b>2016</b> , 47, 1198-1214	2.3	8
73	EBSD Study on the Effect of a Strong Axial Magnetic Field on the Microstructure and Crystallography of Al-Ni Alloys During Solidification. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2016</b> , 47, 1180-1197	2.3	7
72	Visualization Study on the Droplet Evolution Behaviors in Electroslag Remelting Process by Superimposing a Transverse Static Magnetic Field. <i>ISIJ International</i> , <b>2016</b> , 56, 255-263	1.7	15
71	Control of dendrite growth by a magnetic field during directional solidification. <i>Europhysics Letters</i> , <b>2016</b> , 114, 18001	1.6	1
70	EBSD study of the morphology and orientation of the primary and eutectic phases in Altu alloys during solidification under a strong magnetic field. <i>Journal of Applied Crystallography</i> , <b>2016</b> , 49, 139-148	<sub>3</sub> 3.8	6
69	Effect of Esi3N4 Initial Powder Size on Texture Development of Porous Si3N4 Ceramics Prepared by Gel-Casting in a Magnetic Field. <i>Transactions of the Indian Ceramic Society</i> , <b>2016</b> , 75, 256-262	1.8	5
68	Excellent magnetocaloric properties in RECuCd (RE = Dy and Tm) compounds and its composite materials. <i>Scientific Reports</i> , <b>2016</b> , 6, 34192	4.9	56
67	Effect of a High Static Magnetic Field on the Origin of Stray Grains during Directional Solidification. <i>Materials Transactions</i> , <b>2016</b> , 57, 1230-1235	1.3	7
66	Effect of a Transverse Magnetic Field on Stray Grain Formation of Ni-Based Single Crystal Superalloy During Directional Solidification. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2016</b> , 47, 3231-3236	2.5	5

65	Effect of a weak transverse magnetic field on the microstructure in directionally solidified peritectic alloys. <i>Scientific Reports</i> , <b>2016</b> , 6, 37872	4.9	5
64	Refinement and growth enhancement of Al2Cu phase during magnetic field assisting directional solidification of hypereutectic Al-Cu alloy. <i>Scientific Reports</i> , <b>2016</b> , 6, 24585	4.9	23
63	Fabrication and Characterization of Porous Alumina-Based Ceramics Using Silicone Resin as Binder. Transactions of the Indian Ceramic Society, <b>2016</b> , 75, 40-46	1.8	9
62	Interfacial microstructure of partial transient liquid phase bonding of Si 3 N 4 to nickel-base superalloy using Ti/Au/Ni interlayers. <i>Vacuum</i> , <b>2016</b> , 130, 105-108	3.7	13
61	Controlling droplet distribution using thermoelectric magnetic forces during bulk solidification processing of a ZnB wt.%Bi immiscible alloy. <i>Materials and Design</i> , <b>2016</b> , 100, 168-174	8.1	15
60	Effect of a high magnetic field on the growth of ternary Al-Cu-Ag alloys during directional solidification. <i>Acta Materialia</i> , <b>2016</b> , 121, 240-256	8.4	37
59	Magnetic-field dependence of nucleation undercoolings in non-magnetic metallic melts. <i>Philosophical Magazine Letters</i> , <b>2015</b> , 95, 37-43	1	14
58	A novel method to fabricate the aligned columnar dendrite via the diffusion under a strong magnetic field. <i>Materials Letters</i> , <b>2015</b> , 158, 295-299	3.3	1
57	Effect of a high axial magnetic field on the structure of directionally solidified AlBi alloys. <i>Journal of Materials Research</i> , <b>2015</b> , 30, 1043-1055	2.5	5
56	Reaction diffusion in NiAl diffusion couples in steady magnetic fields. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 641, 7-13	5.7	33
55	Experimental Evidence of the Effect of a High Magnetic Field on the Stray Grains Formation in Cross-Section Change Region for Ni-Based Superalloy During Directional Solidification.  Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 1461-146	2.3 56	13
54	Effects of high static magnetic field on crystal orientation and magnetic property of Bi-5 wt.% Zn alloys. <i>Materials Letters</i> , <b>2015</b> , 140, 68-70	3.3	11
53	Effect of a transverse magnetic field on the growth of equiaxed grains during directional solidification. <i>Materials Letters</i> , <b>2015</b> , 161, 595-600	3.3	5
52	Effect of a transverse magnetic field on solidification morphology and microstructures of pure Sn and SnII 5 wt% Pb alloys grown by a Czochralski method. <i>Journal of Crystal Growth</i> , <b>2015</b> , 432, 116-122	1.6	6
51	Effect of a high magnetic field on microstructures of Ni-based superalloy during directional solidification. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 620, 10-17	5.7	21
50	Preparation of textured porous Al2O3 ceramics by slip casting in a strong magnetic field and its mechanical properties. <i>Crystal Research and Technology</i> , <b>2015</b> , 50, 645-653	1.3	23
49	Effect of static magnetic field on microstructure and interdiffusion behavior of Fe/FeBi alloy diffusion couple. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 645, 369-375	5.7	11
48	Fabrication of textured Si3N4 ceramics with Esi3N4 powders as raw material by gel-casting under strong magnetic field. <i>Materials Letters</i> , <b>2014</b> , 135, 218-221	3.3	17

#### (2010-2014)

47	Directionally Solidified Al-Si Alloys Under a Transverse Magnetic Field. <i>Metallurgical and Materials</i> Transactions A: Physical Metallurgy and Materials Science, <b>2014</b> , 45, 5584-5600	2.3	24
46	Surface tensions of non-polar liquids in high magnetic fields. <i>Journal of Molecular Liquids</i> , <b>2013</b> , 181, 51-54	6	11
45	Effect of high magnetic field on diffusion behavior of aluminum in NiAl alloy. <i>Materials Letters</i> , <b>2013</b> , 108, 340-342	3.3	20
44	The effect of magnetic field on precipitation phases of single-crystal nickel-base superalloy during directional solidification. <i>Materials Letters</i> , <b>2013</b> , 100, 223-226	3.3	18
43	Faceted growth of primary Al2Cu crystals during directional solidification in high magnetic field. Journal of Applied Physics, 2013, 114, 154903	2.5	4
42	Modification of liquid/solid interface shape in directionally solidifying Al¶u alloys by a transverse magnetic field. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 213-219	4.3	20
41	Effect of strong magnetic field on solid solubility and microsegregation during directional solidification of Al-Cu alloy. <i>Journal of Materials Research</i> , <b>2013</b> , 28, 2810-2818	2.5	8
40	Influence of a weak static magnetic field on the primary dendrite arm spacing of a directionally solidified Ni-based superalloy. <i>Materials Letters</i> , <b>2012</b> , 67, 205-209	3.3	13
39	Effect of thermoelectric magnetic force on the array of dendrites during directional solidification of AlŒu alloys in a high magnetic field. <i>Philosophical Magazine Letters</i> , <b>2012</b> , 92, 675-682	1	7
38	Application of ring method to measure surface tensions of liquids in high magnetic field. <i>Review of Scientific Instruments</i> , <b>2012</b> , 83, 043906	1.7	9
37	Dendrite fragmentation and columnar-to-equiaxed transition during directional solidification at lower growth speed under a strong magnetic field. <i>Acta Materialia</i> , <b>2012</b> , 60, 3321-3332	8.4	55
36	Effect of a low axial magnetic field on the primary Al2Cu phase growth in a directionally solidified Al¶u hypereutectic alloy. <i>Journal of Crystal Growth</i> , <b>2011</b> , 336, 67-71	1.6	12
35	Influence of an axial uniform magnetic field on the solid/liquid interface curvature and macrosegregation in directionally solidified the Alū.85 wt.% Cu alloy. <i>Materials Letters</i> , <b>2011</b> , 65, 3340-3	343	10
34	Structure, growth characteristic and magnetic properties in directionally solidified BiMnBi composite under strong magnetic field. <i>Acta Materialia</i> , <b>2011</b> , 59, 6297-6307	8.4	14
33	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> , <b>2011</b> , 42, 3459-3471	2.3	13
32	Morphological instability of interface, cell and dendrite during directional solidification under strong magnetic field. <i>Journal of Crystal Growth</i> , <b>2011</b> , 318, 23-27	1.6	8
31	Investigation of thermoelectric magnetic force in solid and its effect on morphological instability in directional solidification. <i>Journal of Crystal Growth</i> , <b>2011</b> , 324, 217-224	1.6	5
30	ON NUCLEATION TEMPERATURE OF PURE ALUMINUM IN MAGNETIC FIELDS. <i>Progress in Electromagnetics Research Letters</i> , <b>2010</b> , 15, 45-52	0.5	19

29	Application of differential thermal analysis to investigation of magnetic field effect on solidification of Alūu hypereutectic alloy. <i>Journal of Alloys and Compounds</i> , <b>2010</b> , 505, 108-112	5.7	24
28	Columnar-to-equiaxed transitions in al-based alloys during directional solidification under a high magnetic field. <i>Journal of Crystal Growth</i> , <b>2010</b> , 312, 267-272	1.6	34
27	Morphological instabilities and alignment of lamellar eutectics during directional solidification under a strong magnetic field. <i>Acta Materialia</i> , <b>2010</b> , 58, 1403-1417	8.4	30
26	Effect of a high magnetic field on the AlAl3Ni fiber eutectic during directional solidification. <i>Acta Materialia</i> , <b>2010</b> , 58, 2430-2441	8.4	27
25	Enhancement on the faceted growth and the coarsening of the MnBi primary phase during the directional solidification under a high magnetic field. <i>Philosophical Magazine Letters</i> , <b>2009</b> , 89, 475-482	1	2
24	Design and application of differential thermal analysis apparatus in high magnetic fields. <i>Review of Scientific Instruments</i> , <b>2009</b> , 80, 073907	1.7	12
23	Degeneration of columnar dendrites during directional solidification under a high magnetic field. <i>Scripta Materialia</i> , <b>2009</b> , 60, 443-446	5.6	11
22	Effect of magnetic fields on solid-melt phase transformation in pure bismuth. <i>Materials Letters</i> , <b>2009</b> , 63, 269-271	3.3	18
21	A dramatic increase in dendrite number for directionally solidified superalloy DZ417G with a strong static magnetic field. <i>Materials Letters</i> , <b>2009</b> , 63, 382-385	3.3	11
20	Effect of a high magnetic field on the morphology and magnetic properties of the MnBi compound during the Mn1.08BiMnBi phase transformation process. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2009</b> , 321, 2694-2700	2.8	12
19	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> , <b>2009</b> , 57, 1689-1701	8.4	30
18	Investigation of thermoelectric magnetic convection and its effect on solidification structure during directional solidification under a low axial magnetic field. <i>Acta Materialia</i> , <b>2009</b> , 57, 2180-2197	8.4	73
17	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> , <b>2009</b> , 487, 612-617	5.7	31
16	Effect of an axial high magnetic field on the microstructure in directionally solidified Pb <b>S</b> n eutectic alloy. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 3584-3589	1.6	7
15	Phase distribution and phase structure control through a high gradient magnetic field during the solidification process. <i>Materials &amp; Design</i> , <b>2008</b> , 29, 1796-1801		13
14	Morphological instability of cell and dendrite during directional solidification under a high magnetic field. <i>Acta Materialia</i> , <b>2008</b> , 56, 3146-3161	8.4	39
13	Effects of parallel magnetic field on electrocodeposition behavior of Ni/nanoparticle composite electroplating. <i>Applied Surface Science</i> , <b>2008</b> , 254, 5649-5654	6.7	40
12	Influence of an axial high magnetic field on the liquid <b>B</b> olid transformation in Al <b>C</b> u hypoeutectic alloys and on the microstructure of the solid. <i>Acta Materialia</i> , <b>2007</b> , 55, 1377-1386	8.4	59

#### LIST OF PUBLICATIONS

11	the mushy zone during the directional solidification of Alūu alloys under a magnetic field. <i>Acta Materialia</i> , <b>2007</b> , 55, 3803-3813	8.4	126
10	Influence of a high magnetic field on columnar dendrite growth during directional solidification. <i>Acta Materialia</i> , <b>2007</b> , 55, 5333-5347	8.4	34
9	Magnetic alignment of MnBi crystals and magnetic properties of MnBi <b>B</b> i composites. <i>Current Applied Physics</i> , <b>2007</b> , 7, 555-560	2.6	3
8	Effect of a high magnetic field on the microstructure in directionally solidified Al¶2 wt%Ni alloy. <i>Journal of Crystal Growth</i> , <b>2007</b> , 306, 187-194	1.6	27
7	The alignment, aggregation and magnetization behaviors in MnBi <b>B</b> i composites solidified under a high magnetic field. <i>Intermetallics</i> , <b>2007</b> , 15, 845-855	3.5	20
6	Effect of a high axial magnetic field on the microstructure in a directionally solidified AlAl2Cu eutectic alloy. <i>Acta Materialia</i> , <b>2006</b> , 54, 5349-5360	8.4	66
5	Selective Laser Melting of Carbon-Free Mar-M509 Co-Based Superalloy: Microstructure, Micro-Cracks, and Mechanical Anisotropy. <i>Acta Metallurgica Sinica (English Letters)</i> ,1	2.5	О
4	Application of Synchrotron X-Ray Imaging and Diffraction in Additive Manufacturing: A Review. <i>Acta Metallurgica Sinica (English Letters)</i> ,1	2.5	2
3	Effect of Non-metallic Inclusions on Subsurface Stress and Fatigue Life of High-speed Railway Bearings. <i>IOP Conference Series: Earth and Environmental Science</i> ,632, 052001	0.3	О
2	Molecular Dynamics Simulations of the Thermally and Stress-Activated Glide of a <0001>{11 00} Screw Dislocation in AlN. <i>Crystal Growth and Design</i> ,	3.5	1
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> ,1	2.5	О