

Jun Zhang

List of Publications by Year in Descending Order

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

182
papers

2,138
citations

23
h-index

32
g-index

188
ext. papers

2,594
ext. citations

4.2
avg, IF

5
L-index

#	Paper	IF	Citations
182	Research Progress on Ultrahigh Temperature Oxide Eutectic Ceramics by Laser Additive Manufacturing. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2022 , 37, 255	1	
181	On the tungsten segregation at γ/δ interface in a Ni-based single-crystal superalloy. <i>Vacuum</i> , 2022 , 197, 110863	3.7	1
180	Double minimum creep processing and mechanism for δ strengthened cobalt-based superalloy. <i>Journal of Materials Science and Technology</i> , 2022 , 112, 123-129	9.1	0
179	Collaborative enhancement of luminous efficacy and fracture toughness based on interface design of Al ₂ O ₃ /YAG:Ce ³⁺ eutectic phosphor ceramic grown by laser floating zone melting. <i>Ceramics International</i> , 2022 , 48, 10144-10154	5.1	0
178	Synergistic effects of Re and Ta on the distribution of W in Ni-based superalloys. <i>Intermetallics</i> , 2022 , 147, 107609	3.5	0
177	Directly fabricated Al ₂ O ₃ /GdAlO ₃ eutectic ceramic with large smooth surface by selective laser melting: Rapid solidification behavior and thermal field simulation. <i>Journal of the European Ceramic Society</i> , 2021 , 42, 1088-1088	6	3
176	Insights into high thermal stability of laser additively manufactured Al ₂ O ₃ /GdAlO ₃ /ZrO ₂ eutectic ceramics under high temperatures. <i>Additive Manufacturing</i> , 2021 , 102425	6.1	1
175	Different roles of stacking fault energy and diffusivity in the creep performance of nickel-based single-crystal superalloys. <i>Materials Research Express</i> , 2021 , 8, 036510	1.7	
174	Phase-field simulation of δ coarsening behavior in cobalt-based superalloy. <i>Computational Materials Science</i> , 2021 , 191, 110358	3.2	4
173	Microstructure on remelting interface of Ni/W heterogeneous seed in preparing Ni-based single crystal superalloys. <i>Journal of Materials Research and Technology</i> , 2021 , 12, 264-270	5.5	2
172	One-step additive manufacturing and microstructure evolution of melt-grown Al ₂ O ₃ /GdAlO ₃ /ZrO ₂ eutectic ceramics by laser directed energy deposition. <i>Journal of the European Ceramic Society</i> , 2021 , 41, 3547-3558	6	11
171	Effect of substituting Mo for W on δ/γ partitioning behaviors of alloying elements in heat-treated second generation Ni based single crystal superalloys: An atom probe tomography study. <i>Intermetallics</i> , 2021 , 134, 107198	3.5	3
170	Distribution control and formation mechanism of gas inclusions in directionally solidified Al ₂ O ₃ -Er ₃ Al ₅ O ₁₂ -ZrO ₂ ternary eutectic ceramic by laser floating zone melting. <i>Journal of Materials Science and Technology</i> , 2021 , 66, 21-27	9.1	10
169	Phase growth patterns for Al ₂ O ₃ /GdAlO ₃ eutectics over wide ranges of compositions and solidification rates. <i>Journal of Materials Science and Technology</i> , 2021 , 65, 89-98	9.1	4
168	Coupling phase field with creep damage to study δ evolution and creep deformation of single crystal superalloys. <i>Journal of Materials Science and Technology</i> , 2021 , 71, 129-137	9.1	2
167	Effect of withdrawal rate on precipitation characteristics of MC-type carbides in a nickel-based directionally solidified superalloy with high Re content. <i>Vacuum</i> , 2021 , 183, 109800	3.7	3
166	The effects of misfit and diffusivity on δ rafting in Re and Ru containing Nickel based single crystal superalloys—details in thermodynamics and dynamics. <i>Vacuum</i> , 2021 , 183, 109839	3.7	2

165	The Element Segregation Between γ/δ Phases in a Ni-Based Single Crystal Superalloy Studied by 3D-APT and Its Potential Impact on Local Interfacial Misfit Strain. <i>Metals and Materials International</i> , 2021 , 27, 1892-1896	2.4	3
164	Solidification characteristics and as-cast microstructures of a Ru-containing nickel-based single crystal superalloy. <i>Journal of Materials Research and Technology</i> , 2021 , 11, 474-486	5.5	7
163	Peritectic reaction during directional solidification in a Ru-containing nickel-based single crystal superalloy. <i>Journal of Alloys and Compounds</i> , 2021 , 870, 159419	5.7	5
162	Formation mechanisms and control method for stray grains at melt-back region of Ni-based single crystal seed. <i>Progress in Natural Science: Materials International</i> , 2021 , 31, 624-632	3.6	1
161	Preparation of large-size Al ₂ O ₃ /GdAlO ₃ /ZrO ₂ ternary eutectic ceramic rod by laser directed energy deposition and its microstructure homogenization mechanism. <i>Journal of Materials Science and Technology</i> , 2021 , 85, 218-223	9.1	5
160	Unveiling the Re segregation at γ/δ interface in Ni-based superalloy. <i>Scripta Materialia</i> , 2021 , 204, 1141315.6	5.6	4
159	Precipitation behavior and chemical composition of secondary δ precipitates in a Re-containing Ni-based single crystal superalloy. <i>Intermetallics</i> , 2020 , 119, 106725	3.5	7
158	Evolutions of rod diameter, molten zone and temperature gradient of oxide eutectic ceramics during laser floating zone melting. <i>Ceramics International</i> , 2020 , 46, 18750-18757	5.1	4
157	Effect of aging temperature on the secondary δ precipitation in a model Ni based single crystal superalloy. <i>Journal of Alloys and Compounds</i> , 2020 , 836, 155486	5.7	4
156	A multifunctional electrolyte with highly-coordinated solvation structure-in-nonsolvent for rechargeable lithium batteries. <i>Journal of Energy Chemistry</i> , 2020 , 51, 362-371	12	8
155	Highly enhanced aging resistance of rapidly solidified zirconia toughened alumina bioceramics with refined eutectic microstructure. <i>Journal of the European Ceramic Society</i> , 2020 , 40, 2497-2503	6	2
154	Study on Synthesis and Adsorption Properties of ReO Ion-Imprinted Polymer. <i>ACS Omega</i> , 2020 , 5, 24356-24366	3.4	6
153	Investigation on solution heat treatment response and δ solvus temperature of a Mo-rich second generation Ni based single crystal superalloy. <i>Intermetallics</i> , 2020 , 125, 106896	3.5	8
152	Effect of alloying elements on stacking fault energies of γ and δ phases in Ni-based superalloy calculated by first principles. <i>Vacuum</i> , 2020 , 181, 109682	3.7	18
151	Grain boundary precipitation behavior in Re-containing nickel-based directionally solidified superalloys with carbon and boron additions. <i>Vacuum</i> , 2020 , 179, 109483	3.7	6
150	Formation of Accumulated Misorientation During Directional Solidification of Ni-Based Single-Crystal Superalloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019 , 50, 1607-1610	2.3	12
149	Effect of scanning speed on the solidification process of Al ₂ O ₃ /GdAlO ₃ /ZrO ₂ eutectic ceramics in a single track by selective laser melting. <i>Ceramics International</i> , 2019 , 45, 17252-17257	5.1	13
148	Theoretical prediction and experimental comparison for eutectic growth of Al ₂ O ₃ /GdAlO ₃ faceted eutectics. <i>Journal of the European Ceramic Society</i> , 2019 , 39, 3837-3842	6	5

147	Densification and microstructural evolution of bulk Al ₂ O ₃ /Er ₃ Al ₅ O ₁₂ (YAG) eutectic ceramic fabricated by spark plasma sintering. <i>Ceramics International</i> , 2019 , 45, 12337-12343	5.1	2
146	Halo formation in directionally solidified Al ₂ O ₃ -Er ₃ Al ₅ O ₁₂ off-eutectic in situ composite ceramics. <i>Materials Characterization</i> , 2019 , 150, 31-37	3.9	4
145	Microstructure control, competitive growth and precipitation rule in faceted Al ₂ O ₃ /Er ₃ Al ₅ O ₁₂ eutectic in situ composite ceramics prepared by laser floating zone melting. <i>Journal of the European Ceramic Society</i> , 2019 , 39, 1900-1908	6	10
144	Inhibition of stray grains at melt-back region for re-using seed to prepare Ni-based single crystal superalloys. <i>Progress in Natural Science: Materials International</i> , 2019 , 29, 582-586	3.6	2
143	Effect of an abrupt change in pulling rate on microstructures of directionally solidified Al ₂ O ₃ -Er ₃ Al ₅ O ₁₂ eutectic and off-eutectic composite ceramics. <i>Ceramics International</i> , 2019 , 45, 6632-6638	5.1	3
142	Dendrite growth and defects formation with increasing withdrawal rates in the rejoined platforms of Ni-based single crystal superalloys. <i>Vacuum</i> , 2019 , 161, 29-36	3.7	12
141	Orientation controlling of Ni-based single-crystal superalloy by a novel method: grain selection assisted by un-melted reused seed. <i>Journal of Materials Research and Technology</i> , 2019 , 8, 1347-1352	5.5	5
140	Formation of low-angle grain boundaries under different solidification conditions in the rejoined platforms of Ni-based single crystal superalloys. <i>Journal of Materials Research</i> , 2019 , 34, 251-260	2.5	9
139	Stress dependence of the creep behaviors and mechanisms of a third-generation Ni-based single crystal superalloy. <i>Journal of Materials Science and Technology</i> , 2019 , 35, 752-763	9.1	23
138	Formation of Lateral Sliver Defects in the Platform Region of Single-Crystal Superalloy Turbine Blades. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019 , 50, 1119-1124	2.3	8
137	Eutectic growth behavior with regular arrangement in the faceted Al ₂ O ₃ /Er ₃ Al ₅ O ₁₂ irregular eutectic system at low growth rate. <i>Scripta Materialia</i> , 2019 , 162, 49-53	5.6	6
136	Stress dependence of dislocation networks in elevated temperature creep of a Ni-based single crystal superalloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 742, 132-137	5.3	18
135	Influence of Secondary Dendrite Orientation on the Evolution of Misorientation in the Platform Region of Single Crystal Superalloy Turbine Blades. <i>Advanced Engineering Materials</i> , 2019 , 21, 1800933	3.5	7
134	Quantitative analysis of withdrawal rate on stray grain formation in the platforms of a Ni-Based single crystal dummy blade. <i>Journal of Alloys and Compounds</i> , 2019 , 773, 432-442	5.7	14
133	Effects of composition and solidification rate on growth striations in laser floating zone melted Al ₂ O ₃ /GdAlO ₃ eutectic ceramics. <i>Journal of the American Ceramic Society</i> , 2018 , 101, 3337-3346	3.8	12
132	Negative influence of rafted γ phases on 750 °C/750 MPa creep in a Ni-based single crystal superalloy with 4% Re addition. <i>Materials Characterization</i> , 2018 , 137, 127-132	3.9	10
131	Coupling plasmonic nanoparticles with TiO ₂ nanotube photonic crystals for enhanced dye-sensitized solar cells performance. <i>Electrochimica Acta</i> , 2018 , 263, 373-381	6.7	18
130	Processing, microstructure and performance of Al ₂ O ₃ /Er ₃ Al ₅ O ₁₂ /ZrO ₂ ternary eutectic ceramics prepared by laser floating zone melting with ultra-high temperature gradient. <i>Ceramics International</i> , 2018 , 44, 4766-4776	5.1	9

129	Competitive converging dendrites growth depended on dendrite spacing distribution of Ni-based bi-crystal superalloys. <i>Journal of Alloys and Compounds</i> , 2018 , 735, 1878-1884	5.7	7
128	A phase-field model for creep behavior in nickel-base single-crystal superalloy: Coupled with creep damage. <i>Scripta Materialia</i> , 2018 , 147, 16-20	5.6	20
127	Influence of substituting Mo for W on solidification characteristics of Re-containing Ni based single crystal superalloy. <i>Journal of Alloys and Compounds</i> , 2018 , 754, 85-92	5.7	18
126	Influence of cooling rate on the formation of bimodal microstructures in nickel-base superalloys during continuous two-step aging. <i>Computational Materials Science</i> , 2018 , 149, 14-20	3.2	6
125	Microstructure tailoring and thermal stability of directionally solidified Al ₂ O ₃ /GdAlO ₃ binary eutectic ceramics by laser floating zone melting. <i>Ceramics International</i> , 2018 , 44, 7908-7916	5.1	11
124	Nucleation Crystallography of Ni Grains on CrFeNb Inoculants Investigated by Edge-to-Edge Matching Model in an IN718 Superalloy. <i>Advanced Engineering Materials</i> , 2018 , 20, 1700568	3.5	4
123	Study of rafting under different stress states in a phase-field simulation considering viscoplasticity. <i>Journal of Alloys and Compounds</i> , 2018 , 769, 453-462	5.7	11
122	Direct formation of Al ₂ O ₃ /GdAlO ₃ /ZrO ₂ ternary eutectic ceramics by selective laser melting: Microstructure evolutions. <i>Journal of the European Ceramic Society</i> , 2018 , 38, 5144-5152	6	26
121	Influence of Melt Superheating Treatment on Solidification Characteristics and Rupture Life of a Third-Generation Ni-Based Single-Crystal Superalloy. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018 , 49, 1537-1546	2.5	9
120	Formation of Slivers in the Extended Cross-Section Platforms of Ni-Based Single Crystal Superalloy. <i>Advanced Engineering Materials</i> , 2018 , 20, 1701189	3.5	9
119	Abnormal Grain Refinement Behavior in High-Pressure Die Casting of Pure Mg with Addition of Zr as Grain Refiner. <i>Jom</i> , 2018 , 70, 2555-2560	2.1	2
118	Microstructure and cytotoxicity of Al ₂ O ₃ -ZrO ₂ eutectic bioceramics with high mechanical properties prepared by laser floating zone melting. <i>Ceramics International</i> , 2018 , 44, 17978-17985	5.1	12
117	Improving the efficiency of dye-sensitized solar cell via tuning the Au plasmons in Al ₂ O ₃ /TiO ₂ nanotube array photoanode. <i>Journal of Applied Electrochemistry</i> , 2018 , 48, 1139-1149	2.6	8
116	Grain Refinement on Microstructure and Mechanical Properties of IN718 Superalloy. <i>Minerals, Metals and Materials Series</i> , 2018 , 275-286	0.3	
115	Insight of the dendrite deformation in Ni-based superalloys for increased misorientation along convergent boundaries. <i>Progress in Natural Science: Materials International</i> , 2018 , 28, 489-495	3.6	10
114	Hypereutectic Al ₂ O ₃ /YAG/ZrO ₂ In Situ Composite Prepared by Horizontal Laser Zone Melting. <i>High Temperature Materials and Processes</i> , 2017 , 36, 23-28	0.9	
113	Solidification behavior of Re- and Ru-containing Ni-based single-crystal superalloys with thermal and metallographic analysis. <i>Rare Metals</i> , 2017 , 36, 792-798	5.5	7
112	Microstructures and mechanical properties of directionally solidified Al ₂ O ₃ /GdAlO ₃ eutectic ceramic by laser floating zone melting with high temperature gradient. <i>Journal of the European Ceramic Society</i> , 2017 , 37, 1617-1626	6	44

111	Phase-field study on effects of antiphase domain and elastic energy on evolution of γ precipitates in nickel-based superalloys. <i>Computational Materials Science</i> , 2017 , 129, 211-219	3.2	25
110	Directional solidification and growth characteristics of Al ₂ O ₃ /Er ₃ Al ₅ O ₁₂ /ZrO ₂ ternary eutectic ceramic by laser floating zone melting. <i>Journal of Materials Science</i> , 2017 , 52, 5559-5568	4.3	22
109	Effect of secondary dendrite orientations on competitive growth of converging dendrites of Ni-based bi-crystal superalloys. <i>Materials Characterization</i> , 2017 , 125, 152-159	3.9	16
108	The influence of melt superheating treatment on the cast structure and stress rupture property of IN718C superalloy. <i>Journal of Alloys and Compounds</i> , 2017 , 706, 76-81	5.7	14
107	Influence of withdrawal rate on the porosity in a third-generation Ni-based single crystal superalloy. <i>Progress in Natural Science: Materials International</i> , 2017 , 27, 236-243	3.6	14
106	Simulation of stray grain formation in Ni-base single crystal turbine blades fabricated by HRS and LMC techniques. <i>China Foundry</i> , 2017 , 14, 75-79	0.8	7
105	Investigation on remelting solution heat treatment for nickel-based single crystal superalloys. <i>Scripta Materialia</i> , 2017 , 136, 74-77	5.6	16
104	Investigation on solidification path of Ni-based single crystal superalloys with different Ru contents. <i>Materials Characterization</i> , 2017 , 130, 211-218	3.9	11
103	Three-dimensional elastoplastic phase-field simulation of γ rafting and creep deformation. <i>Journal of Materials Science</i> , 2017 , 52, 13940-13947	4.3	6
102	Investigation on a ramp solution heat treatment for a third generation nickel-based single crystal superalloy. <i>Journal of Alloys and Compounds</i> , 2017 , 723, 922-929	5.7	9
101	Interaction between Re and W on the microstructural stability of Ni-based single-crystal superalloys. <i>Materials Science and Technology</i> , 2017 , 33, 377-380	1.5	6
100	Enhanced Grain Refinement and Porosity Control of the Polycrystalline Superalloy by a Modified Thermally Controlled Solidification. <i>Advanced Engineering Materials</i> , 2016 , 18, 1785-1791	3.5	7
99	The Formation Mechanism, Influencing Factors and Processing Control of Stray Grains in Nickel-Based Single Crystal Superalloys 2016 , 293-301		5
98	Microstructure and property of directionally solidified Ni ₃ Bi hypereutectic alloy. <i>Applied Physics A: Materials Science and Processing</i> , 2016 , 122, 1	2.6	6
97	Effects of grain refinement on cast structure and tensile properties of superalloy K4169 at high pouring temperature. <i>China Foundry</i> , 2016 , 13, 101-106	0.8	4
96	Solid-liquid interface and growth rate range of Al ₂ O ₃ -based eutectic in situ composites grown by laser floating zone melting. <i>Journal of Alloys and Compounds</i> , 2016 , 662, 634-639	5.7	20
95	Microstructure transformation from irregular eutectic to complex regular eutectic in directionally solidified Al ₂ O ₃ /GdAlO ₃ /ZrO ₂ ceramics by laser floating zone melting. <i>Journal of the European Ceramic Society</i> , 2016 , 36, 1447-1454	6	35
94	Sintering densification and microstructure formation of bulk Al ₂ O ₃ /YAG eutectic ceramics by hot pressing based on fine eutectic structure. <i>Materials and Design</i> , 2016 , 92, 213-222	8.1	19

93	The process analysis of seeding-grain selection and its effect on stray grain and orientation control. <i>Journal of Alloys and Compounds</i> , 2016 , 657, 341-347	5.7	12
92	Effects of boron and zirconium additions on the fluidity, microstructure and mechanical properties of IN718C superalloy. <i>Journal of Materials Research</i> , 2016 , 31, 3557-3566	2.5	5
91	Influence of W, Re, Cr, and Mo on microstructural stability of the third generation Ni-based single crystal superalloys. <i>Journal of Materials Research</i> , 2016 , 31, 3381-3389	2.5	12
90	Effect of Co on microstructural stability of the third generation Ni-based single crystal superalloys. <i>Journal of Materials Research</i> , 2016 , 31, 1328-1337	2.5	8
89	Effect of melt thermal history on solidification behavior and microstructural characteristics of a third-generation Ni-based single crystal superalloy. <i>Journal of Alloys and Compounds</i> , 2016 , 688, 430-437	5.7	9
88	Multi-scale characterization of stray grain in the platform of nickel-base single crystal turbine blade. <i>Vacuum</i> , 2016 , 131, 181-187	3.7	17
87	Rapid eutectic growth of Al ₂ O ₃ /Er ₃ Al ₅ O ₁₂ nanocomposite prepared by a new method: Melt falling-drop quenching. <i>Scripta Materialia</i> , 2016 , 125, 39-43	5.6	20
86	Heterogeneous nucleation in Mg ₂ Zr alloy under die casting condition. <i>Materials Letters</i> , 2015 , 160, 263-267	3.3	16
85	Investigation of grain competitive growth during directional solidification of single-crystal nickel-based superalloys. <i>Applied Physics A: Materials Science and Processing</i> , 2015 , 120, 793-800	2.6	3
84	Effect of Solidification Rate on Microstructure and Solid/Liquid Interface Morphology of Ni-1.5 wt% Si Eutectic Alloy. <i>Journal of Materials Science and Technology</i> , 2015 , 31, 280-284	9.1	13
83	Investigation of segregation and density profiles in the mushy zone of CMSX-4 superalloys solidified during downward and upward directional solidification processes. <i>Journal of Alloys and Compounds</i> , 2015 , 620, 24-30	5.7	23
82	Microstructure evolution during heat treatment of superalloys loaded with different amounts of carbon. <i>Journal of Materials Research</i> , 2015 , 30, 2064-2072	2.5	4
81	Microstructure and Element Segregation of Ni-Base Superalloy Casting with Radiation and Liquid-Metal Cooling. <i>Materials Science Forum</i> , 2015 , 816, 608-612	0.4	
80	Formation of stray grains during directional solidification of a superalloy AM3. <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 114, 979-983	2.6	12
79	Simulation of grain selection during single crystal casting of a Ni-base superalloy. <i>Journal of Alloys and Compounds</i> , 2014 , 586, 220-229	5.7	34
78	In situ fabrication of highly-dense Al ₂ O ₃ /YAG nanoeutectic composite ceramics by a modified laser surface processing. <i>Journal of the European Ceramic Society</i> , 2014 , 34, 739-744	6	25
77	An Al ₂ O ₃ /Y ₃ Al ₅ O ₁₂ eutectic nanocomposite rapidly solidified by a new method: Liquid-metal quenching. <i>Scripta Materialia</i> , 2014 , 92, 39-42	5.6	23
76	Effect of local cooling rates on the microstructures of single crystal CMSX-6 superalloy: A comparative assessment of the Bridgman and the downward directional solidification processes. <i>Journal of Alloys and Compounds</i> , 2014 , 616, 102-109	5.7	20

75	Effect of solidification parameters on the microstructures of superalloy CMSX-6 formed during the downward directional solidification process. <i>Journal of Crystal Growth</i> , 2014 , 389, 47-54	1.6	29
74	Effect of carbon addition on carbide morphology of single crystal Ni-based superalloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2014 , 24, 339-345	3.3	15
73	Effects of Refiners on Grain Structures of Superalloy in 718 at High Pouring Temperature 2014 , 193-202		
72	Orientation evolution of single-crystal superalloys under different solidification interface. <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 117, 1971-1975	2.6	2
71	Microstructural evolution of aluminium-copper alloys during the downward directional solidification process. <i>International Journal of Materials Research</i> , 2014 , 105, 168-176	0.5	3
70	Microstructure and mechanical properties of Al ₂ O ₃ /Y ₃ Al ₅ O ₁₂ /ZrO ₂ hypereutectic directionally solidified ceramic prepared by laser floating zone. <i>Journal of the European Ceramic Society</i> , 2014 , 34, 3051-3059	6	30
69	Competitive grain growth mechanism in three dimensions during directional solidification of a nickel-based superalloy. <i>Journal of Alloys and Compounds</i> , 2013 , 578, 577-584	5.7	15
68	Effect of carbon and boron additions on segregation behavior of directionally solidified nickel-base superalloys with rhenium. <i>Transactions of Nonferrous Metals Society of China</i> , 2013 , 23, 3257-3264	3.3	20
67	Effect of growth rate on rod spacing and undercooling of Bridgman-grown Si ₃ N ₄ /Si ₂ eutectic in situ composite. <i>Journal of Alloys and Compounds</i> , 2013 , 551, 643-648	5.7	10
66	Solidification microstructure of Bridgman-grown Si ₃ N ₄ /Si ₂ eutectic in situ composite. <i>Journal of Crystal Growth</i> , 2013 , 376, 59-65	1.6	5
65	Microstructure and field emission property of Bridgman-grown Si ₃ N ₄ /Si ₂ eutectic in situ composite. <i>Materials Letters</i> , 2013 , 100, 212-215	3.3	3
64	Preparation, microstructure characterisation and corrosion behaviour of directionally grown TaSi ₂ fibre arrays with sharp tip fabricated by selective wet etching. <i>Corrosion Science</i> , 2013 , 75, 287-292	6.8	1
63	Preparation of Inoculants Used in Superalloy and Analysis of the Atomic Matching Models. <i>Journal of Materials Science and Technology</i> , 2013 , 29, 387-392	9.1	6
62	Longitudinal cross-section microstructure of growth striation in Al ₂ O ₃ /Y ₃ Al ₅ O ₁₂ /ZrO ₂ directionally solidified eutectic ceramic prepared by laser floating zone. <i>Journal of the European Ceramic Society</i> , 2013 , 33, 1123-1128	6	26
61	Directional solidification of Ni ₃ Al/Si eutectic in situ composites by electron beam floating zone melting. <i>Physica B: Condensed Matter</i> , 2013 , 412, 70-73	2.8	10
60	Laser zone remelting of Al ₂ O ₃ /Er ₃ Al ₅ O ₁₂ bulk oxide in situ composite thermal emission ceramics: Influence of rapid solidification. <i>Materials Research Bulletin</i> , 2013 , 48, 544-550	5.1	9
59	Preparation and microstructure evolution of directionally solidified Al ₂ O ₃ /YAG/YSZ ternary eutectic ceramics by a modified electron beam floating zone melting. <i>Materials Letters</i> , 2013 , 91, 92-95	3.3	13
58	MICROSTRUCTURE OF Al ₂ O ₃ /YAG/ZrO ₂ HYPEREUTECTIC ALLOY DIRECTIONALLY SOLIDIFIED BY LASER FLOATING ZONE METHOD. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2013 , 48, 220-226		2

57	EFFECTS OF Re AND Ru ON MICROSTRUCTURE AND SEGREGATION OF Ni-BASED SINGLE-CRYSTAL SUPERALLOYS. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2013 , 48, 845-852		8
56	Effect of solidification path on the microstructure of Al ₂ O ₃ /ZrO ₂ ternary oxide eutectic ceramic system. <i>Journal of the European Ceramic Society</i> , 2012 , 32, 3137-3142	6	7
55	Modes of Grain Selection in Spiral Selector during Directional Solidification of Nickel-base Superalloys. <i>Journal of Materials Science and Technology</i> , 2012 , 28, 214-220	9.1	22
54	Microstructure and properties of Ni ₃ Al ₃ Si composites by directional solidification. <i>Physica B: Condensed Matter</i> , 2012 , 407, 3566-3569	2.8	25
53	Solidification microstructure of laser floating zone remelted Al ₂ O ₃ /YAG eutectic in situ composite. <i>Journal of Crystal Growth</i> , 2012 , 345, 51-55	1.6	21
52	Preparation, microstructure and dislocation of solar-grade multicrystalline silicon by directional solidification from metallurgical-grade silicon. <i>Transactions of Nonferrous Metals Society of China</i> , 2012 , 22, 2548-2553	3.3	17
51	Dendrite morphology and evolution mechanism of nickel-based single crystal superalloys grown along the and orientations. <i>Progress in Natural Science: Materials International</i> , 2012 , 22, 407-413	3.6	17
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45	Influence of crystal orientation on cellular growth of a nickel-base single crystal superalloy. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 9645-9649	5.7	14
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43	Solidification Characteristics and as-Cast Microstructure of Rhenium-Containing Single Crystal Superalloys under High Thermal Gradient Directional Solidification. <i>Advanced Materials Research</i> , 2011 , 278, 423-427	0.5	1
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