

# Menghuai Wu

## List of Publications by Citations

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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.

183  
papers

2,720  
citations

30  
h-index

45  
g-index

194  
ext. papers

3,112  
ext. citations

2.2  
avg, IF

5.52  
L-index

#	Paper	IF	Citations
183	A three-phase model for mixed columnar-equiaxed solidification. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2006</b> , 37, 1613-1631	2.3	147
182	Modeling equiaxed solidification with melt convection and grain sedimentation□ Model description. <i>Acta Materialia</i> , <b>2009</b> , 57, 5621-5631	8.4	124
181	Simulation of macrosegregation in a 2.45-ton steel ingot using a three-phase mixed columnar-equiaxed model. <i>International Journal of Heat and Mass Transfer</i> , <b>2014</b> , 72, 668-679	4.9	99
180	Using a Three-Phase Deterministic Model for the Columnar-to-Equiaxed Transition. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2007</b> , 38, 1465-1475	2.3	97
179	Modelling mixed columnar-equiaxed solidification with melt convection and grain sedimentation □ Part I: Model description. <i>Computational Materials Science</i> , <b>2010</b> , 50, 32-42	3.2	91
178	Modeling of globular equiaxed solidification with a two-phase approach. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2002</b> , 33, 3673-3683	2.3	87
177	Modeling equiaxed solidification with melt convection and grain sedimentation□. Model verification. <i>Acta Materialia</i> , <b>2009</b> , 57, 5632-5644	8.4	67
176	Modelling mixed columnar-equiaxed solidification with melt convection and grain sedimentation □ Part II: Illustrative modelling results and parameter studies. <i>Computational Materials Science</i> , <b>2010</b> , 50, 43-58	3.2	59
175	Influence of convection and grain movement on globular equiaxed solidification. <i>International Journal of Heat and Mass Transfer</i> , <b>2003</b> , 46, 2819-2832	4.9	59
174	Modeling the columnar-to-equiaxed transition with a three-phase Eulerian approach. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 413-414, 109-114	5.3	54
173	Influence of argon gas bubbles and non-metallic inclusions on the flow behavior in steel continuous casting. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 413-414, 115-120	5.3	51
172	On Macrosegregation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2015</b> , 46, 4854-4867	2.3	50
171	Using a Two-Phase Columnar Solidification Model to Study the Principle of Mechanical Soft Reduction in Slab Casting. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2012</b> , 43, 945-964	2.3	49
170	Modeling of marangoni-induced droplet motion and melt convection during solidification of hypermonotectic alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2003</b> , 34, 3009-3019	2.3	49
169	Shape and stability of the slag/melt interface in a small dc ESR process. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 413-414, 129-134	5.3	48
168	Modeling of Multiscale and Multiphase Phenomena in Materials Processing. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2014</b> , 45, 36-43	2.5	45
167	On the Formation of Centreline Segregation in Continuous Slab Casting of Steel due to Bulging and/or Feeding. <i>Steel Research International</i> , <b>2010</b> , 81, 660-667	1.6	44

166	Application of laser measuring, numerical simulation and rapid prototyping to titanium dental castings. <i>Dental Materials</i> , <b>2001</b> , 17, 102-8	5.7	42
165	Simulation of the Electric Signal During the Formation and Departure of Droplets in the Electroslag Remelting Process. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2016</b> , 47, 1427-1434	2.5	41
164	Review on Modeling and Simulation of Electroslag Remelting. <i>Steel Research International</i> , <b>2018</b> , 89, 1700100	1.6	41
163	A four phase model for the macrosegregation and shrinkage cavity during solidification of steel ingot. <i>Applied Mathematical Modelling</i> , <b>2017</b> , 41, 102-120	4.5	40
162	Simulation of channel segregation using a two-phase columnar solidification model [Part I: Model description and verification. <i>Computational Materials Science</i> , <b>2012</b> , 55, 407-418	3.2	40
161	On the Importance of Electric Currents Flowing directly into the Mould during an ESR Process. <i>Steel Research International</i> , <b>2008</b> , 79, 632-636	1.6	40
160	A Dynamic Mesh-Based Approach to Model Melting and Shape of an ESR Electrode. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2015</b> , 46, 2049-2061	2.5	39
159	Analysis of macrosegregation formation and columnar-to-equiaxed transition during solidification of Al-4wt.%Cu ingot using a 5-phase model. <i>Journal of Crystal Growth</i> , <b>2015</b> , 417, 65-74	1.6	38
158	Modeling the Effects of Strand Surface Bulging and Mechanical Softreduction on the Macrosegregation Formation in Steel Continuous Casting. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2014</b> , 45, 1415-1434	2.3	38
157	Simulation of channel segregation using a two-phase columnar solidification model [Part II: Mechanism and parameter study. <i>Computational Materials Science</i> , <b>2012</b> , 55, 419-429	3.2	38
156	Modeling diffusion-governed solidification of ternary alloys - Part 1: Coupling solidification kinetics with thermodynamics. <i>Computational Materials Science</i> , <b>2013</b> , 79, 830-840	3.2	37
155	Solidification and Particle Entrapment during Continuous Casting of Steel. <i>Steel Research International</i> , <b>2008</b> , 79, 599-607	1.6	35
154	On Melting of Electrodes during Electro-Slag Remelting. <i>ISIJ International</i> , <b>2014</b> , 54, 1621-1628	1.7	32
153	On the Formation of Macrosegregations in Steel Ingot Castings. <i>Steel Research International</i> , <b>2008</b> , 79, 637-644	1.6	27
152	Modelling the solidification of hypermonotectic alloys. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2003</b> , 11, 755-769	2	27
151	Numerical Investigation of Shell Formation in Thin Slab Casting of Funnel-Type Mold. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2014</b> , 45, 1024-1037	2.5	25
150	Modeling diffusion-governed solidification of ternary alloys - Part 2: Macroscopic transport phenomena and macrosegregation. <i>Computational Materials Science</i> , <b>2014</b> , 92, 267-285	3.2	25
149	Influence of Phase-Transport Phenomena on Macrosegregation and Structure Formation During Solidification. <i>Advanced Engineering Materials</i> , <b>2003</b> , 5, 62-66	3.5	24

148	A transient model for nozzle clogging. <i>Powder Technology</i> , <b>2018</b> , 329, 181-198	5.2	23
147	Influence of the Frequency of the Applied AC Current on the Electroslag Remelting Process		23
146	Prediction of the As-Cast Structure of Al-4.0 Wt Pct Cu Ingots. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2013</b> , 44, 2895-2903	2.3	22
145	Computer aided prediction and control of shrinkage porosity in titanium dental castings. <i>Dental Materials</i> , <b>1998</b> , 14, 321-8	5.7	22
144	On Validity of Axisymmetric Assumption for Modeling an Industrial Scale Electroslag Remelting Process. <i>Advanced Engineering Materials</i> , <b>2016</b> , 18, 224-230	3.5	19
143	Effect of an Electrically-Conducting Wall on Transient Magnetohydrodynamic Flow in a Continuous-Casting Mold with an Electromagnetic Brake. <i>Metals</i> , <b>2018</b> , 8, 609	2.3	19
142	A Comprehensive Analysis of Macrosegregation Formation During Twin-Roll Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2019</b> , 50, 1334-1350	2.5	18
141	Experimental and numerical analysis of free surface deformation in an electrically driven flow. <i>Experimental Thermal and Fluid Science</i> , <b>2015</b> , 62, 192-201	3	18
140	Use of a mixed columnar-equiaxed solidification model to analyse the formation of as-cast structure and macrosegregation in a Sn-10 wt% Pb benchmark experiment. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 122, 939-953	4.9	18
139	A way of coupling ternary phase diagram information with multiphase solidification simulations. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 413-414, 485-489	5.3	18
138	Physical and Numerical Modeling of Exposed Slag Eye in Continuous Casting Mold using Euler-Euler Approach. <i>Steel Research International</i> , <b>2019</b> , 90, 1800117	1.6	17
137	Volume-Averaged Modeling of Multiphase Flow Phenomena during Alloy Solidification. <i>Metals</i> , <b>2019</b> , 9, 229	2.3	16
136	Reformulation of time averaged Joule heating in presence of temperature fluctuations. <i>International Journal of Cast Metals Research</i> , <b>2009</b> , 22, 155-159	1	16
135	A Numerical Study on the Influence of the Frequency of the Applied AC Current on the Electroslag Remelting Process		16
134	Electric Current Distribution During Electromagnetic Braking in Continuous Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2020</b> , 51, 2811-2828	2.5	16
133	Modelling the thermosolutal convection, shrinkage flow and grain movement of globular equiaxed solidification using a three phase model. <i>International Journal of Cast Metals Research</i> , <b>2005</b> , 18, 221-228 <sup>1</sup>		15
132	Review of Ammonium Chloride-Water Solution Properties. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2018</b> , 63, 3170-3183	2.8	14
131	Toward Modeling of Electrochemical Reactions during Electroslag Remelting (ESR) Process. <i>Steel Research International</i> , <b>2017</b> , 88, 1700011	1.6	13

130	3D Lattice Boltzmann flow simulations through dendritic mushy zones. <i>Engineering Analysis With Boundary Elements</i> , <b>2014</b> , 45, 29-35	2.6	13
129	Simulation of Horizontal Centrifugal Casting: Mold Filling and Solidification. <i>ISIJ International</i> , <b>2014</b> , 54, 266-274	1.7	13
128	Importance of Melt Flow in Solidifying Mushy Zone~!2009-09-25~!2010-02-26~!2010-04-16~!. <i>Open Transport Phenomena Journal</i> , <b>2010</b> , 2, 16-23		13
127	Incorporation of fragmentation into a volume average solidification model. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2018</b> , 26, 015004	2	12
126	Multiphase/multicomponent modeling of solidification processes: coupling solidification kinetics with thermodynamics. <i>International Journal of Materials Research</i> , <b>2008</b> , 99, 618-625	0.5	12
125	Numerical study of porosity in titanium dental castings. <i>Journal of Materials Science: Materials in Medicine</i> , <b>1999</b> , 10, 519-25	4.5	12
124	Scale-Adaptive Simulation of Transient Two-Phase Flow in Continuous-Casting Mold. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2019</b> , 50, 543-554	2.5	12
123	Heat Transfer Coefficient at Cast-Mold Interface During Centrifugal Casting: Calculation of Air Gap. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2018</b> , 49, 1421-1433	2.5	11
122	Numerical analysis of macrosegregation in vertically solidified Pb-Sn test castings [Part II: Equiaxed solidification. <i>Computational Materials Science</i> , <b>2016</b> , 124, 456-470	3.2	11
121	Observation of flow regimes and transitions during a columnar solidification experiment. <i>Fluid Dynamics Research</i> , <b>2014</b> , 46, 041424	1.2	11
120	Simultaneous Observation of Melt Flow and Motion of Equiaxed Crystals During Solidification Using a Dual Phase Particle Image Velocimetry Technique. Part I: Stage Characterization of Melt Flow and Equiaxed Crystal Motion. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2013</b> , 44, 650-660	2.3	11
119	Validation of a Multiphase Model for the Macrosegregation and Primary Structure of High-Grade Steel Ingots. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2009</b> , 40, 305-311	2.5	11
118	Simulation of Crystal Sedimentation and Viscoplastic Behavior of Sedimented Equiaxed Mushy Zones. <i>Transactions of the Indian Institute of Metals</i> , <b>2015</b> , 68, 1087-1094	1.2	10
117	Numerical analysis of macrosegregation in vertically solidified Pb-Sn test castings [Part I: Columnar solidification. <i>Computational Materials Science</i> , <b>2016</b> , 124, 444-455	3.2	10
116	Modelling macrosegregation in a 2.45 ton steel ingot. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2012</b> , 33, 012091	0.4	10
115	Generation of Reverse Meniscus Flow by Applying An Electromagnetic Brake. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2021</b> , 52, 3193-3207	2.5	10
114	A multiphysics model of the electroslag rapid remelting (ESRR) process. <i>Applied Thermal Engineering</i> , <b>2018</b> , 130, 1062-1069	5.8	10
113	Calculation Accuracy and Efficiency of a Transient Model for Submerged Entry Nozzle Clogging. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2019</b> , 50, 1428-1443	2.5	9

112	Confrontation of the Ohmic approach with the ionic transport approach for modeling the electrical behavior of an electrolyte. <i>Ionics</i> , <b>2018</b> , 24, 2157-2165	2.7	9
111	Physical and numerical simulation of mixed columnar-equiaxed solidification during cold strip feeding in continuous casting. <i>International Journal of Heat and Mass Transfer</i> , <b>2021</b> , 173, 121237	4.9	9
110	Simulation in Metallurgical Processing: Recent Developments and Future Perspectives. <i>Jom</i> , <b>2016</b> , 68, 2191-2197	2.1	9
109	Contribution of an Electro-Vortex Flow to Primary, Secondary, and Tertiary Electric Current Distribution in an Electrolyte. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, E604-E615	3.9	9
108	On the Coupling Mechanism of Equiaxed Crystal Generation with the Liquid Flow Driven by Natural Convection During Solidification. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2018</b> , 49, 1708-1724	2.3	8
107	Simultaneous Observation of Melt Flow and Motion of Equiaxed Crystals During Solidification Using a Dual Phase Particle Image Velocimetry Technique. Part II: Relative Velocities. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2013</b> , 44, 661-668	2.3	8
106	A Water Experiment Benchmark to Evaluate Numerical Models for the Motion of Particles in Continuous Casting Tundish. <i>Steel Research International</i> , <b>2017</b> , 88, 1600276	1.6	8
105	Simulation of casting, homogenization, and hot rolling: consecutive process and microstructure modelling for aluminium sheet production. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2004</b> , 12, S19-S31	2	8
104	Study of spatial phase separation during solidification and its impact on the formation of macrosegregations. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 413-414, 192-199	5.3	8
103	Numerical simulation of the casting process of titanium tooth crowns and bridges. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2001</b> , 12, 485-90	4.5	8
102	Influence of forced convection on solidification and remelting in the developing mushy zone. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2016</b> , 117, 012045	0.4	8
101	An Experimental Benchmark of Non-metallic Inclusion Distribution Inside a Heavy Continuous-Casting Slab. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2019</b> , 50, 1370-1379	2.3	8
100	An idea to treat the dendritic morphology in mixed columnar-equiaxed solidification. <i>International Journal of Cast Metals Research</i> , <b>2009</b> , 22, 323-326	1	7
99	A Parametric Study of the Vacuum Arc Remelting (VAR) Process: Effects of Arc Radius, Side-Arcing, and Gas Cooling. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2020</b> , 51, 222-235	2.5	7
98	Modeling of the Twin-Roll Casting Process: Transition from Casting to Rolling. <i>Transactions of the Indian Institute of Metals</i> , <b>2018</b> , 71, 2645-2649	1.2	7
97	Massive Formation of Equiaxed Crystals by Avalanches of Mushy Zone Segments. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2017</b> , 48, 2927-2931	2.3	6
96	A Numerical Investigation on the Electrochemical Behavior of CaO and Al <sub>2</sub> O <sub>3</sub> in the ESR Slags. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2020</b> , 51, 871-879	2.5	6
95	Simulation of As-Cast Steel Ingots. <i>Steel Research International</i> , <b>2018</b> , 89, 1700037	1.6	6

94	Application of Microprobe Analysis to the Reconstruction and Characterization of Dendritic Structures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2013</b> , 44, 607-616	2.3	6
93	Using four-phase Eulerian volume averaging approach to model macrosegregation and shrinkage cavity. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 84, 012006	0.4	6
92	Modeling of the flow-solidification interaction in thin slab casting. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2012</b> , 33, 012014	0.4	6
91	Numerical simulation of the casting process of titanium removable partial denture frameworks. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2002</b> , 13, 301-6	4.5	6
90	Two-phase modelling of equiaxed crystal sedimentation and thermomechanic stress development in the sedimented packed bed. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 84, 012102	0.4	6
89	On modelling viscoplastic behavior of the solidifying shell in the funnel-type continuous casting mold. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2019</b> , 529, 012081	0.4	6
88	Modeling electrochemical transport of ions in the molten CaF <sub>2</sub> -BeO slag operating under a DC voltage. <i>Applied Mathematics and Computation</i> , <b>2019</b> , 357, 357-373	2.7	6
87	Modelling viscoplastic behavior of solidifying shell under applied electromagnetic breaking during continuous casting. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2020</b> , 861, 012015	0.4	5
86	Two-phase viscoplastic model for the simulation of twin roll casting. <i>Journal of Materials Processing Technology</i> , <b>2020</b> , 286, 116814	5.3	5
85	Exploration of the double-diffusive convection during dendritic solidification with a combined volume-averaging and cellular-automaton model. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2012</b> , 33, 012115	0.4	5
84	3D Simulation of the Melting during an Electro-Slag Remelting Process <b>2012</b> , 770-778		5
83	Evaluation of a mixed columnar-equiaxed solidification model with laboratory castings. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2012</b> , 27, 012018	0.4	5
82	Assessment of Different Turbulence Models for the Motion of Non-metallic Inclusion in Induction Crucible Furnace. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2016</b> , 143, 012026	0.4	4
81	Impact of hydrodynamics on growth and morphology of faceted crystals. <i>Journal of Crystal Growth</i> , <b>2020</b> , 541, 125667	1.6	4
80	Numerical investigation of grid influence on formation of macrosegregation. <i>International Journal of Cast Metals Research</i> , <b>2009</b> , 22, 175-178	1	4
79	Numerical simulation of porosity-free titanium dental castings. <i>European Journal of Oral Sciences</i> , <b>1999</b> , 107, 307-15	2.3	4
78	Contribution of the Mould Current to the Ingot Surface Quality in the Electroslag Remelting Process <b>2013</b> , 95-99		4
77	Variation of the Resistance During the Electrode Movement in the Electroslag Remelting Process <b>2013</b> , 145-150		4

76	Numerical study of the role of mush permeability in the solidifying mushy zone under forced convection. <i>Materials Today Communications</i> , <b>2020</b> , 22, 100842	2.5	4
75	Role of Solidification in Submerged Entry Nozzle Clogging During Continuous Casting of Steel. <i>Steel Research International</i> , <b>2020</b> , 91, 2000230	1.6	4
74	A GPU solver for symmetric positive-definite matrices vs. traditional codes. <i>Computers and Mathematics With Applications</i> , <b>2019</b> , 78, 2933-2943	2.7	3
73	Transient melting of an ESR electrode. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2016</b> , 143, 012003	0.4	3
72	A 2D Multiphase Model of Drop Behavior during Electroslag Remelting. <i>Metals</i> , <b>2020</b> , 10, 490	2.3	3
71	A Dynamic Mesh Method to Model Shape Change during Electrodeposition. <i>Journal of the Electrochemical Society</i> , <b>2019</b> , 166, D521-D529	3.9	3
70	A scale adaptive dendritic envelope model of solidification at mesoscopic scales. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 84, 012032	0.4	3
69	Shallow water model for horizontal centrifugal casting. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2012</b> , 33, 012032	0.4	3
68	Experimental and numerical investigations of NH <sub>4</sub> Cl solidification in a mould Part 2: numerical results. <i>International Journal of Cast Metals Research</i> , <b>2009</b> , 22, 172-174	1	3
67	Simulation of the as-cast structure of Al-4.0wt.%Cu ingots with a 5-phase mixed columnar-equiaxed solidification model. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2012</b> , 33, 012075	0.4	3
66	Mathematical Modeling of the Early Stage of Clogging of the SEN During Continuous Casting of Ti-ULC Steel. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2011</b> , 42, 4609-4622	2.5	3
65	Flow-solidification interaction: A numerical study on solidification of NH <sub>4</sub> Cl 70wt.%H <sub>2</sub> O solution in a water-cooled mould with a large sample thickness. <i>International Journal of Heat and Mass Transfer</i> , <b>2021</b> , 164, 120566	4.9	3
64	Macrosegregation Formation in an AlSi Casting Sample with Cross-sectional Change During Directional Solidification. <i>Transactions of the Indian Institute of Metals</i> , <b>2018</b> , 71, 2639-2643	1.2	3
63	On Modelling Parasitic Solidification Due to Heat Loss at Submerged Entry Nozzle Region of Continuous Casting Mold. <i>Metals</i> , <b>2021</b> , 11, 1375	2.3	3
62	Bridging Capillary-Driven Fragmentation and Grain Transport with Mixed Columnar-Equiaxed Solidification. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2021</b> , 52, 4609-4622	2.3	3
61	Modelling melting and grain destruction phenomena during globular equiaxed solidification. <i>Applied Mathematical Modelling</i> , <b>2021</b> , 97, 821-838	4.5	3
60	An approximate Riemann solver for shallow water equations and heat advection in horizontal centrifugal casting. <i>Applied Mathematics and Computation</i> , <b>2015</b> , 267, 179-194	2.7	2
59	Numerical Study about the Influence of Small Casting Speed Variations on the Metallurgical Length in Continuous Casting of Steel Slabs. <i>Steel Research International</i> , <b>2015</b> , 86, 184-188	1.6	2



58	A volume of fluid (VOF) method to model shape change during electrodeposition. <i>Electrochemistry Communications</i> , <b>2020</b> , 112, 106675	5.1	2
57	Simulation of Non-metallic Inclusion Deposition and Clogging of Nozzle. <i>Minerals, Metals and Materials Series</i> , <b>2018</b> , 149-158	0.3	2
56	Premature melt solidification during mold filling and its influence on the as-cast structure. <i>Frontiers of Mechanical Engineering</i> , <b>2018</b> , 13, 53-65	3.3	2
55	Modelling Al-4wt.%Cu as-cast structure using equiaxed morphological parameters deduced from in-situ synchrotron X-ray radiography. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2016</b> , 117, 012010	0.4	2
54	Advanced Process Simulation of Solidification and Melting. <i>BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik</i> , <b>2014</b> , 159, 30-40	0.6	2
53	Process Simulation for the Metallurgical Industry: New Insights into Invisible Phenomena. <i>BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik</i> , <b>2013</b> , 158, 184-188	0.6	2
52	Benchmark experiments and numerical modelling of the columnar-equiaxed dendritic growth in the transparent alloy Neopentylglycol-(d)Camphor. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 84, 012086	0.4	2
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32	A (non-)hydrostatic free-surface numerical model for two-layer flows. <i>Applied Mathematics and Computation</i> , <b>2018</b> , 319, 301-317	2.7	1
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29	Role of fragmentation in as-cast structure: numerical study and experimental validation. <i>China Foundry</i> , <b>2017</b> , 14, 321-326	0.8	1
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