

# Menghuai Wu

## List of Publications by Year in descending order

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178  
papers

3,526  
citations

126907

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189892

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194  
docs citations

194  
times ranked

838  
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling of the as-cast structure and macrosegregation in the continuous casting of a steel billet: Effect of M-EMS. Journal of Materials Processing Technology, 2022, 301, 117434.	6.3	18
2	Hydrodynamically driven facet kinetics in crystal growth. Journal of Crystal Growth, 2022, 584, 126557.	1.5	1
3	Norton-Hoff model for deformation of growing solid shell of thin slab casting in funnel-shape mold. Journal of Iron and Steel Research International, 2022, 29, 88-102.	2.8	10
4	Modeling Asymmetric Flow in the Thin Slab Casting Mold Under Electromagnetic Brake. Steel Research International, 2022, 93, .	1.8	7
5	Tornados and cyclones driven by Magneto-hydrodynamic forces. European Journal of Mechanics, B/Fluids, 2022, 94, 90-105.	2.5	5
6	Important Key Process Simulations in the Field of Steel Metallurgy. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2022, 167, 2-9.	1.0	0
7	Experimental Evaluation of MHD Modeling of EMS During Continuous Casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2022, 53, 2166-2181.	2.1	5
8	Numerical modeling and experimental validation of the effect of arc distribution on the as-solidified Ti64 ingot in vacuum arc remelting (VAR) process. Journal of Materials Research and Technology, 2022, 19, 183-193.	5.8	8
9	Validation of a capillary-driven fragmentation model during mixed columnar-equiaxed solidification with melt convection and grain transport. Materialia, 2022, 23, 101462.	2.7	3
10	The Role of Mold Electromagnetic Stirring in the Dissipation of Superheat during the Continuous Casting of Billets. Steel Research International, 2022, 93, .	1.8	5
11	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. International Journal of Heat and Mass Transfer, 2021, 164, 120566.	4.8	7
12	Geometrical effect on macrosegregation formation during unidirectional solidification of Al-Si alloy. Journal of Materials Processing Technology, 2021, 288, 116913.	6.3	3
13	Hydrodynamically enhanced electrochemical mass transfer on the surface of an electrically conductive droplet. Heat and Mass Transfer, 2021, 57, 1697-1705.	2.1	2
14	Directional Solidification of AlSi7Fe1 Alloy Under Forced Flow Conditions: Effect of Intermetallic Phase Precipitation and Dendrite Coarsening. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 3007-3022.	2.2	8
15	Generation of Reverse Meniscus Flow by Applying An Electromagnetic Brake. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 3193-3207.	2.1	21
16	Physical and numerical simulation of mixed columnar-equiaxed solidification during cold strip feeding in continuous casting. International Journal of Heat and Mass Transfer, 2021, 173, 121237.	4.8	22
17	A Numerical Study on the Influence of an Axial Magnetic Field (AMF) on Vacuum Arc Remelting (VAR) Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 3354-3362.	2.1	14
18	On Modelling Parasitic Solidification Due to Heat Loss at Submerged Entry Nozzle Region of Continuous Casting Mold. Metals, 2021, 11, 1375.	2.3	12

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19	Bridging Capillary-Driven Fragmentation and Grain Transport with Mixed Columnar-Equiaxed Solidification. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 4609-4622.	2.2	8
20	Modelling melting and grain destruction phenomena during globular equiaxed solidification. Applied Mathematical Modelling, 2021, 97, 821-838.	4.2	10
21	Toward a Simplified Arc Impingement Model in a Direct-Current Electric Arc Furnace. Metals, 2021, 11, 1482.	2.3	4
22	Mathematical Modeling of the Early Stage of Clogging of the SEN During Continuous Casting of Ti-ULC Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 4167-4178.	2.1	17
23	Investigation of effect of electrode polarity on electrochemistry and magnetohydrodynamics using tertiary current distribution in electroslag remelting process. Journal of Iron and Steel Research International, 2021, 28, 1551-1561.	2.8	2
24	Reverse flows and flattening of a submerged jet under the action of a transverse magnetic field. Physical Review Fluids, 2021, 6, .	2.5	7
25	A Parametric Study of the Vacuum Arc Remelting (VAR) Process: Effects of Arc Radius, Side-Arcing, and Gas Cooling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 222-235.	2.1	22
26	Numerical study of the role of mush permeability in the solidifying mushy zone under forced convection. Materials Today Communications, 2020, 22, 100842.	1.9	5
27	Modelling of shear bands during solidification. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012066.	0.6	0
28	Role of Solidification in Submerged Entry Nozzle Clogging During Continuous Casting of Steel. Steel Research International, 2020, 91, 2000230.	1.8	11
29	Modeling mixed columnar-equiaxed solidification of Sn-10wt%Pb alloy under forced convection driven by travelling magnetic stirring. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012024.	0.6	0
30	Numerical investigation of an in-situ observed flow regimes during solidification of an NH <sub>4</sub> Cl 70 wt%H <sub>2</sub> O solution. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012041.	0.6	0
31	Impact of crystal sedimentation and viscoplastic semi-solid dynamics on macrosegregation. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012042.	0.6	2
32	Electric Current Distribution During Electromagnetic Braking in Continuous Casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 2811-2828.	2.1	26
33	A 2D Multiphase Model of Drop Behavior during Electroslag Remelting. Metals, 2020, 10, 490.	2.3	4
34	Impact of hydrodynamics on growth and morphology of faceted crystals. Journal of Crystal Growth, 2020, 541, 125667.	1.5	14
35	Influence of crystal fragmentation on the formation of microstructure and macrosegregation during directional solidification under forced convection condition. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012048.	0.6	0
36	Modelling viscoplastic behavior of solidifying shell under applied electromagnetic braking during continuous casting. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012015.	0.6	8

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37	Two-phase viscoplastic model for the simulation of twin roll casting. <i>Journal of Materials Processing Technology</i> , 2020, 286, 116814.	6.3	13
38	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> , 2020, 51, 871-879.	2.1	7
39	A volume of fluid (VOF) method to model shape change during electrodeposition. <i>Electrochemistry Communications</i> , 2020, 112, 106675.	4.7	7
40	Physical and Numerical Modeling of Exposed Slag Eye in Continuous Casting Mold using Euler–Euler Approach. <i>Steel Research International</i> , 2019, 90, 1800117.	1.8	30
41	A Dynamic Mesh Method to Model Shape Change during Electrodeposition. <i>Journal of the Electrochemical Society</i> , 2019, 166, D521-D529.	2.9	5
42	A Comprehensive Analysis of Macrosegregation Formation During Twin-Roll Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 1334-1350.	2.1	23
43	A GPU solver for symmetric positive-definite matrices vs. traditional codes. <i>Computers and Mathematics With Applications</i> , 2019, 78, 2933-2943.	2.7	3
44	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> , 2019, 50, 1428-1443.	2.1	17
45	Volume-Averaged Modeling of Multiphase Flow Phenomena during Alloy Solidification. <i>Metals</i> , 2019, 9, 229.	2.3	33
46	On the Modelling of Macrosegregation during Twin-Roll Casting. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 529, 012041.	0.6	0
47	On modelling viscoplastic behavior of the solidifying shell in the funnel-type continuous casting mold. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 529, 012081.	0.6	7
48	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> , 2019, 50, 1370-1379.	2.2	9
49	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> , 2019, 50, 543-554.	2.1	17
50	Modeling electrochemical transport of ions in the molten CaF <sub>2</sub> –FeO slag operating under a DC voltage. <i>Applied Mathematics and Computation</i> , 2019, 357, 357-373.	2.2	6
51	Optimizing the Flow Conditions in the Thin-Slab Casting Mold Using Electromagnetic Brake. , 2019, , .		0
52	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> , 2018, 122, 939-953.	4.8	30
53	A transient model for nozzle clogging. <i>Powder Technology</i> , 2018, 329, 181-198.	4.2	44
54	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> , 2018, 49, 1708-1724.	2.2	8

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55	Simulation of Non-metallic Inclusion Deposition and Clogging of Nozzle. Minerals, Metals and Materials Series, 2018, , 149-158.	0.4	4
56	Confrontation of the Ohmic approach with the ionic transport approach for modeling the electrical behavior of an electrolyte. Ionics, 2018, 24, 2157-2165.	2.4	13
57	Heat Transfer Coefficient at Cast-Mold Interface During Centrifugal Casting: Calculation of Air Gap. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 1421-1433.	2.1	16
58	A (non-)hydrostatic free-surface numerical model for two-layer flows. Applied Mathematics and Computation, 2018, 319, 301-317.	2.2	1
59	Simulation of As-cast Steel Ingots. Steel Research International, 2018, 89, 1700037.	1.8	17
60	Premature melt solidification during mold filling and its influence on the as-cast structure. Frontiers of Mechanical Engineering, 2018, 13, 53-65.	4.3	5
61	Incorporation of fragmentation into a volume average solidification model. Modelling and Simulation in Materials Science and Engineering, 2018, 26, 015004.	2.0	20
62	A multiphysics model of the electroslag rapid remelting (ESRR) process. Applied Thermal Engineering, 2018, 130, 1062-1069.	6.0	16
63	Review on Modeling and Simulation of Electroslag Remelting. Steel Research International, 2018, 89, 1700100.	1.8	61
64	Macrosegregation Formation in an Al-Si Casting Sample with Cross-sectional Change During Directional Solidification. Transactions of the Indian Institute of Metals, 2018, 71, 2639-2643.	1.5	5
65	Numerical Investigation of Collective Motion of Cathode Spots. , 2018, , .		1
66	Effect of an Electrically-Conducting Wall on Transient Magnetohydrodynamic Flow in a Continuous-Casting Mold with an Electromagnetic Brake. Metals, 2018, 8, 609.	2.3	27
67	Modeling of the Twin-Roll Casting Process: Transition from Casting to Rolling. Transactions of the Indian Institute of Metals, 2018, 71, 2645-2649.	1.5	8
68	Contribution of an Electro-Vortex Flow to Primary, Secondary, and Tertiary Electric Current Distribution in an Electrolyte. Journal of the Electrochemical Society, 2018, 165, E604-E615.	2.9	16
69	Review of Ammonium Chloride-Water Solution Properties. Journal of Chemical & Engineering Data, 2018, 63, 3170-3183.	1.9	25
70	Discussion on Modeling Capability for Macrosegregation. High Temperature Materials and Processes, 2017, 36, 531-539.	1.4	2
71	Toward Modeling of Electrochemical Reactions during Electroslag Remelting (ESR) Process. Steel Research International, 2017, 88, 1700011.	1.8	15
72	Massive Formation of Equiaxed Crystals by Avalanches of Mushy Zone Segments. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 2927-2931.	2.2	10

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73	A four phase model for the macrosegregation and shrinkage cavity during solidification of steel ingot. Applied Mathematical Modelling, 2017, 41, 102-120.	4.2	58
74	A Water Experiment Benchmark to Evaluate Numerical Models for the Motion of Particles in Continuous Casting Tundish. Steel Research International, 2017, 88, 1600276.	1.8	10
75	Role of fragmentation in as-cast structure: numerical study and experimental validation. China Foundry, 2017, 14, 321-326.	1.4	1
76	Assessment of Different Turbulence Models for the Motion of Non-metallic Inclusion in Induction Crucible Furnace. IOP Conference Series: Materials Science and Engineering, 2016, 143, 012026.	0.6	4
77	An attempt to model electrode change during the ESR process. IOP Conference Series: Materials Science and Engineering, 2016, 143, 012006.	0.6	1
78	Transient melting of an ESR electrode. IOP Conference Series: Materials Science and Engineering, 2016, 143, 012003.	0.6	3
79	A numerical study on electrochemical transport of ions in calcium fluoride slag. IOP Conference Series: Materials Science and Engineering, 2016, 143, 012008.	0.6	2
80	Influence of forced convection on solidification and remelting in the developing mushy zone. IOP Conference Series: Materials Science and Engineering, 2016, 117, 012045.	0.6	13
81	Simulation in Metallurgical Processing: Recent Developments and Future Perspectives. Jom, 2016, 68, 2191-2197.	1.9	12
82	On Validity of Axisymmetric Assumption for Modeling an Industrial Scale Electroslag Remelting Process. Advanced Engineering Materials, 2016, 18, 224-230.	3.5	23
83	Simulation of macrosegregation in a large vertical continuous casting of steel. IOP Conference Series: Materials Science and Engineering, 2016, 143, 012032.	0.6	3
84	Numerical analysis of macrosegregation in vertically solidified Pb-Sn test castings – Part I: Columnar solidification. Computational Materials Science, 2016, 124, 444-455.	3.0	13
85	Numerical analysis of macrosegregation in vertically solidified Pb-Sn test castings – Part II: Equiaxed solidification. Computational Materials Science, 2016, 124, 456-470.	3.0	14
86	Modelling Al-4wt.%Cu as-cast structure using equiaxed morphological parameters deduced from in-situ synchrotron X-ray radiography. IOP Conference Series: Materials Science and Engineering, 2016, 117, 012010.	0.6	3
87	Free-surface flow in horizontally rotating cylinder: experiment and simulation. IOP Conference Series: Materials Science and Engineering, 2016, 143, 012036.	0.6	1
88	Numerical investigation of solidification and CET of the transparent alloy NPG-37.5 wt.% DC in microgravity – TRACE experiment. IOP Conference Series: Materials Science and Engineering, 2016, 117, 012011.	0.6	2
89	On the Importance of Modeling 3D Shrinkage Cavities for the Prediction of Macrosegregation in Steel Ingots. Minerals, Metals and Materials Series, 2016, , 3-10.	0.4	1
90	Simulation of thermos-solutal convection induced macrosegregation in a Sn-10%Pb alloy benchmark during columnar solidification. IOP Conference Series: Materials Science and Engineering, 2016, 119, 012004.	0.6	0

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91	Simulation of the Electric Signal During the Formation and Departure of Droplets in the Electroslag Remelting Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 1427-1434.	2.1	44
92	Benchmark experiments and numerical modelling of the columnar-equiaxed dendritic growth in the transparent alloy Neopentylglycol-(d)Camphor. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012086.	0.6	5
93	A scale adaptive dendritic envelope model of solidification at mesoscopic scales. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012032.	0.6	4
94	Using four-phase Eulerian volume averaging approach to model macrosegregation and shrinkage cavity. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012006.	0.6	7
95	A Dynamic Mesh-Based Approach to Model Melting and Shape of an ESR Electrode. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 2049-2061.	2.1	45
96	Numerical simulation of multi-mini-pot pouring process of a 13-ton steel ingot. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012009.	0.6	0
97	Modelling of macrosegregation in direct chill casting considering columnar-to-equiaxed transition using 3-phase Eulerian approach. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012061.	0.6	0
98	Modified Shallow Water Equations With Application for Horizontal Centrifugal Casting of Rolls. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	1.5	2
99	An approximate Riemann solver for shallow water equations and heat advection in horizontal centrifugal casting. Applied Mathematics and Computation, 2015, 267, 179-194.	2.2	3
100	Experimental and numerical analysis of free surface deformation in an electrically driven flow. Experimental Thermal and Fluid Science, 2015, 62, 192-201.	2.7	21
101	On Macrosegregation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4854-4867.	2.2	65
102	Numerical Study about the Influence of Small Casting Speed Variations on the Metallurgical Length in Continuous Casting of Steel Slabs. Steel Research International, 2015, 86, 184-188.	1.8	3
103	Recent Developments and Future Perspectives in Simulation of Metallurgical Processes. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2015, 160, 507-512.	1.0	1
104	Simulation of Crystal Sedimentation and Viscoplastic Behavior of Sedimented Equiaxed Mushy Zones. Transactions of the Indian Institute of Metals, 2015, 68, 1087-1094.	1.5	10
105	Analysis of macrosegregation formation and columnar-to-equiaxed transition during solidification of Al-4wt.%Cu ingot using a 5-phase model. Journal of Crystal Growth, 2015, 417, 65-74.	1.5	42
106	Two-phase modelling of equiaxed crystal sedimentation and thermomechanic stress development in the sedimented packed bed. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012102.	0.6	6
107	Modeling of Multiscale and Multiphase Phenomena in Materials Processing. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 36-43.	2.1	50
108	Advanced Process Simulation of Solidification and Melting. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2014, 159, 30-40.	1.0	2

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109	Numerical Investigation of Shell Formation in Thin Slab Casting of Funnel-Type Mold. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 1024-1037.	2.1	39
110	Modeling the Effects of Strand Surface Bulging and Mechanical Softreduction on the Macroseggregation Formation in Steel Continuous Casting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 1415-1434.	2.2	47
111	3D Lattice Boltzmann flow simulations through dendritic mushy zones. Engineering Analysis With Boundary Elements, 2014, 45, 29-35.	3.7	19
112	Observation of flow regimes and transitions during a columnar solidification experiment. Fluid Dynamics Research, 2014, 46, 041424.	1.3	12
113	Modeling diffusion-governed solidification of ternary alloys " Part 2: Macroscopic transport phenomena and macroseggregation. Computational Materials Science, 2014, 92, 267-285.	3.0	30
114	Simulation of macroseggregation in a 2.45-ton steel ingot using a three-phase mixed columnar-equiaxed model. International Journal of Heat and Mass Transfer, 2014, 72, 668-679.	4.8	126
115	Simulation of Horizontal Centrifugal Casting: Mold Filling and Solidification. ISIJ International, 2014, 54, 266-274.	1.4	16
116	On Melting of Electrodes during Electro-Slag Remelting. ISIJ International, 2014, 54, 1621-1628.	1.4	40
117	Process Simulation for the Metallurgical Industry: New Insights into Invisible Phenomena. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2013, 158, 184-188.	1.0	2
118	Application of Microprobe Analysis to the Reconstruction and Characterization of Dendritic Structures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 607-616.	2.2	7
119	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. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 650-660.	2.2	11
120	Simultaneous Observation of Melt Flow and Motion of Equiaxed Crystals During Solidification Using a Dual Phase Particle Image Velocimetry Technique. Part II: Relative Velocities. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 661-668.	2.2	10
121	Prediction of the As-Cast Structure of Al-4.0Wt%PctCu Ingots. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2895-2903.	2.2	23
122	Modeling diffusion-governed solidification of ternary alloys " Part 1: Coupling solidification kinetics with thermodynamics. Computational Materials Science, 2013, 79, 830-840.	3.0	45
123	Contribution of the Mould Current to the Ingot Surface Quality in the Electroslag Remelting Process. , 2013, , 95-99.		5
124	A Numerical Study on the Influence of the Frequency of the Applied AC Current on the Electroslag Remelting Process. , 2013, , 13-19.		17
125	Variation of the Resistance During the Electrode Movement in the Electroslag Remelting Process. , 2013, , 145-150.		5
126	Using a Three-Phase Mixed Columnar-Equiaxed Solidification Model to Study Macroseggregation in Ingot Castings: Perspectives and Limitations. , 2013, , 171-180.		2



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127	3D simulation of interdendritic flow through a Al-18wt.%Cu structure captured with X-ray microtomography. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012016.	0.6	3
128	Numerical study of the influence of mold filling conditions on the as-cast structure of Al-4 wt.% Cu ingots. , 2012, , .		1
129	Modelling macrosegregation in a 2.45 ton steel ingot. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012091.	0.6	10
130	Evaluation of a mixed columnar-equiaxed solidification model with laboratory castings. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012018.	0.6	9
131	Simulation of the as-cast structure of Al-4.0wt.%Cu ingots with a 5-phase mixed columnar-equiaxed solidification model. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012075.	0.6	4
132	Simultaneous observation of melt flow and motion of equiaxed crystals during solidification using a dual phase Particle Image Velocimetry technique. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012042.	0.6	2
133	Shallow water model for horizontal centrifugal casting. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012032.	0.6	3
134	Exploration of the double-diffusive convection during dendritic solidification with a combined volume-averaging and cellular-automaton model. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012115.	0.6	5
135	Simulation of channel segregation using a two-phase columnar solidification model â€œ Part II: Mechanism and parameter study. Computational Materials Science, 2012, 55, 419-429.	3.0	46
136	Simulation of channel segregation using a two-phase columnar solidification model â€œ Part I: Model description and verification. Computational Materials Science, 2012, 55, 407-418.	3.0	51
137	A 3-phase model for mixed columnar-equiaxed solidification in DC casting of bronze. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012015.	0.6	3
138	Modeling of the flow-solidification interaction in thin slab casting. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012014.	0.6	11
139	Study of the channel segregation using a two-phase columnar solidification model. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012055.	0.6	0
140	Using a Two-Phase Columnar Solidification Model to Study the Principle of Mechanical Soft Reduction in Slab Casting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 945-964.	2.2	62
141	Thermo-mechanical modeling of dendrite deformation in continuous casting of steel. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012058.	0.6	2
142	On the Formation of Centreline Segregation in Continuous Slab Casting of Steel due to Bulging and/or Feeding. Steel Research International, 2010, 81, 660-667.	1.8	50
143	Modelling mixed columnar-equiaxed solidification with melt convection and grain sedimentation â€œ Part I: Model description. Computational Materials Science, 2010, 50, 32-42.	3.0	99
144	Modelling mixed columnar-equiaxed solidification with melt convection and grain sedimentation â€œ Part II: Illustrative modelling results and parameter studies. Computational Materials Science, 2010, 50, 43-58.	3.0	65

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145	Importance of Melt Flow in Solidifying Mushy Zone–!2009-09-25–!2010-02-26–!2010-04-16–!. Open Transport Phenomena Journal, 2010, 2, 16-23.	0.5	15
146	Experimental and numerical investigations of NH4Cl solidification in a mould Part 2: numerical results. International Journal of Cast Metals Research, 2009, 22, 172-174.	1.0	3
147	An idea to treat the dendritic morphology in mixed columnar–“equiaxed solidification. International Journal of Cast Metals Research, 2009, 22, 323-326.	1.0	8
148	Numerical investigation of grid influence on formation of macrosegregation. International Journal of Cast Metals Research, 2009, 22, 175-178.	1.0	4
149	Reformulation of time averaged Joule heating in presence of temperature fluctuations. International Journal of Cast Metals Research, 2009, 22, 155-159.	1.0	16
150	Validation of a Multiphase Model for the Macrosegregation and Primary Structure of High-Grade Steel Ingots. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2009, 40, 305-311.	2.1	12
151	Modeling equiaxed solidification with melt convection and grain sedimentation–“I: Model description. Acta Materialia, 2009, 57, 5621-5631.	7.9	135
152	Modeling equiaxed solidification with melt convection and grain sedimentation–“II. Model verification. Acta Materialia, 2009, 57, 5632-5644.	7.9	76
153	Numerical Modelling of the Effect of Global Transport Phenomena on the Microstructure Formation. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2008, 153, 253-256.	1.0	0
154	Multiphase/multicomponent modeling of solidification processes: coupling solidification kinetics with thermodynamics. International Journal of Materials Research, 2008, 99, 618-625.	0.3	12
155	On the Importance of Electric Currents Flowing directly into the Mould during an ESR Process. Steel Research International, 2008, 79, 632-636.	1.8	48
156	Solidification and Particle Entrapment during Continuous Casting of Steel. Steel Research International, 2008, 79, 599-607.	1.8	49
157	On the Formation of Macroseggregations in Steel Ingot Castings. Steel Research International, 2008, 79, 637-644.	1.8	30
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