

Brian G Thomas

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.

190
papers

6,888
citations

47
h-index

77
g-index

202
ext. papers

7,687
ext. citations

2.2
avg, IF

6.24
L-index

#	Paper	IF	Citations
190	State of the Art in Evaluation and Control of Steel Cleanliness.. <i>ISIJ International</i> , 2003 , 43, 271-291	1.7	408
189	Fixed grid techniques for phase change problems: A review. <i>International Journal for Numerical Methods in Engineering</i> , 1990 , 30, 875-898	2.4	358
188	Heat-transfer and solidification model of continuous slab casting: CON1D. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2003 , 34, 685-705	2.5	282
187	Simple model of microsegregation during solidification of steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2001 , 32, 1755-1767	2.3	224
186	Thermomechanical finite-element model of shell behavior in continuous casting of steel. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2004 , 35, 1151-1172	2.5	196
185	Mathematical Modeling of Iron and Steel Making Processes. Mathematical Modeling of Fluid Flow in Continuous Casting.. <i>ISIJ International</i> , 2001 , 41, 1181-1193	1.7	170
184	State of the art in the control of inclusions during steel ingot casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2006 , 37, 733-761	2.5	164
183	Inclusion removal by bubble flotation in a continuous casting mold. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2006 , 37, 361-379	2.5	131
182	Investigation of Fluid Flow and Steel Cleanliness in the Continuous Casting Strand. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2007 , 38, 63-83	2.5	130
181	Modeling of inclusion removal in a tundish. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1999 , 30, 639-654	2.5	123
180	Simple constitutive equations for steel at high temperature. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1992 , 23, 903-918		113
179	Simulation of fluid flow inside a continuous slab-casting machine. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1990 , 21, 387-400		107
178	Modeling superheat removal during continuous casting of steel slabs. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1992 , 23, 339-356	2.5	104
177	Flow Control with Local Electromagnetic Braking in Continuous Casting of Steel Slabs. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2008 , 39, 94-107	2.5	100
176	Initial development of thermal and stress fields in continuously cast steel billets. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1988 , 19, 2589-2602		98
175	Bubble formation during horizontal gas injection into downward-flowing liquid. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2001 , 32, 1143-1159	2.5	96
174	Simulation of Argon Gas Flow Effects in a Continuous Slab Caster. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1994 , 25, 527-547	2.5	94

173	Modeling of the continuous casting of steel past, present, and future. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2002 , 33, 795-812	2.5	87
172	Study of transient flow and particle transport in continuous steel caster molds: Part I. Fluid flow. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2004 , 35, 685-702	2.5	86
171	Modeling transient slag-layer phenomena in the shell/mold gap in continuous casting of steel. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2003 , 34, 707-725	2.5	86
170	Mathematical Modeling of Iron and Steel Making Processes. Comparison of Four Methods to Evaluate Fluid Velocities in a Continuous Slab Casting Mold.. <i>ISIJ International</i> , 2001 , 41, 1262-1271	1.7	86
169	Turbulent flow of liquid steel and argon bubbles in slide-gate tundish nozzles: Part I. model development and validation. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2001 , 32, 253-267	2.5	85
168	Modeling creep and fatigue of copper alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000 , 31, 2491-2502	2.3	83
167	Prediction of dendrite arm spacing for low alloy steel casting processes. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1996 , 27, 689-693	2.5	83
166	Review on Modeling and Simulation of Continuous Casting. <i>Steel Research International</i> , 2018 , 89, 1700318	2.5	83
165	Numerical study of steady turbulent flow through bifurcated nozzles in continuous casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1995 , 26, 749-765	2.5	80
164	Flow and thermal behavior of the top surface flux/powder layers in continuous casting molds. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1996 , 27, 672-685	2.5	79
163	The use of water cooling during the continuous casting of steel and aluminum alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2005 , 36, 187-204	2.3	77
162	Effect of Electromagnetic Ruler Braking (EMBr) on Transient Turbulent Flow in Continuous Slab Casting using Large Eddy Simulations. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2012 , 43, 532-553	2.5	75
161	Transport and Entrapment of Particles in Steel Continuous Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2014 , 45, 22-35	2.5	74
160	Study of transient flow and particle transport in continuous steel caster molds: Part II. Particle transport. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2004 , 35, 703-714	2.5	73
159	Comparison of numerical modeling techniques for complex, two-dimensional, transient heat-conduction problems. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1984 , 15, 307-318		69
158	Thermo-mechanical models of steel solidification based on two elastic visco-plastic constitutive laws. <i>Journal of Materials Processing Technology</i> , 2008 , 197, 408-418	5.3	64
157	Computational and experimental study of turbulent flow in a 0.4-scale water model of a continuous steel caster. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2004 , 35, 967-982	2.5	64
156	A new mechanism of hook formation during continuous casting of ultra-low-carbon steel slabs. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2006 , 37, 1597-1611	2.3	62

155	Mathematical model of the thermal processing of steel ingots: Part I. Heat flow model. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1987 , 18, 119-130		62
154	Mathematical model of the thermal processing of steel ingots: Part II. Stress model. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1987 , 18, 131-147		60
153	Simulation of Microstructure and Behavior of Interfacial Mold Slag Layers in Continuous Casting of Steel. <i>ISIJ International</i> , 2006 , 46, 660-669	1.7	59
152	Effects of clogging, argon injection, and continuous casting conditions on flow and air aspiration in submerged entry nozzles. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2001 , 32, 707-722	2.5	59
151	Real-Time, Model-Based Spray-Cooling Control System for Steel Continuous Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2011 , 42, 87-103	2.5	58
150	Efficient thermo-mechanical model for solidification processes. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 66, 1955-1989	2.4	58
149	Turbulent flow of liquid steel and argon bubbles in slide-gate tundish nozzles: Part II. Effect of operation conditions and nozzle design. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2001 , 32, 269-284	2.5	58
148	Explicit coupled thermo-mechanical finite element model of steel solidification. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 78, 1-31	2.4	57
147	Micrograph evidence of meniscus solidification and sub-surface microstructure evolution in continuous-cast ultralow-carbon steels. <i>Acta Materialia</i> , 2006 , 54, 1165-1173	8.4	52
146	Large Inclusions in Plain-carbon Steel Ingots Cast by Bottom Teeming. <i>ISIJ International</i> , 2006 , 46, 670-679		50
145	Transient Turbulent Flow in a Liquid-Metal Model of Continuous Casting, Including Comparison of Six Different Methods. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2011 , 42, 987-1007	2.5	49
144	Measurement and Prediction of Lubrication, Powder Consumption, and Oscillation Mark Profiles in Ultra-low Carbon Steel Slabs. <i>ISIJ International</i> , 2006 , 46, 1635-1644	1.7	48
143	Large Eddy Simulations of Double-Ruler Electromagnetic Field Effect on Transient Flow During Continuous Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2014 , 45, 1098-1115	2.5	47
142	Issues in Thermal-Mechanical Modeling of Casting Processes.. <i>ISIJ International</i> , 1995 , 35, 737-743	1.7	45
141	Transient fluid flow and superheat transport in continuous casting of steel slabs. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2005 , 36, 801-823	2.5	44
140	Measurements of Molten Steel Surface Velocity and Effect of Stopper-rod Movement on Transient Multiphase Fluid Flow in Continuous Casting. <i>ISIJ International</i> , 2014 , 54, 2314-2323	1.7	43
139	Transient Fluid Flow during Steady Continuous Casting of Steel Slabs: Part I. Measurements and Modeling of Two-phase Flow. <i>ISIJ International</i> , 2014 , 54, 845-854	1.7	42
138	Turbulent flow through bifurcated nozzles. <i>International Journal for Numerical Methods in Fluids</i> , 1993 , 17, 23-47	1.9	42

137	Thermal and mechanical behavior of copper molds during thin-slab casting (I): Plant trial and mathematical modeling. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2002 , 33, 425-436	2.5	41
136	Analysis of thermomechanical behaviour in billet casting with different mould corner radii. <i>Ironmaking and Steelmaking</i> , 2002 , 29, 359-375	1.3	41
135	Transient Thermo-fluid Model of Meniscus Behavior and Slag Consumption in Steel Continuous Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2014 , 45, 1842-1864	2.5	40
134	Modeling of Transient Flow Phenomena in Continuous Casting of Steel. <i>Canadian Metallurgical Quarterly</i> , 1998 , 37, 197-212	0.9	40
133	Transient Mold Fluid Flow with Well- and Mountain-Bottom Nozzles in Continuous Casting of Steel. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2008 , 39, 870-884	2.5	38
132	Modeling and Measurements of Multiphase Flow and Bubble Entrapment in Steel Continuous Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016 , 47, 548-565	2.5	37
131	Effects of a Magnetic Field on Turbulent Flow in the Mold Region of a Steel Caster. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2013 , 44, 1201-1221	2.5	37
130	Finite element modelling of turbulent fluid flow and heat transfer in continuous casting. <i>Applied Mathematical Modelling</i> , 1991 , 15, 226-243	4.5	37
129	Computational Modeling of Temperature, Flow, and Crystallization of Mold Slag During Double Hot Thermocouple Technique Experiments. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2013 , 44, 1264-1279	2.5	36
128	Solidification and Particle Entrapment during Continuous Casting of Steel. <i>Steel Research International</i> , 2008 , 79, 599-607	1.6	35
127	Investigation of strand surface defects using mould instrumentation and modelling. <i>Ironmaking and Steelmaking</i> , 2004 , 31, 485-494	1.3	35
126	Direct numerical simulations of magnetic field effects on turbulent flow in a square duct. <i>Physics of Fluids</i> , 2010 , 22, 075102	4.4	34
125	Equilibrium Model of Precipitation in Microalloyed Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 524-539	2.3	31
124	Effect of refractory properties on initial bubble formation in continuous-casting nozzles. <i>Metals and Materials International</i> , 2010 , 16, 501-506	2.4	31
123	Modeling of steel grade transition in continuous slab casting processes. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1993 , 24, 379-393		30
122	Multiphysics Model of Metal Solidification on the Continuum Level. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2010 , 58, 371-392	1.3	29
121	Three-Dimensional Numerical Study of Impinging Water Jets in Runout Table Cooling Processes. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2008 , 39, 593-602	2.5	28
120	Electromagnetic Forces in Continuous Casting of Steel Slabs. <i>Metals</i> , 2019 , 9, 471	2.3	27

119	Large Eddy Simulations of Electromagnetic Braking Effects on Argon Bubble Transport and Capture in a Steel Continuous Casting Mold. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018 , 49, 1360-1377	2.5	27
118	Measurement and Modeling of Heat Transfer Across Interfacial Mold Flux Layers. <i>Canadian Metallurgical Quarterly</i> , 1999 , 38, 363-375	0.9	27
117	Intermixing model of continuous casting during a grade transition. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1996 , 27, 617-632	2.5	27
116	Fluid Flow, Dissolution, and Mixing Phenomena in Argon-Stirred Steel Ladles. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018 , 49, 2722-2743	2.5	26
115	Looking into continuous casting mould. <i>Ironmaking and Steelmaking</i> , 2014 , 41, 242-249	1.3	26
114	Rise of an argon bubble in liquid steel in the presence of a transverse magnetic field. <i>Physics of Fluids</i> , 2016 , 28, 093301	4.4	26
113	Effect of Nozzle Port Angle on Transient Flow and Surface Slag Behavior During Continuous Steel-Slab Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019 , 50, 52-76	2.5	26
112	Study of Computational Issues in Simulation of Transient Flow in Continuous Casting. <i>Steel Research International</i> , 2005 , 76, 33-43	1.6	25
111	Transient Two-Phase Flow in Slide-Gate Nozzle and Mold of Continuous Steel Slab Casting with and without Double-Ruler Electro-Magnetic Braking. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016 , 47, 3080-3098	2.5	24
110	Thermal and mechanical behavior of copper molds during thin-slab casting (II): Mold crack formation. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2002 , 33, 437-449	2.5	24
109	Effect of Stopper-Rod Misalignment on Fluid Flow in Continuous Casting of Steel. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2011 , 42, 300-315	2.5	23
108	Basic oxygen furnace based steelmaking processes and cleanliness control at Baosteel. <i>Ironmaking and Steelmaking</i> , 2006 , 33, 129-139	1.3	23
107	Prediction and control of subsurface hooks in continuous cast ultra-low-carbon steel slabs. <i>Ironmaking and Steelmaking</i> , 2009 , 36, 39-49	1.3	22
106	Transient Fluid Flow during Steady Continuous Casting of Steel Slabs: Part II. Effect of Double-Ruler Electro-Magnetic Braking. <i>ISIJ International</i> , 2014 , 54, 855-864	1.7	21
105	Enthalpy-based feedback control algorithms for the Stefan problem 2012 ,		20
104	Microstructure near corners of continuous-cast steel slabs showing three-dimensional frozen meniscus and hooks. <i>Acta Materialia</i> , 2007 , 55, 6705-6712	8.4	20
103	Transient thermal model of the continuous single-wheel thin-strip casting process. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1996 , 27, 509-525	2.5	19
102	Large Eddy Simulations of the Effects of EMB and SEN Submergence Depth on Turbulent Flow in the Mold Region of a Steel Caster. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2017 , 48, 162-178	2.5	18

101	Measurement of heat flux in dense air-mist cooling: Part I □ A novel steady-state technique. <i>Experimental Thermal and Fluid Science</i> , 2013 , 44, 147-160	3	18
100	Modeling of Transient Flow Phenomena in Continuous Casting of Steel		18
99	Measurement of heat flux in dense air-mist cooling: Part II □ The influence of mist characteristics on steady-state heat transfer. <i>Experimental Thermal and Fluid Science</i> , 2013 , 44, 161-173	3	17
98	Thermal-mechanical behaviour during initial solidification in continuous casting: steel grade effects. <i>International Journal of Cast Metals Research</i> , 2009 , 22, 8-14	1	17
97	Heat Transfer in Funnel-mould Casting: Effect of Plate Thickness. <i>ISIJ International</i> , 2008 , 48, 1380-1388	1.7	17
96	Multiphysics modeling of continuous casting of stainless steel. <i>Journal of Materials Processing Technology</i> , 2020 , 278, 116469	5.3	16
95	Evolution of Temperature Distribution and Microstructure in Multipass Welded AISI 321 Stainless Steel Plates With Different Thicknesses. <i>Journal of Pressure Vessel Technology, Transactions of the ASME</i> , 2015 , 137,	1.2	15
94	Enhanced Latent Heat Method to Incorporate Superheat Effects into Fixed-Grid Multiphysics Simulations. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2010 , 57, 396-413	1.3	15
93	MOULD SLAG PROPERTY MEASUREMENTS TO CHARACTERIZE CC MOULD □ SHELL GAP PHENOMENA. <i>Canadian Metallurgical Quarterly</i> , 2006 , 45, 79-94	0.9	15
92	Numerical study of flow and heat transfer in a molten flux layer. <i>International Journal of Heat and Fluid Flow</i> , 2005 , 26, 105-118	2.4	15
91	Mathematical Modeling of Multiphase Flow in Steel Continuous Casting. <i>ISIJ International</i> , 2019 , 59, 956-972	1.7	14
90	Model of Gas Flow Through Porous Refractory Applied to an Upper Tundish Nozzle. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2015 , 46, 388-405	2.5	14
89	The visualization of defect formation during casting processes. <i>Jom</i> , 2006 , 58, 16-18	2.1	14
88	The Thermal Distortion of a Funnel Mold. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2012 , 43, 1156-1172	2.5	13
87	Investigation of panel crack formation in steel ingots: Part I. Mathematical analysis and mid face panel cracks. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1988 , 19, 277-287		13
86	Bubble Behavior and Size Distributions in Stopper-Rod Nozzle and Mold during Continuous Casting of Steel Slabs. <i>ISIJ International</i> , 2018 , 58, 1443-1452	1.7	13
85	Effect of Grade on Thermal□Mechanical Behavior of Steel During Initial Solidification. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017 , 48, 3777-3793	2.3	12
84	Direct numerical simulations of transverse and spanwise magnetic field effects on turbulent flow in a 2:1 aspect ratio rectangular duct. <i>Computers and Fluids</i> , 2011 , 51, 100-114	2.8	12

83	Measuring Mechanical Behavior of Steel During Solidification: Modeling the SSCC Test. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2011 , 42, 837-851	2.5	12
82	Optimisation of narrow face water slot design for Siderar slab casting mould. <i>Ironmaking and Steelmaking</i> , 2003 , 30, 235-239	1.3	12
81	Continuous Casting 2001 , 1595-1598		12
80	Review of Peritectic Solidification Mechanisms and Effects in Steel Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2020 , 51, 1875-1903	2.5	12
79	Measuring heat transfer during spray cooling using controlled induction-heating experiments and computational models. <i>Applied Mathematical Modelling</i> , 2013 , 37, 3181-3192	4.5	11
78	Feedback control of the two-phase Stefan problem, with an application to the continuous casting of steel 2010 ,		11
77	Investigation of panel crack formation in steel ingots: Part II. Off-corner panel cracks. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1988 , 19, 289-301		11
76	A reduced-order model of mould heat transfer in the continuous casting of steel. <i>Applied Mathematical Modelling</i> , 2016 , 40, 8530-8551	4.5	10
75	Particle-Size-Grouping Model of Precipitation Kinetics in Microalloyed Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 1079-1096	2.3	10
74	Three-Dimensional Flow in a Driven Cavity Subjected to an External Magnetic Field. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2015 , 137,	2.1	10
73	Measurement and Modeling of Heat Transfer Across Interfacial Mold Flux Layers		10
72	Agglomeration of Solid Inclusions in Molten Steel. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019 , 50, 36-41	2.5	10
71	Modeling Argon Gas Behavior in Continuous Casting of Steel. <i>Jom</i> , 2018 , 70, 2148-2156	2.1	9
70	Online Recalibration of the State Estimators for a System With Moving Boundaries Using Sparse Discrete-in-Time Temperature Measurements. <i>IEEE Transactions on Automatic Control</i> , 2018 , 63, 1090-1098	5.0	9
69	Overview of Electromagnetic Forces to Control Flow During Continuous Casting of Steel. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 424, 012027	0.4	8
68	Thermal-Mechanical Model Calibration with Breakout Shell Measurements in Continuous Steel Slab Casting	3558362	
67	The optimization of mold taper for the Ilva-Dalmine round bloom caster. <i>Revue De Metallurgie</i> , 1994 , 91, 609-620		7
66	Effect of Melt Superheat and Alloy Size on the Mixing Phenomena in Argon-Stirred Steel Ladles. <i>Steel Research International</i> , 2019 , 90, 1800288	1.6	7

65	Simulation and validation of two-phase turbulent flow and particle transport in continuous casting of steel slabs. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015 , 84, 012095	0.4	6
64	A Hybrid Eulerian-Eulerian Discrete-Phase Model of Turbulent Bubbly Flow. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2018 , 140,	2.1	6
63	Application of enthalpy-based feedback control methodology to the two-sided stefan problem 2014 ,		6
62	Measurement of Molten Steel Surface Velocity with SVC and Nail Dipping during Continuous Casting Process 2011 , 51-58		6
61	Numerical simulation on inclusion transport in continuous casting mold. <i>International Journal of Minerals, Metallurgy, and Materials</i> , 2006 , 13, 293-300		6
60	The removal of superheat from continuous casting molds 1990 , 131-145		6
59	Electromagnetic Effects on Solidification Defect Formation in Continuous Steel Casting. <i>Jom</i> , 2020 , 72, 3610-3627	2.1	6
58	GPU accelerated simulations of three-dimensional flow of power-law fluids in a driven cube. <i>International Journal of Computational Fluid Dynamics</i> , 2017 , 31, 36-56	1.2	5
57	Visualization of Steel Continuous Casting Including a New Integral Method for Post-Processing Temperature Data. <i>Steel Research International</i> , 2019 , 90, 1800540	1.6	5
56	Meso-scale simulation of liquid feeding in an equiaxed dendritic mushy zone. <i>Materialia</i> , 2020 , 9, 100612, 2	3.2	5
55	Monitoring of Meniscus Thermal Phenomena with Thermocouples in Continuous Casting of Steel 2011 , 119-126		5
54	Modeling of Stress, Distortion, and Hot Tearing 2008 , 449-461		5
53	Surface Defect Formation in Steel Continuous Casting. <i>Materials Science Forum</i> , 2018 , 941, 112-117	0.4	5
52	Effect of Single-Ruler Electromagnetic Braking (EMBr) Location on Transient Flow in Continuous Casting. <i>Journal for Manufacturing Science and Production</i> , 2015 , 15, 93-104		4
51	Multiphase Flow-Related Defects in Continuous Casting of Steel Slabs. <i>Minerals, Metals and Materials Series</i> , 2020 , 1161-1173	0.3	4
50	Thermo-mechanical behaviour during encapsulation of glass in a steel vessel. <i>International Journal of Pressure Vessels and Piping</i> , 2016 , 146, 203-215	2.4	4
49	Thermal Stress Cracking of Slide-Gate Plates in Steel Continuous Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016 , 47, 1453-1464	2.5	4
48	Bang-Bang Free Boundary Control of a Stefan Problem for Metallurgical Length Maintenance 2018 ,		4

47	Particle Transport and Deposition in a Turbulent Square Duct Flow With an Imposed Magnetic Field. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2014 , 136,	2.1	4
46	Simulation of transient fluid flow in mold region during steel continuous casting. <i>IOP Conference Series: Materials Science and Engineering</i> , 2012 , 33, 012015	0.4	4
45	Effect of Thermal Buoyancy Force on the Flow, Temperature Distribution and Residence Time Distribution of Molten Steel in the Slab Casting Tundish 2012 , 327-334		4
44	Implementation of Temperature and Strain Micro-Sensors into a Casting Mold Surface 2011 , 127-134		4
43	Effect of geometry on void formation in commercial electroplating of thin strips to copper. <i>Surface and Coatings Technology</i> , 2008 , 202, 4153-4158	4.4	4
42	Analysis of copper alloy to stainless steel bonded panels for ITER first wall applications		4
41	Spread Sheet Model of Continuous Casting. <i>Journal of Engineering for Industry</i> , 1996 , 118, 37-44		4
40	Estimation of Time-Temperature-Transformation Diagrams of Mold Powder Slags from Thermo-analysis of Non-isothermal Crystallization. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2015 , 46, 286-303	2.5	3
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