

# Brian G Thomas

## List of Publications by Year in descending order

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173  
papers

8,628  
citations

38660

50  
h-index

51492

86  
g-index

202  
all docs

202  
docs citations

202  
times ranked

2225  
citing authors

#	ARTICLE	IF	CITATIONS
1	State of the Art in Evaluation and Control of Steel Cleanliness.. ISIJ International, 2003, 43, 271-291.	0.6	513
2	Fixed grid techniques for phase change problems: A review. International Journal for Numerical Methods in Engineering, 1990, 30, 875-898.	1.5	443
3	Heat-transfer and solidification model of continuous slab casting: CON1D. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2003, 34, 685-705.	1.0	363
4	Simple model of microsegregation during solidification of steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2001, 32, 1755-1767.	1.1	286
5	Thermomechanical finite-element model of shell behavior in continuous casting of steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2004, 35, 1151-1172.	1.0	222
6	State of the art in the control of inclusions during steel ingot casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2006, 37, 733-761.	1.0	218
7	Mathematical Modeling of Iron and Steel Making Processes. Mathematical Modeling of Fluid Flow in Continuous Casting.. ISIJ International, 2001, 41, 1181-1193.	0.6	208
8	Inclusion removal by bubble flotation in a continuous casting mold. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2006, 37, 361-379.	1.0	158
9	Investigation of Fluid Flow and Steel Cleanliness in the Continuous Casting Strand. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2007, 38, 63-83.	1.0	154
10	Review on Modeling and Simulation of Continuous Casting. Steel Research International, 2018, 89, 1700312.	1.0	149
11	Modeling of inclusion removal in a tundish. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1999, 30, 639-654.	1.0	143
12	Simple constitutive equations for steel at high temperature. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1992, 23, 903-918.	1.4	127
13	Bubble formation during horizontal gas injection into downward-flowing liquid. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2001, 32, 1143-1159.	1.0	123
14	Simulation of fluid flow inside a continuous slab-casting machine. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1990, 21, 387-400.	0.5	122
15	Flow Control with Local Electromagnetic Braking in Continuous Casting of Steel Slabs. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2008, 39, 94-107.	1.0	117
16	Simulation of Argon Gas Flow Effects in a Continuous Slab Caster. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1994, 25, 527-547.	1.0	116
17	Modeling superheat removal during continuous casting of steel slabs. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1992, 23, 339-356.	1.0	115
18	Modeling of the continuous casting of steel“past, present, and future. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2002, 33, 795-812.	1.0	111

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19	Initial development of thermal and stress fields in continuously cast steel billets. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1988, 19, 2589-2602.	1.4	109
20	Mathematical Modeling of Iron and Steel Making Processes. Comparison of Four Methods to Evaluate Fluid Velocities in a Continuous Slab Casting Mold.. ISIJ International, 2001, 41, 1262-1271.	0.6	106
21	Modeling creep and fatigue of copper alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 2491-2502.	1.1	102
22	Turbulent flow of liquid steel and argon bubbles in slide-gate tundish nozzles: Part I. model development and validation. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2001, 32, 253-267.	1.0	98
23	Study of transient flow and particle transport in continuous steel caster molds: Part I. Fluid flow. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2004, 35, 685-702.	1.0	98
24	Prediction of dendrite arm spacing for low alloy steel casting processes. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1996, 27, 689-693.	1.0	97
25	Transport and Entrapment of Particles in Steel Continuous Casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 22-35.	1.0	96
26	Modeling transient slag-layer phenomena in the shell/mold gap in continuous casting of steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2003, 34, 707-725.	1.0	95
27	The use of water cooling during the continuous casting of steel and aluminum alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 187-204.	1.1	95
28	Effect of Electromagnetic Ruler Braking (EMBr) on Transient Turbulent Flow in Continuous Slab Casting using Large Eddy Simulations. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2012, 43, 532-553.	1.0	92
29	Numerical study of steady turbulent flow through bifurcated nozzles in continuous casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1995, 26, 749-765.	1.0	90
30	Flow and thermal behavior of the top surface flux/powder layers in continuous casting molds. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1996, 27, 672-685.	1.0	87
31	Real-Time, Model-Based Spray-Cooling Control System for Steel Continuous Casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2011, 42, 87-103.	1.0	87
32	Study of transient flow and particle transport in continuous steel caster molds: Part II. Particle transport. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2004, 35, 703-714.	1.0	82
33	A new mechanism of hook formation during continuous casting of ultra-low-carbon steel slabs. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 1597-1611.	1.1	82
34	Effects of clogging, argon injection, and continuous casting conditions on flow and air aspiration in submerged entry nozzles. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2001, 32, 707-722.	1.0	79
35	Mathematical model of the thermal processing of steel ingots: Part I. Heat flow model. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1987, 18, 119-130.	0.5	76
36	Thermo-mechanical models of steel solidification based on two elastic visco-plastic constitutive laws. Journal of Materials Processing Technology, 2008, 197, 408-418.	3.1	76

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37	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.	0.5	74
38	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.	1.0	73
39	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.	1.0	72
40	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.	0.5	71
41	Efficient thermo-mechanical model for solidification processes. <i>International Journal for Numerical Methods in Engineering</i> , 2006, 66, 1955-1989.	1.5	68
42	Explicit coupled thermo-mechanical finite element model of steel solidification. <i>International Journal for Numerical Methods in Engineering</i> , 2009, 78, 1-31.	1.5	64
43	Simulation of Microstructure and Behavior of Interfacial Mold Slag Layers in Continuous Casting of Steel. <i>ISIJ International</i> , 2006, 46, 660-669.	0.6	62
44	Large Inclusions in Plain-carbon Steel Ingots Cast by Bottom Teeming. <i>ISIJ International</i> , 2006, 46, 670-679.	0.6	61
45	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.	0.6	59
46	Micrograph evidence of meniscus solidification and sub-surface microstructure evolution in continuous-cast ultralow-carbon steels. <i>Acta Materialia</i> , 2006, 54, 1165-1173.	3.8	58
47	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.	1.0	56
48	Issues in Thermal-Mechanical Modeling of Casting Processes.. <i>ISIJ International</i> , 1995, 35, 737-743.	0.6	55
49	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.	1.0	55
50	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.	0.6	55
51	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.	1.0	54
52	Modeling of Transient Flow Phenomena in Continuous Casting of Steel. <i>Canadian Metallurgical Quarterly</i> , 1998, 37, 197-212.	0.4	53
53	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.	1.0	53
54	Electromagnetic Forces in Continuous Casting of Steel Slabs. <i>Metals</i> , 2019, 9, 471.	1.0	53

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55	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.	0.6	52
56	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.	1.0	51
57	Solidification and Particle Entrapment during Continuous Casting of Steel. <i>Steel Research International</i> , 2008, 79, 599-607.	1.0	49
58	Analysis of thermomechanical behaviour in billet casting with different mould corner radii. <i>Ironmaking and Steelmaking</i> , 2002, 29, 359-375.	1.1	48
59	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.	1.0	48
60	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.	1.0	48
61	Turbulent flow through bifurcated nozzles. <i>International Journal for Numerical Methods in Fluids</i> , 1993, 17, 23-47.	0.9	47
62	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.	1.0	46
63	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.	1.0	44
64	Finite element modelling of turbulent fluid flow and heat transfer in continuous casting. <i>Applied Mathematical Modelling</i> , 1991, 15, 226-243.	2.2	43
65	Direct numerical simulations of magnetic field effects on turbulent flow in a square duct. <i>Physics of Fluids</i> , 2010, 22, .	1.6	42
66	Investigation of strand surface defects using mould instrumentation and modelling. <i>Ironmaking and Steelmaking</i> , 2004, 31, 485-494.	1.1	40
67	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.	0.5	39
68	Effect of refractory properties on initial bubble formation in continuous-casting nozzles. <i>Metals and Materials International</i> , 2010, 16, 501-506.	1.8	38
69	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.	1.0	38
70	Equilibrium Model of Precipitation in Microalloyed Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011, 42, 524-539.	1.1	37
71	Enthalpy-based feedback control algorithms for the Stefan problem. , 2012, , .		37
72	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.	1.0	36

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73	Review of Peritectic Solidification Mechanisms and Effects in Steel Casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 1875-1903.	1.0	36
74	Intermixing model of continuous casting during a grade transition. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1996, 27, 617-632.	1.0	35
75	Measurement and Modeling of Heat Transfer Across Interfacial Mold Flux Layers. Canadian Metallurgical Quarterly, 1999, 38, 363-375.	0.4	35
76	Looking into continuous casting mould. Ironmaking and Steelmaking, 2014, 41, 242-249.	1.1	35
77	Fluid Flow, Dissolution, and Mixing Phenomena in Argon-Stirred Steel Ladles. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 2722-2743.	1.0	34
78	Thermal and mechanical behavior of copper molds during thin-slab casting (II): Mold crack formation. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2002, 33, 437-449.	1.0	33
79	Three-Dimensional Numerical Study of Impinging Water Jets in Runout Table Cooling Processes. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2008, 39, 593-602.	1.0	33
80	Multiphysics Model of Metal Solidification on the Continuum Level. Numerical Heat Transfer, Part B: Fundamentals, 2010, 58, 371-392.	0.6	33
81	Rise of an argon bubble in liquid steel in the presence of a transverse magnetic field. Physics of Fluids, 2016, 28, .	1.6	33
82	Transient Two-Phase Flow in Slide-Gate Nozzle and Mold of Continuous Steel Slab Casting with and without Double-Ruler Electro-Magnetic Braking. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 3080-3098.	1.0	33
83	Effect of Stopper-Rod Misalignment on Fluid Flow in Continuous Casting of Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2011, 42, 300-315.	1.0	29
84	Basic oxygen furnace based steelmaking processes and cleanliness control at Baosteel. Ironmaking and Steelmaking, 2006, 33, 129-139.	1.1	27
85	Mathematical Modeling of Multiphase Flow in Steel Continuous Casting. ISIJ International, 2019, 59, 956-972.	0.6	27
86	Study of Computational Issues in Simulation of Transient Flow in Continuous Casting. Steel Research International, 2005, 76, 33-43.	1.0	26
87	Prediction and control of subsurface hooks in continuous cast ultra-low-carbon steel slabs. Ironmaking and Steelmaking, 2009, 36, 39-49.	1.1	26
88	Large Eddy Simulations of the Effects of EMBr and SEN Submergence Depth on Turbulent Flow in the Mold Region of a Steel Caster. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 162-178.	1.0	26
89	Bubble Behavior and Size Distributions in Stopper-Rod Nozzle and Mold during Continuous Casting of Steel Slabs. ISIJ International, 2018, 58, 1443-1452.	0.6	26
90	Multiphysics modeling of continuous casting of stainless steel. Journal of Materials Processing Technology, 2020, 278, 116469.	3.1	26

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91	Microstructure near corners of continuous-cast steel slabs showing three-dimensional frozen meniscus and hooks. <i>Acta Materialia</i> , 2007, 55, 6705-6712.	3.8	24
92	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.	1.5	24
93	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.	1.0	23
94	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.	0.6	22
95	Thermal-mechanical behaviour during initial solidification in continuous casting: steel grade effects. <i>International Journal of Cast Metals Research</i> , 2009, 22, 8-14.	0.5	21
96	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.	1.0	21
97	Feedback control of the two-phase Stefan problem, with an application to the continuous casting of steel. , 2010, , .		20
98	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.	1.5	20
99	Modeling of Transient Flow Phenomena in Continuous Casting of Steel. , 0, .		20
100	Heat Transfer in Funnel-mould Casting: Effect of Plate Thickness. <i>ISIJ International</i> , 2008, 48, 1380-1388.	0.6	19
101	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.	0.6	19
102	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, 1090-1096.	3.6	19
103	Agglomeration of Solid Inclusions in Molten Steel. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 36-41.	1.0	19
104	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.	1.1	17
105	The Thermal Distortion of a Funnel Mold. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2012, 43, 1156-1172.	1.0	17
106	Modeling Argon Gas Behavior in Continuous Casting of Steel. <i>Jom</i> , 2018, 70, 2148-2156.	0.9	17
107	Electromagnetic Effects on Solidification Defect Formation in Continuous Steel Casting. <i>Jom</i> , 2020, 72, 3610-3627.	0.9	17
108	MOULD SLAG PROPERTY MEASUREMENTS TO CHARACTERIZE CC MOULD " SHELL GAP PHENOMENA. <i>Canadian Metallurgical Quarterly</i> , 2006, 45, 79-94.	0.4	16

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109	The visualization of defect formation during casting processes. <i>Jom</i> , 2006, 58, 16-18.	0.9	16
110	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.	1.1	16
111	Continuous Casting. , 2001, , 1595-1598.		15
112	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.	1.3	15
113	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.	1.0	15
114	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, .	0.4	15
115	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.	1.1	14
116	Measuring heat transfer during spray cooling using controlled induction-heating experiments and computational models. <i>Applied Mathematical Modelling</i> , 2013, 37, 3181-3192.	2.2	14
117	Overview of Electromagnetic Forces to Control Flow During Continuous Casting of Steel. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 424, 012027.	0.3	14
118	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.	0.5	13
119	Optimisation of narrow face water slot design for Siderar slab casting mould. <i>Ironmaking and Steelmaking</i> , 2003, 30, 235-239.	1.1	13
120	A reduced-order model of mould heat transfer in the continuous casting of steel. <i>Applied Mathematical Modelling</i> , 2016, 40, 8530-8551.	2.2	13
121	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.	0.5	12
122	Application of enthalpy-based feedback control methodology to the two-sided stefan problem. , 2014, , .		12
123	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, .	0.8	12
124	Modeling Air Aspiration in Steel Continuous Casting Slide-Gate Nozzles. <i>Metals</i> , 2021, 11, 116.	1.0	12
125	Quenching and Partitioning of Plate Steels: Partitioning Design Methodology. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 4701-4713.	1.1	11
126	Measurement and Modeling of Heat Transfer Across Interfacial Mold Flux Layers. , 0, .		11



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127	Bang-Bang Free Boundary Control of a Stefan Problem for Metallurgical Length Maintenance. , 2018, , .		10
128	Air Gap Measurement During Steel-Ingot Casting and Its Effect on Interfacial Heat Transfer. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 2224-2238.	1.0	10
129	Effect of Single-Ruler Electromagnetic Braking (EMBr) Location on Transient Flow in Continuous Casting. Journal for Manufacturing Science and Production, 2015, 15, 93-104.	0.1	9
130	Surface Defect Formation in Steel Continuous Casting. Materials Science Forum, 2018, 941, 112-117.	0.3	9
131	Visualization of Steel Continuous Casting Including a New Integral Method for Post-Processing Temperature Data. Steel Research International, 2019, 90, 1800540.	1.0	9
132	Effect of Melt Superheat and Alloy Size on the Mixing Phenomena in Argon-Stirred Steel Ladles. Steel Research International, 2019, 90, 1800288.	1.0	9
133	A Hybrid Eulerian-Eulerian Discrete-Phase Model of Turbulent Bubbly Flow. Journal of Fluids Engineering, Transactions of the ASME, 2018, 140, .	0.8	8
134	Enthalpy-based Full-State Feedback Control of the Stefan Problem with Hysteresis. , 2019, , .		8
135	The removal of superheat from continuous casting molds. , 1990, , 131-145.		7
136	The optimization of mold taper for the Ilva-Dalmine round bloom caster. Revue De Metallurgie, 1994, 91, 609-620.	0.3	7
137	Numerical simulation on inclusion transport in continuous casting mold. International Journal of Minerals, Metallurgy, and Materials, 2006, 13, 293-300.	0.2	7
138	Simulation and validation of two-phase turbulent flow and particle transport in continuous casting of steel slabs. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012095.	0.3	7
139	Enthalpy-based Output Feedback Control of the Stefan Problem with Hysteresis. , 2020, , .		7
140	Meso-scale simulation of liquid feeding in an equiaxed dendritic mushy zone. Materialia, 2020, 9, 100612.	1.3	7
141	Thermal Stress Cracking of Slide-Gate Plates in Steel Continuous Casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 1453-1464.	1.0	6
142	Modeling of Inclusion Capture in a Steel Slab Caster with Vertical Section and Bending. Metals, 2021, 11, 654.	1.0	6
143	Modeling of Stress, Distortion, and Hot Tearing. , 2008, , 449-461.		6
144	Pressure Distribution and Flow Rate Behavior in Continuous-Casting Slide-Gate Systems: PFSG. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2022, 53, 1661-1680.	1.0	6

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145	Analysis of copper alloy to stainless steel bonded panels for ITER first wall applications. , 0, , .		5
146	Simulation of transient fluid flow in mold region during steel continuous casting. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012015.	0.3	5
147	Particle Transport and Deposition in a Turbulent Square Duct Flow With an Imposed Magnetic Field. Journal of Fluids Engineering, Transactions of the ASME, 2014, 136, .	0.8	5
148	GPU accelerated simulations of three-dimensional flow of power-law fluids in a driven cube. International Journal of Computational Fluid Dynamics, 2017, 31, 36-56.	0.5	5
149	Spread Sheet Model of Continuous Casting. Journal of Engineering for Industry, 1996, 118, 37-44.	0.8	4
150	Effect of geometry on void formation in commercial electroplating of thin strips to copper. Surface and Coatings Technology, 2008, 202, 4153-4158.	2.2	4
151	Modeling and Measurement of Residual Stresses in a Steel Vessel Containing Glass. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	0.8	4
152	Thermo-mechanical behaviour during encapsulation of glass in a steel vessel. International Journal of Pressure Vessels and Piping, 2016, 146, 203-215.	1.2	4
153	Thermo-Mechanical Finite Element Model of Shell Behavior in the Continuous Casting of Steel. Key Engineering Materials, 2003, 233-236, 827-834.	0.4	3
154	Estimation of Time-Transformation Diagrams of Mold Powder Slags from Thermo-analysis of Non-isothermal Crystallization. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 286-303.	1.0	3
155	Continuous Casting: Complex Models. , 2001, , 1599-1609.		2
156	Dynamic Modeling of Unsteady Bulging in Continuous Casting of Steel. Minerals, Metals and Materials Series, 2019, , 23-35.	0.3	2
157	A 3D discrete-element model for simulating liquid feeding during dendritic solidification of steel. IOP Conference Series: Materials Science and Engineering, 2019, 529, 012031.	0.3	2
158	Simulation of longitudinal surface defect in steel continuous casting. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012016.	0.3	2
159	Modeling of Hot Tearing and Other Defects in Casting Processes. , 2009, , 362-374.		2
160	Transient Flow and Temperature Transport in Continuous Casting of Steel Slabs. Journal of Heat Transfer, 2005, 127, 807-807.	1.2	1
161	Large Eddy Simulations of the Effects of Double-Ruler Electromagnetic Braking and Nozzle Submergence Depth on Molten Steel Flow in a Commercial Continuous Casting Mold. Minerals, Metals and Materials Series, 2016, , 159-166.	0.3	1
162	Hybrid Eulerian Eulerian Discrete Phase Model of Turbulent Bubbly Flow. , 2017, , .		1

#	ARTICLE	IF	CITATIONS
163	Modeling of Argon Gas Behavior in Continuous Casting of Steel. Minerals, Metals and Materials Series, 2018, , 119-131.	0.3	1
164	Investigating Dynamic Thermal Behavior of Continuous Casting of Steel with CONOFFLINE. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 2917-2934.	1.0	1
165	Thermal and mechanical behavior of the first wall in fusion reactor. , 0, , .		0
166	Direct Numerical Simulations of Magnetic Field Effects on Turbulent Duct Flows. , 2009, , .		0
167	Online recalibration of the state estimators for a system with moving boundaries using sparse discrete-in-time temperature measurements. , 2016, , .		0
168	Numerical Simulation of Turbulent Steel CemÂ® Mold Under High Mass Flow Condition. IOP Conference Series: Materials Science and Engineering, 2018, 424, 012033.	0.3	0
169	Hydrogen Embrittlement Susceptibility of Case Hardened Steel Fasteners. , 2018, , .		0
170	Continuous Casting. , 2019, , .		0
171	Grouping Methods of Cluster Dynamics Model for Precipitation Kinetics. Metals, 2020, 10, 1685.	1.0	0
172	Feedback Control of the One-Phase Stefan Problem with Unknown Boundary Input Hysteresis. , 2021, , .		0
173	Particle Transport in a Turbulent Square Duct Flow With an Imposed Magnetic Field. , 2013, , .		0