

# Mikael Ersson

## List of Publications by Year in descending order

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65  
papers

870  
citations

471061

17  
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552369

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g-index

65  
all docs

65  
docs citations

65  
times ranked

406  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Review on Swirling Flow Casting Technology in Steel Production. Steel Research International, 2022, 93, 2100410.	1.0	6
2	A Fundamental Investigation of Decarburization Reactions in the Argon-Oxygen Decarburization Converter Using Coupled Computational Fluid Dynamics and Thermodynamics Databases. Steel Research International, 2022, 93, .	1.0	3
3	The effects of oil/MWCNT nanofluids and geometries on the solid oxide fuel cell cooling systems: a CFD study. Journal of Thermal Analysis and Calorimetry, 2021, 144, 245-256.	2.0	6
4	Study of dynamic refractory wear by slags containing very high FeO contents under steelmaking conditions. Ironmaking and Steelmaking, 2021, 48, 607-618.	1.1	5
5	Effect of Froude Number on Submerged Gas Blowing Characteristics. Materials, 2021, 14, 627.	1.3	3
6	Experimental and Numerical Study of the Free Surface During the Side Teeming Ingot Casting Process. Steel Research International, 2021, 92, 2000660.	1.0	1
7	Numerical Study on the Influence of the Filling Angle on the Fluid Flow during the Ingot Side Teeming Process. Steel Research International, 2021, 92, 2100102.	1.0	1
8	Inclination Effect on Mixing Time in a Gas-Stirred Side-Blown Converter. Steel Research International, 2021, 92, 2100044.	1.0	6
9	Study on the Cavity Forming Induced by a Gas Jet Impinging on a Liquid Surface Based on a Deformed Mesh Method. Jom, 2021, 73, 2953-2962.	0.9	2
10	Numerical Analysis of Slag Transfer in the IronArc Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 2171-2186.	1.0	1
11	Reply to the Discussion on "A Review of Physical and Numerical Approaches for the Study of Gas Stirring in Ladle Metallurgy". Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 1847-1850.	1.0	1
12	Numerical Investigations on Bubble Behavior at a Steel-Slag Interface. Steel Research International, 2020, 91, 1900611.	1.0	7
13	CFD study of non-premixed swirling burners: Effect of turbulence models. Chinese Journal of Chemical Engineering, 2020, 28, 1029-1038.	1.7	16
14	An Experimental and Numerical Study of the Free Surface in an Uphill Teeming Ingot Casting Process. Steel Research International, 2020, 91, 1900609.	1.0	4
15	Numerical investigation of thermal performance augmentation of nanofluid flow in microchannel heat sinks by using of novel nozzle structure: sinusoidal cavities and rectangular ribs. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	0.8	7
16	Mathematical Modelling of the Initial Mold Filling with Utilization of an Angled Runner. Metals, 2019, 9, 693.	1.0	5
17	Effect of swirling flow tundish submerged entry nozzle outlet design on multiphase flow and heat transfer in mould. Ironmaking and Steelmaking, 2019, 46, 911-920.	1.1	9
18	Mathematical Modeling of Postcombustion in an Electric Arc Furnace (EAF). Metals, 2019, 9, 547.	1.0	2

#	ARTICLE	IF	CITATIONS
19	Comparison of Euler-Euler Approach and Euler-Lagrange Approach to Model Gas Injection in a Ladle. Steel Research International, 2019, 90, 1800494.	1.0	16
20	Colocated pressure-velocity coupling in finite difference methods. Progress in Computational Fluid Dynamics, 2019, 19, 273.	0.1	0
21	Experimental Determinations of Mixing Times in the IronArc Pilot Plant Process. Metals, 2019, 9, 101.	1.0	0
22	Mathematical Modelling Study of Dynamic Composition Change of Steel and Mold Flux in Continuous Casting of Steel. ISIJ International, 2019, 59, 2024-2035.	0.6	10
23	Physical and Numerical Modelling on the Mixing Condition in a 50 t Ladle. Metals, 2019, 9, 1136.	1.0	7
24	A Review of Physical and Numerical Approaches for the Study of Gas Stirring in Ladle Metallurgy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 555-577.	1.0	65
25	Numerical study of an application of a divergent reverse TurboSwirl nozzle in the billet continuous casting process. Ironmaking and Steelmaking, 2019, 46, 148-158.	1.1	2
26	Physical Modeling Study on the Mixing in the New IronArc Process. Steel Research International, 2018, 89, 1700555.	1.0	5
27	A Study on the Nonmetallic Inclusion Motions in a Swirling Flow Submerged Entry Nozzle in a New Cylindrical Tundish Design. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 723-736.	1.0	15
28	Review on CFD Simulation and Modeling of Decarburization Processes. Steel Research International, 2018, 89, 1700108.	1.0	10
29	Importance of the Penetration Depth and Mixing in the IRONARC Process. ISIJ International, 2018, 58, 1210-1217.	0.6	6
30	Effect of Immersion Depth of a Swirling Flow Tundish SEN on Multiphase Flow and Heat Transfer in Mold. Metals, 2018, 8, 910.	1.0	10
31	Numerical Study on the Influence of a Swirling Flow Tundish on Multiphase Flow and Heat Transfer in Mold. Metals, 2018, 8, 368.	1.0	12
32	Mechanically Assisted Low-Temperature Pyrolysis of Hydrocarbons. Energy and Power Engineering, 2018, 10, 133-153.	0.5	0
33	Study on Slopping Prevention in the BOF Steelmaking Process. Steel Research International, 2017, 88, 1600399.	1.0	4
34	Transport and Deposition of Nonmetallic Inclusions in Steel Flows - A Comparison of Different Model Predictions to Pilot Plant Experiment Data. Steel Research International, 2017, 88, 1700155.	1.0	2
35	Numerical and Physical Study on a Cylindrical Tundish Design to Produce a Swirling Flow in the SEN During Continuous Casting of Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2695-2706.	1.0	19
36	Non-Metallic Inclusion Behaviors in a New Tundish and SEN Design Using a Swirling Flow during Continuous Casting of Steel. Steel Research International, 2017, 88, 1600155.	1.0	18

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37	Experimental Validation and Numerical Analysis of the Swirling Flow in a Submerged Entry Nozzle and Mold by Using a Reverse TurboSwirl in a Billet Continuous Casting Process. Steel Research International, 2017, 88, 1600339.	1.0	7
38	Application of a Swirling Flow Producer in a Conventional Tundish during Continuous Casting of Steel. ISIJ International, 2017, 57, 2175-2184.	0.6	12
39	An Experimental and Numerical Study of Swirling Flow Generated by TurboSwirl in an Uphill Teeming Ingot Casting Process. ISIJ International, 2016, 56, 1404-1412.	0.6	11
40	A Numerical Study about the Influence of a Bubble Wake Flow on the Removal of Inclusions. ISIJ International, 2016, 56, 1982-1988.	0.6	24
41	A New Tundish Design to Produce a Swirling Flow in the SEN During Continuous Casting of Steel. Steel Research International, 2016, 87, 1356-1365.	1.0	19
42	Deposition of particles in liquid flows in horizontal straight channels. International Journal of Heat and Fluid Flow, 2016, 62, 166-173.	1.1	10
43	Numerical Simulations of the Kinetic Energy Transfer in the Bath of a BOF Converter. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 434-445.	1.0	37
44	Effect of TurboSwirl Structure on an Uphill Teeming Ingot Casting Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 2652-2665.	1.0	9
45	The Influence of Swirl Flow on the Flow Field, Temperature Field and Inclusion Behavior when Using a Half Type Electromagnetic Swirl Flow Generator in a Submerged Entry and Mold. Steel Research International, 2015, 86, 1312-1327.	1.0	16
46	Numerical and Physical Simulations of a Combined Top-Bottom-Side Blown Converter. Steel Research International, 2015, 86, 1328-1338.	1.0	24
47	Effect of TurboSwirl on Inclusions during Ingot Casting of Steels. Mathematical Problems in Engineering, 2015, 2015, 1-10.	0.6	1
48	Numerical Simulation of Single Argon Bubble Rising in Molten Metal Under a Laminar Flow. Steel Research International, 2015, 86, 1289-1297.	1.0	24
49	Inclusion Behavior under a Swirl Flow in a Submerged Entry Nozzle and Mold. Steel Research International, 2015, 86, 341-360.	1.0	26
50	A Mathematical Modeling Study of Bubble Formations in a Molten Steel Bath. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 2628-2638.	1.0	18
51	Optimization of Combined Blown Converter Process. ISIJ International, 2014, 54, 2255-2262.	0.6	23
52	The Use of an Enhanced Eulerian Deposition Model to Investigate Nozzle Clogging During Continuous Casting of Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 2414-2424.	1.0	25
53	A Study of Post-Combustion in an AOD Flue. Steel Research International, 2014, 85, 1173-1184.	1.0	4
54	Mathematical and Physical Simulation of a Top Blown Converter. Steel Research International, 2014, 85, 273-281.	1.0	52

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55	On the deposition of particles in liquid metals onto vertical ceramic walls. International Journal of Multiphase Flow, 2014, 62, 152-160.	1.6	22
56	Uphill Teeming Utilizing TurboSwirl to Control Flow Pattern in Mold. Steel Research International, 2013, 84, 837-844.	1.0	7
57	Mathematical Modeling of Scrap Melting in an EAF Using Electromagnetic Stirring. ISIJ International, 2013, 53, 48-55.	0.6	33
58	Turbulent Flow Phenomena and Ce <sub>2</sub> O <sub>3</sub> Behavior during a Steel Teeming Process. ISIJ International, 2013, 53, 792-801.	0.6	12
59	Modeling of Initial Mold Filling with Utilization of Swirl Blades. ISIJ International, 2012, 52, 1066-1071.	0.6	14
60	Mathematical Modeling of Initial Filling Moment of Uphill Teeming Process Considering a Trumpet. ISIJ International, 2011, 51, 1461-1467.	0.6	10
61	Mathematical Comparison of Two VOD Nozzle Jets. ISIJ International, 2011, 51, 1637-1646.	0.6	6
62	Mathematical Modeling of VOD Oxygen Nozzle Jets. Steel Research International, 2011, 82, 249-259.	1.0	11
63	Dynamic Coupling of Computational Fluid Dynamics and Thermodynamics Software: Applied on a Top Blown Converter. ISIJ International, 2008, 48, 147-153.	0.6	49
64	A Mathematical Model of an Impinging Air Jet on a Water Surface. ISIJ International, 2008, 48, 377-384.	0.6	67
65	Fluid Flow in a Combined Top and Bottom Blown Reactor. ISIJ International, 2006, 46, 1137-1142.	0.6	11