

Lifeng Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9585065/publications.pdf>

Version: 2024-02-01

83
papers

3,165
citations

218677

26
h-index

161849

54
g-index

83
all docs

83
docs citations

83
times ranked

772
citing authors

#	ARTICLE	IF	CITATIONS
1	State of the Art in Evaluation and Control of Steel Cleanliness.. ISIJ International, 2003, 43, 271-291.	1.4	513
2	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.	2.1	218
3	Mathematical Modeling of Iron and Steel Making Processes. Mathematical Modeling of Fluid Flow in Continuous Casting.. ISIJ International, 2001, 41, 1181-1193.	1.4	208
4	Characteristics of Inclusions in Low Carbon Al-Killed Steel during Ladle Furnace Refining and Calcium Treatment. ISIJ International, 2013, 53, 1401-1410.	1.4	166
5	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.	2.1	158
6	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.	2.1	154
7	Formation and Modification of MgO-Al ₂ O ₃ -Based Inclusions in Alloy Steels. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2012, 43, 731-750.	2.1	154
8	Flow Transport and Inclusion Motion in Steel Continuous-Casting Mold under Submerged Entry Nozzle Clogging Condition. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2008, 39, 534-550.	2.1	124
9	Transient Evolution of Inclusions during Calcium Modification in Linepipe Steels. ISIJ International, 2014, 54, 2772-2779.	1.4	85
10	Transformation of Oxide Inclusions in Type 304 Stainless Steels during Heat Treatment. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2281-2292.	2.1	79
11	Effect of Slag Composition on Inclusions in Si-Deoxidized 18Cr-8Ni Stainless Steels. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 1024-1034.	2.1	57
12	State of the Art in the Control of Inclusions in Tire Cord Steels - a Review. Steel Research International, 2006, 77, 158-169.	1.8	55
13	Formation and Thermodynamics of Mg-Al-Ti-O Complex Inclusions in Mg-Al-Ti-Deoxidized Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 2057-2071.	2.1	54
14	Deformability of Oxide Inclusions in Tire Cord Steels. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 803-811.	2.1	52
15	Kinetic Modeling on Nozzle Clogging During Steel Billet Continuous Casting. ISIJ International, 2010, 50, 712-720.	1.4	45
16	Numerical Simulation of Steel and Argon Gas Two-Phase Flow in Continuous Casting Using LES+VOF+DPM Model. Jom, 2019, 71, 1158-1168.	1.9	45
17	Water model study on inclusion removal from liquid steel by bubble flotation under turbulent conditions. Ironmaking and Steelmaking, 2002, 29, 326-336.	2.1	44
18	Transformation of Inclusions in Linepipe Steels During Heat Treatment. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 2047-2062.	2.1	42

#	ARTICLE	IF	CITATIONS
19	Transient Evolution of Nonmetallic Inclusions During Calcium Treatment of Molten Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 1841-1859.	2.1	41
20	Evolution of Oxide Inclusions in Si-Mn Killed Steels During Hot-Rolling Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2717-2730.	2.1	39
21	Transformation of Inclusions in Pipeline Steels During Solidification and Cooling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2267-2273.	2.1	36
22	Effect of Sulfur in Steel on Transient Evolution of Inclusions During Calcium Treatment. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 610-626.	2.1	35
23	Transient Behavior of Inclusions during Reoxidation of Si-killed Stainless Steels in Continuous Casting Tundish. ISIJ International, 2016, 56, 584-593.	1.4	34
24	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.	2.1	34
25	Thermodynamic Model for Prediction of Slag-Steel-Inclusion Reactions of 304 Stainless Steels. ISIJ International, 2017, 57, 68-75.	1.4	29
26	Transformation of Inclusions in Solid GCr15 Bearing Steels During Heat Treatment. Metals, 2019, 9, 642.	2.3	28
27	Control of Transverse Corner Cracks on Low-Carbon Steel Slabs. Jom, 2014, 66, 1711-1720.	1.9	26
28	Effect of non-metallic precipitates and grain size on core loss of non-oriented electrical silicon steels. Journal of Magnetism and Magnetic Materials, 2018, 451, 454-462.	2.3	26
29	Effect of Mold Electromagnetic Stirring and Final Electromagnetic Stirring on the Solidification Structure and Macrosegregation in Bloom Continuous Casting. Steel Research International, 2021, 92, 2000661.	1.8	26
30	A Reaction Model for Prediction of Inclusion Evolution During Reoxidation of Ca-Treated Al-Killed Steels in Tundish. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1433-1438.	2.1	24
31	Effect of Oxide Inclusions on the Magnetic Properties of Non-oriented Electrical Steel. Steel Research International, 2018, 89, 1800047.	1.8	24
32	Water Modeling of Self-Braking Submerged Entry Nozzle Used for Steel Continuous Casting Mold. Jom, 2012, 64, 1080-1086.	1.9	22
33	Transformation of cerium-containing inclusions in ultra-low-carbon aluminum-killed steels during solidification and cooling. Journal of Materials Research and Technology, 2020, 9, 8197-8206.	5.8	22
34	Deformation and fracture of non-metallic inclusions in steel at different temperatures. Journal of Materials Research and Technology, 2020, 9, 15016-15022.	5.8	21
35	Effect of Superheat, Cooling Rate, and Refractory Composition on the Formation of Non-metallic Inclusions in Non-oriented Electrical Steels. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 2348-2360.	2.1	20
36	Analysis on the Deflection Angle of Columnar Dendrites of Continuous Casting Steel Billets Under the Influence of Mold Electromagnetic Stirring. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5496-5509.	2.2	20

#	ARTICLE	IF	CITATIONS
37	Modeling on the Fluid Flow and Mixing Phenomena in a RH Steel Degasser with Oval Downâ€leg Snorkel. Steel Research International, 2018, 89, 1800048.	1.8	20
38	Thermodynamic and Kinetic Analysis for Transformation of Oxide Inclusions in Solid 304 Stainless Steels. Steel Research International, 2019, 90, 1800600.	1.8	20
39	Entrapment of Inclusions by Solidified Hooks at the Subsurface of Ultra-Low-Carbon Steel Slab. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 3186-3199.	2.1	19
40	Effect of the Gap Between Copper Mold and Solidified Shell on the Fluid Flow in the Continuous Casting Strand with Mold Electromagnetic Stirring. Steel Research International, 2020, 91, 1900470.	1.8	19
41	Effect of Cooling Rate on Oxide Inclusions During Solidification of 304 Stainless Steel. Steel Research International, 2019, 90, 1900027.	1.8	18
42	Relationship Between Dissolved Calcium and Total Calcium in Al-Killed Steels After Calcium Treatment. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 1624-1631.	2.1	17
43	Influence of Casting Parameters on Hooks and Entrapped Inclusions at the Subsurface of Continuous Casting Slabs. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 5469-5477.	2.2	17
44	Formation and Deformation Mechanism of Al ₂ O ₃ -CaS Inclusions in Ca-Treated Non-Oriented Electrical Steels. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 200-212.	2.1	17
45	Formation and Control of Transverse Corner Cracks in the Continuous Casting Slab of a Microalloyed Steel. Steel Research International, 2021, 92, 2000649.	1.8	17
46	A Method to Control the Transverse Corner Cracks on a Continuous Casting Slab by Combining Microstructure Analysis with Numerical Simulation of the Slab Temperature Field. Steel Research International, 2018, 89, 1700480.	1.8	15
47	Kinetic study on compositional variations of inclusions, steel and slag during refining process. Metallurgical Research and Technology, 2018, 115, 415.	0.7	15
48	Effect of calcium treatment on magnetic properties of non-oriented electrical steels. Journal of Magnetism and Magnetic Materials, 2020, 494, 165803.	2.3	15
49	Prediction on the spatial distribution of the composition of inclusions in a heavy rail steel continuous casting bloom. Journal of Materials Research and Technology, 2020, 9, 5648-5665.	5.8	14
50	Effect of slag basicity adjusting on inclusions in tire cord steels during ladle furnace refining process. Metallurgical Research and Technology, 2017, 114, 602.	0.7	13
51	Modification of inclusions in linepipe steels by Ca-containing ferrosilicon during ladle refining. Ironmaking and Steelmaking, 2020, 47, 6-12.	2.1	12
52	Influence of cooling conditions on the hot ductility of Nb-Ti-bearing steels. Metallurgical Research and Technology, 2015, 112, 604.	0.7	11
53	Numerical Simulation on the Oxidation of Lanthanum During the Electroslag Remelting Process. Jom, 2018, 70, 2157-2168.	1.9	10
54	Modification of inclusions by Al and Ca in ferrosilicon during alloying process of 18Crâ€8Ni stainless steels. Ironmaking and Steelmaking, 2020, 47, 40-46.	2.1	10

#	ARTICLE	IF	CITATIONS
55	Effect of Temperature and Multichannel Stopper Rod on Bubbles in Water Model of a Steel Continuous Caster. <i>Steel Research International</i> , 2021, 92, 2100067.	1.8	9
56	Investigation on Fluid Flow inside a Continuous Slab Casting Mold Using Particle Image Velocimetry. <i>Steel Research International</i> , 2019, 90, 1900209.	1.8	8
57	Precipitation of nitrides in non-oriented silicon steel. <i>Ironmaking and Steelmaking</i> , 2019, 46, 359-367.	2.1	8
58	Transformation of Inclusions in a Complicated δ - ϵ Deoxidized Heavy Rail Steels During Heating. <i>Steel Research International</i> , 2020, 91, 2000120.	1.8	8
59	Evolution of Nonmetallic Inclusions during the Electroslag Remelting Process. <i>Steel Research International</i> , 2021, 92, 2000629.	1.8	8
60	Effect of Slag Modification on Inclusions in Si-Mn Killed 304 Stainless Steels. <i>Steel Research International</i> , 2021, 92, 2000506.	1.8	7
61	Dissolution of SiO ₂ Inclusions in CaO-SiO ₂ -Based Slags In Situ Observed Using High-Temperature Confocal Scanning Laser Microscopy. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2022, 53, 682-692.	2.1	7
62	Effect of Casting Parameters on the Flow Pattern in a Steel Continuous Casting Slab Mold: Numerical Simulation and Industrial Trials. <i>Steel Research International</i> , 2022, 93, 2100350.	1.8	6
63	Center Segregation Evolution in Slab Continuous Casting with Mechanical Reduction: A 3D Simulation. <i>Steel Research International</i> , 2022, 93, 2100569.	1.8	6
64	Transient Evolution of Nonmetallic Inclusions in a Si-Mn Killed Stainless Steel with Cerium Addition. <i>Steel Research International</i> , 2022, 93, .	1.8	6
65	Kinetic analysis of the thermal degradation of printed wiring boards. <i>Jom</i> , 2011, 63, 33-37.	1.9	5
66	Evolution of Nonmetallic Inclusions with Varied Argon Stirring Condition during Vacuum Degassing Refining of a Bearing Steel. <i>Steel Research International</i> , 2021, 92, 2000364.	1.8	5
67	Effect of Total Calcium in Heavy Rail Steels on the Transformation of Inclusions during Heat Treatment at 1473 K. <i>Steel Research International</i> , 2021, 92, 2000605.	1.8	5
68	Inclusion Evolution in Al-Killed Ca-Treated Steels at Heat Treatment Temperature In Situ Observed Using Confocal Scanning Laser Microscope. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2022, 53, 1323-1328.	2.1	5
69	Effect of Types of Calcium-Containing Cored Wires on the Inclusion Modification by Calcium Treatment. <i>Steel Research International</i> , 2022, 93, .	1.8	5
70	Pinning Effect of Oxide Particles on Grain Boundaries of a Low Aluminum Non-oriented Electrical Steel. <i>Steel Research International</i> , 2020, 91, 1900303.	1.8	4
71	Effect of Sulfur Content on Evolution of Nonmetallic Inclusions in Low Sulfur Al-Killed Steels during Heat Treatment. <i>Steel Research International</i> , 2022, 93, 2100526.	1.8	4
72	Study on the Spatial Distribution of Argon Bubbles in a Steel Slab Continuous Casting Strand. <i>Steel Research International</i> , 2022, 93, .	1.8	3

#	ARTICLE	IF	CITATIONS
73	Solid reactions between $\text{CaO} \cdot \text{Al}_2\text{O}_3$ and $\text{Si} \cdot \text{Ti}$ -containing steel at 1273 K. Journal of Materials Research and Technology, 2022, 18, 159-170.	5.8	3
74	Purification of solar grade silicon using electromagnetic field. , 2010, , .		2
75	Mathematical Modeling on the Initial Melting of the Consumable Electrode During Electroslag Remelting Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 4033-4045.	2.1	2
76	Kinetic Prediction for Isothermal Transformation of Inclusions in a Bearing Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2022, 53, 394-406.	2.1	2
77	Transformation of LaAlO_3 Inclusions During Heating in a Solid Non-oriented Electrical Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2022, 53, 637-649.	2.1	2
78	Three-Dimensional Evaluation of Internal Quality of the Continuous Casting Billet of a High Carbon Steel Using X-ray Computed Tomography. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2022, 53, 1603-1616.	2.1	2
79	Evolution of Sulfides in Nonoriented Silicon Steels during Heating Process. Steel Research International, 2021, 92, 2000489.	1.8	1
80	Effect of Compression Reduction on Deformation of $\text{CaO} \cdot \text{CaS} \cdot \text{Al}_2\text{O}_3 \cdot \text{MgO}$ Inclusions in Solid and Semi-solid Steel. Steel Research International, 2021, 92, 2000609.	1.8	1
81	Effect of Al on the Solid Reaction between $3\text{CaO} \cdot \text{Al}_2\text{O}_3$ Oxide and $\text{Fe} \cdot \text{S} \cdot \text{O} \cdot \text{Al}$ Alloy at 1373 K. Steel Research International, 2021, 92, 2100049.	1.8	1
82	Effect of Oxygen at Basic Oxygen Furnace Endpoint on Control of Inclusions in a $\text{Si} \cdot \text{Mn}$ Killed Steel. Steel Research International, 2022, 93, 2100411.	1.8	1
83	Non-metallic particles in Solar Grade Silicon (SoG-Si). , 2010, , .		0