

Thomas Echterhof

List of Publications by Year in descending order

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docs citations

34
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citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling and Simulation of Metallurgical Processes in Ironmaking and Steelmaking. <i>Metals</i> , 2022, 12, 1185.	2.3	0
2	A Review of Mathematical Process Models for the Electric Arc Furnace Process. <i>Steel Research International</i> , 2021, 92, 2000395.	1.8	22
3	Calculation of View Factors in Electric Arc Furnace Process Modeling. <i>Steel Research International</i> , 2021, 92, 2000341.	1.8	3
4	Review on the Use of Alternative Carbon Sources in EAF Steelmaking. <i>Metals</i> , 2021, 11, 222.	2.3	50
5	Process Improvements for Direct Reduced Iron Melting in the Electric Arc Furnace with Emphasis on Slag Operation. <i>Processes</i> , 2021, 9, 402.	2.8	17
6	Cyanide recombination in electric arc furnace plasma. <i>Plasma Research Express</i> , 2021, 3, 025008.	0.9	2
7	Towards CO ₂ -neutral process heat generation for continuous reheating furnaces in steel hot rolling mills – A case study. <i>Energy</i> , 2021, 224, 120155.	8.8	23
8	Application and Evaluation of Mathematical Models for Prediction of the Electric Energy Demand Using Plant Data of Five Industrial-Size EAFs. <i>Metals</i> , 2021, 11, 1348.	2.3	9
9	Development of a Fast Modeling Approach for the Prediction of Scrap Preheating in Continuously Charged Metallurgical Recycling Processes. <i>Metals</i> , 2021, 11, 1280.	2.3	2
10	Investigation on the Chemical and Thermal Behavior of Recycling Agglomerates from EAF by-Products. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8309.	2.5	8
11	Electric Arc Length-Voltage and Conductivity Characteristics in a Pilot-Scale AC Electric Arc Furnace. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2020, 51, 1646-1655.	2.1	5
12	Improving the Modeling of Slag and Steel Bath Chemistry in an Electric Arc Furnace Process Model. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 2377-2388.	2.1	10
13	Pilot-scale AC electric arc furnace plasma characterization. <i>Plasma Research Express</i> , 2019, 1, 035007.	0.9	10
14	Development of an Electric Arc Furnace Simulator Based on a Comprehensive Dynamic Process Model. <i>Processes</i> , 2019, 7, 852.	2.8	12
15	Fabrication of Agglomerates from Secondary Raw Materials Reinforced with Paper Fibres by Stamp Pressing Process. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3946.	2.5	5
16	Application of fast pyrolysis char in an electric arc furnace. <i>Fuel Processing Technology</i> , 2018, 174, 61-68.	7.2	19
17	Process Modeling and Simulation of the Radiation in the Electric Arc Furnace. <i>Steel Research International</i> , 2018, 89, 1700487.	1.8	13
18	Modeling and Simulation of the Off-gas in an Electric Arc Furnace. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2017, 48, 3329-3344.	2.1	8

#	ARTICLE	IF	CITATIONS
19	Process Modeling and Simulation of Biochar Usage in an Electric Arc Furnace as a Substitute for Fossil Coal. Steel Research International, 2017, 88, 1600458.	1.8	16
20	On-line Analysis of Cr&sub>2&sub>O&sub>3&sub> Content of the Slag in Pilot Scale EAF by Measuring Optical Emission Spectrum of Electric Arc. ISIJ International, 2017, 57, 478-486.	1.4	7
21	Modelling and Simulation of the Melting Process in Electric Arc Furnacesâ€”Influence of Numerical Solution Methods. Steel Research International, 2016, 87, 581-588.	1.8	8
22	Heat recovery from EAF off-gas for steam generation: analytical exergy study of a sample EAF batch. Ironmaking and Steelmaking, 2016, 43, 581-587.	2.1	14
23	Investigation on the Influence of the Arc Region on Heat and Mass Transport in an EAF Freeboard using Numerical Modeling. Steel Research International, 2016, 87, 15-28.	1.8	22
24	Modeling of the Off-Gas Cooling System for an Electric Arc Furnace and Evaluation of the Heat Recovery Potential. Chemie-Ingenieur-Technik, 2016, 88, 1463-1473.	0.8	2
25	Increasing the sustainability of steel production in the electric arc furnace by substituting fossil coal with biochar agglomerates. Ironmaking and Steelmaking, 2016, 43, 564-570.	2.1	21
26	Verwendung von Biomassekarbonisaten. , 2016, , 213-346.		2
27	Application of genetic algorithm to improve an electric arc furnace freeboard model based on practical data. International Journal of Engineering Systems Modelling and Simulation, 2015, 7, 244.	0.2	0
28	Sustainable Electric Arc Furnace Steel Production: GREENEAF. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2013, 158, 17-23.	1.0	15
29	Nitrogen Oxide Formation in the Electric Arc Furnaceâ€”Measurement and Modeling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2012, 43, 163-172.	2.1	3
30	Measurement and Control of NOx Emissions at Two AC Electric Arc Furnaces. ISIJ International, 2011, 51, 1631-1636.	1.4	2
31	Application of an Off-Gas Analysing System to Control Oxidation during Stainless Steelmaking in an EAF. Steel Research International, 2010, 81, 778-783.	1.8	4
32	Zeolite based trace humidity sensor for high temperature applications in hydrogen atmosphere. Sensors and Actuators B: Chemical, 2008, 134, 171-174.	7.8	40
33	Suitability of Selfâ€”Reducing and Slagâ€”Forming Briquettes for EAF Use based on Laboratory Tests. Steel Research International, 0, , 2100472.	1.8	1