

Deng-fu Chen

List of Publications by Year in descending order

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Version: 2024-02-01

69
papers

912
citations

471509

17
h-index

580821

25
g-index

73
all docs

73
docs citations

73
times ranked

600
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimization of submerged entry nozzle parameters for ultra-high casting speed continuous casting mold of billet. <i>Journal of Iron and Steel Research International</i> , 2022, 29, 44-52.	2.8	13
2	Comprehensive Utilization of Boron-Concentrate by Hydrometallurgy. <i>Journal of Sustainable Metallurgy</i> , 2021, 7, 244-255.	2.3	4
3	Temperature Distribution in the As-Cast Steel Specimen During Gleeble Hot-Tensile Test and Its Effect on High-Temperature Mechanical Properties. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2021, 52, 1228-1242.	2.1	7
4	Comparison of Fluid Flow and Temperature Distribution in a Single-Strand Tundish with Different Flow Control Devices. <i>Metals</i> , 2021, 11, 796.	2.3	11
5	Migration and Enrichment Behaviors of Ca and Mg Elements during Cooling and Crystallization of Boron-Bearing Titanium Slag Melt. <i>Crystals</i> , 2021, 11, 888.	2.2	5
6	Interface structure characterization and elements doping on interface bonding strength and tensile failure mechanism of NiCo coating/Cu matrix. <i>Results in Physics</i> , 2021, 30, 104883.	4.1	3
7	Crystal structure and mechanical properties of nickel-cobalt alloys with different compositions: A first-principles study. <i>Journal of Physics and Chemistry of Solids</i> , 2020, 137, 109194.	4.0	25
8	The Formation of Humps and Ripples During Selective Laser Melting of 316l Stainless Steel. <i>Jom</i> , 2020, 72, 1128-1137.	1.9	12
9	Investigation of the Peritectic Phase Transition in a Commercial Peritectic Steel Under Different Cooling Rates Using In Situ Observation. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2020, 51, 338-352.	2.1	27
10	Numerical Simulation of Heat Transfer between Roll and Slab under Dry Secondary Cooling in Ultrathick Slab Continuous Casting. <i>Steel Research International</i> , 2020, 91, 1900516.	1.8	2
11	Hydraulic Modeling on Flow Behavior in High-Speed Billet Continuous Casting Mold Considering Hydrostatic Pressure and Solidified Shell. <i>Metals</i> , 2020, 10, 1226.	2.3	4
12	The effect of the elements Cr, Os, Ir, and Y additions on the mechanical and electronic properties of L12 Ni ₃ Co alloys. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	4
13	Melting and Flowing Behavior of Mold Flux in a Continuous Casting Billet Mold for Ultra-High Speed. <i>Metals</i> , 2020, 10, 1165.	2.3	9
14	Control of Coarse Precipitates of Titanium Nitride in High-Strength Low-Alloy Steel. <i>Metal Science and Heat Treatment</i> , 2020, 61, 534-542.	0.6	5
15	Experimental simulation on the high-temperature friction property of slag in slab continuous casting mold. <i>Journal of Materials Research and Technology</i> , 2020, 9, 6453-6463.	5.8	2
16	The Reduction of Cu ²⁺ Promoted by Zn or Ni on rGO. <i>Jom</i> , 2020, 72, 4458-4465.	1.9	5
17	Ab Initio Calculations on Elastic Properties of IF Steel Matrix Phase at High Temperature Based on Lattice Expansion Theory. <i>Metals</i> , 2020, 10, 283.	2.3	6
18	Transient flow and mold flux behavior during ultra-high speed continuous casting of billet. <i>Journal of Materials Research and Technology</i> , 2020, 9, 3984-3993.	5.8	15

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19	Ab Initio Study on Continuous Evolution of Mechanical Properties in Phase Transition Region of Low-Carbon Steel. <i>Steel Research International</i> , 2020, 91, 2000070.	1.8	5
20	Evolution of Phase Transition and Mechanical Properties of Ultra-High Strength Hot-Stamped Steel During Quenching Process. <i>Metals</i> , 2020, 10, 138.	2.3	13
21	Numerical Analysis of Molten Pool Behavior and Spatter Formation with Evaporation During Selective Laser Melting of 316L Stainless Steel. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 2273-2283.	2.1	15
22	Thermal Behavior During the Selective Laser Melting Process of Ti-6Al-4V Powder in the Point Exposure Scan Pattern. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 2804-2814.	2.1	6
23	Characteristics of Slag Infiltration in High-Mn Steel Castings. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 1104-1113.	2.1	9
24	Quantifying the Effects of Combustion Gases Radiation on Surface Temperature Measurements Using Two-Color Pyrometry. <i>Energy & Fuels</i> , 2019, 33, 3610-3619.	5.1	13
25	Effect of the mold corner structure on the friction behavior in slab continuous casting molds. <i>Journal of Materials Processing Technology</i> , 2019, 270, 157-167.	6.3	7
26	Effect of the strand corner structure on the corner stress during the bending and straightening processes in slab continuous casting. <i>Journal of Manufacturing Processes</i> , 2019, 48, 270-282.	5.9	4
27	Prediction model for austenite grains growth during reheating process in Ti micro-alloyed cast steel by coupling precipitates dissolution and coarsening behavior. <i>Journal of Iron and Steel Research International</i> , 2019, 26, 162-172.	2.8	5
28	Numerical modeling of centerline segregation by a combined 3-D and 2-D hybrid model during slab continuous casting. <i>Journal of Materials Research</i> , 2018, 33, 989-1002.	2.6	5
29	Stress and Friction Distribution around Slab Corner in Continuous Casting Mold with Different Corner Structures. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 866-876.	2.1	9
30	Dilatometric determination of four critical temperatures and phase transition fraction for austenite decomposition in hypo-eutectoid steels using peak separation method. <i>Journal of Materials Research</i> , 2018, 33, 967-977.	2.6	13
31	Uniform Secondary Cooling Pattern for Minimizing Surface Reheating of the Strand During Round Bloom Continuous Casting. <i>Jom</i> , 2018, 70, 237-242.	1.9	6
32	Structural and transport properties of FeO-TiO ₂ system through molecular dynamics simulations. <i>Journal of Non-Crystalline Solids</i> , 2018, 493, 57-64.	3.1	26
33	Numerical Simulation of Electromagnetic Field in Round Bloom Continuous Casting with Final Electromagnetic Stirring. <i>Metals</i> , 2018, 8, 903.	2.3	16
34	Crystallization Behaviors of Anosovite and Silicate Crystals in High CaO and MgO Titanium Slag. <i>Metals</i> , 2018, 8, 754.	2.3	10
35	Effect of coarse TiN inclusions and microstructure on impact toughness fluctuation in Ti micro-alloyed steel. <i>Journal of Iron and Steel Research International</i> , 2018, 25, 1043-1053.	2.8	24
36	Effects of Inclusion Precipitation, Partition Coefficient, and Phase Transition on Microsegregation for High-Sulfur Steel Solidification. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 3280-3292.	2.1	23

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37	CuOâ€ZnO anchored on APS modified activated carbon as an enhanced catalyst for methanol synthesisâ€The role of ZnO. Journal of Materials Research, 2018, 33, 1625-1631.	2.6	8
38	Using differential scanning calorimetry to characterize the precipitation and dissolution of V(CN) and VC particles during continuous casting and reheating process. Journal of Materials Research, 2018, 33, 2784-2795.	2.6	1
39	Fluid Flow and Solidified Shell Remelting in F-EMS During Billet Continuous Casting. Jom, 2018, 70, 2059-2064.	1.9	6
40	Thermal spin fluctuations in CoCrFeMnNi high entropy alloy. Scientific Reports, 2018, 8, 12211.	3.3	27
41	Effect of MnS precipitation on solute equilibrium partition coefficients in high sulfur steel during solidification. Journal of Materials Research, 2018, 33, 3490-3500.	2.6	9
42	Research on the Onâ€Line Simulation of a Threeâ€Dimensional Temperature Field Model of Slab Continuous Casting. Steel Research International, 2018, 89, 1800091.	1.8	5
43	Longitudinal spin fluctuation contribution to thermal lattice expansion of paramagnetic Fe. Physical Review B, 2017, 95, .	3.2	25
44	Production of Synthetic Rutile from Molten Titanium Slag with the Addition of B2O3. Jom, 2017, 69, 1914-1919.	1.9	16
45	Modeling on solute enrichment and inclusion precipitation during the solidification process of high sulfur steel slab. Journal of Materials Research, 2017, 32, 3854-3863.	2.6	7
46	Effects of Partition Coefficients, Diffusion Coefficients, and Solidification Paths on Microsegregation in Fe-Based Multinary Alloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2504-2515.	2.1	28
47	Elastic properties of paramagnetic austenitic steel at finite temperature: Longitudinal spin fluctuations in multicomponent alloys. Physical Review B, 2017, 96, .	3.2	15
48	Fluid flow and heat transfer behavior of liquid steel in slab mold with different corner structures. Part 1: Mathematical model and verification. Numerical Heat Transfer; Part A: Applications, 2017, 72, 642-656.	2.1	10
49	Fluid flow and heat transfer behavior of liquid steel in slab mold with different corner structures. Part 2: Fluid flow, heat transfer, and solidification characteristics. Numerical Heat Transfer; Part A: Applications, 2017, 72, 657-668.	2.1	5
50	Computation of Phase Fractions in Austenite Transformation with the Dilation Curve for Various Cooling Regimens in Continuous Casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 1553-1564.	2.1	4
51	Analysis on the dynamic extension for transverse surface cracks in the as-cast steel slab at high temperatures. Engineering Failure Analysis, 2016, 66, 341-353.	4.0	6
52	Thermal spin fluctuation effect on the elastic constants of paramagnetic Fe from first principles. Physical Review B, 2015, 92, .	3.2	29
53	A Three Dimensional Cellular Automata Model for Dendrite Growth in Non-Equilibrium Solidification of Binary Alloy. Steel Research International, 2015, 86, 1490-1497.	1.8	14
54	Numerical Analysis of Coupled Turbulent Flow and Macroscopic Solidification in a Round Bloom Continuous Casting Mold with Electromagnetic Stirring. Steel Research International, 2015, 86, 1104-1115.	1.8	48

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55	Effect of Temperature Reversion on Hot Ductility and Flow Stress–Strain Curves of C-Mn Continuously Cast Steels. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 1885-1894.	2.1	3
56	Universal Secondary Cooling Structure for Round Blooms Continuous Casting of Steels in Various Diameters. Steel Research International, 2015, 86, 154-162.	1.8	6
57	Interface analysis and hot deformation behaviour of a novel laminated composite with high-Cr cast iron and low carbon steel prepared by hot compression bonding. Journal of Iron and Steel Research International, 2015, 22, 438-445.	2.8	14
58	Effects of an even secondary cooling mode on the temperature and stress fields of round billet continuous casting steel. Journal of Materials Processing Technology, 2015, 222, 315-326.	6.3	22
59	Defect detection in slab surface: A novel dual charge-coupled device imaging-based fuzzy connectedness strategy. Review of Scientific Instruments, 2014, 85, 115004.	1.3	9
60	A Three-Dimensional Cellular Automata Model for Dendrite Growth with Various Crystallographic Orientations During Solidification. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 719-725.	2.1	13
61	Mathematical Modeling of Heat Transfer in Mold Copper Coupled with Cooling Water During the Slab Continuous Casting Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 2442-2452.	2.1	22
62	Hydraulics and Mathematics Simulation on the Weir and Gas Curtain in Tundish of Ultrathick Slab Continuous Casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 392-398.	2.1	45
63	Investigation on Water Model for Fluid Flow in Slab Continuous Casting Mold With Consideration of Solidified Process. Steel Research International, 2013, 84, 31-39.	1.8	19
64	Compensation Control Model of Superheat and Cooling Water Temperature for Secondary Cooling of Continuous Casting. Steel Research International, 2011, 82, 213-221.	1.8	50
65	Study on Mitigating Center Macro–Segregation During Steel Continuous Casting Process. Steel Research International, 2011, 82, 847-856.	1.8	38
66	Study on Mathematical Model of Temperature and Stress for Thin Slab in Continuous Casting. , 2009, , .		1
67	Preparation and characterization of porous titanium using space-holder technique. Rare Metals, 2009, 28, 338-342.	7.1	22
68	The Review of Microwave Applications in Metallurgical Process in China. ISIJ International, 2007, 47, 528-532.	1.4	13
69	Effect of Microwave Treating the Blast Furnace Slag Bearing Titanium on Thermal Action. ISIJ International, 2007, 47, 1239-1244.	1.4	4