Geoffrey Brooks

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

84 papers	1,533 citations	21 h-index	37 g-index
88 ext. papers	1,754 ext. citations	2.3 avg, IF	4.77 L-index

#	Paper	IF	Citations
84	Metal Extraction Processes for Electronic Waste and Existing Industrial Routes: A Review and Australian Perspective. *Resources*, **2014**, 3, 152-179	3.7	282
83	Generation of Droplets in Slag-Metal Emulsions through Top Gas Blowing. *ISIJ International*, **2003**, 43, 983-989	1.7	89
82	Computational Fluid Dynamics Simulation of Supersonic Oxygen Jet Behavior at Steelmaking Temperature. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2010**, 41, 636-645	2.5	79
81	Techno economic analysis of electronic waste processing through black copper smelting route. *Journal of Cleaner Production*, **2016**, 126, 178-190	10.3	65
80	Modeling of trajectory and residence time of metal droplets in slag-metal-gas emulsions in oxygen steelmaking. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2005**, 36, 525-535	2.5	64
79	The carbothermic route to magnesium. *Jom*, **2006**, 58, 51-55	2.1	63
78	Kinetics of metal/slag reactions during spontaneous emulsification. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2005**, 36, 219-227	2.5	54
77	A Computational Fluid Dynamics Model of Shrouded Supersonic Jet Impingement on a Water Surface. *ISIJ International*, **2012**, 52, 1026-1035	1.7	53
76	Computational Fluid Dynamics Modeling of Supersonic Coherent Jets for Electric Arc Furnace Steelmaking Process. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2010**, 41, 1354-1367	2.5	52
75	Spout Eyes Area Correlation in Ladle Metallurgy.. *ISIJ International*, **2003**, 43, 262-263	1.7	38
74	Splashing in Oxygen Steelmaking. *ISIJ International*, **2014**, 54, 836-844	1.7	36
73	Development of high flux solar simulators for solar thermal research. *Solar Energy Materials and Solar Cells*, **2015**, 141, 436-446	6.4	35
72	Analysis of the source of dynamic interfacial phenomena during reaction between metal droplets and slag. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2005**, 36, 591-604	2.5	35
71	Inclined Jetting and Splashing in Electric Arc Furnace Steelmaking. *ISIJ International*, **2011**, 51, 1439-1447	1.7	33
70	Degradation of MgO refractory in CaO-SiO2-MgO-FeO x and CaO-SiO2-Al2O3-MgO-FeO x slags under forced convection. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2005**, 36, 453-461	2.5	33
69	Splash Distribution in Oxygen Steelmaking. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2015**, 46, 863-872	2.5	32
68	Computational Fluid Dynamic Modeling of Zinc Slag Fuming Process in Top-Submerged Lance Smelting Furnace. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2012**, 43, 39-55	2.5	30

67	A thermodynamic-based life cycle assessment of precious metal recycling out of waste printed circuit board through secondary copper smelting. *Environmental Development*, **2017**, 24, 36-49	4.1	29
66	Principal characteristics of a bubble formation on a horizontal downward facing surface. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2012**, 411, 94-104	5.1	26
65	Investigation of Anodic Gas Film Behavior in HallHeroult Cell Using Low Temperature Electrolyte. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2013** , 44, 1155-1165	2.5	24
64	Theoretical Investigation of the Inclined Sidewall Design on Magnetohydrodynamic (MHD) Forces in an Aluminum Electrolytic Cell. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2011**, 42, 243-253	2.5	23
63	Computational Fluid Dynamics (CFD) Investigation of Submerged Combustion Behavior in a Tuyere Blown Slag-fuming Furnace. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2012**, 43, 1054-1068	2.5	19
62	Analysis of Droplet Generation in Oxygen Steelmaking. *ISIJ International*, **2009**, 49, 24-28	1.7	19
61	Analysis of interfacial area changes during spontaneous emulsification of metal droplets in slag. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2006** , 37, 1087-1091	2.5	19
60	Thermal separation of arsenic and antimony oxides. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **1994**, 25, 873-884	2.5	19
59	Control and Removal of Impurities from Al Melts: A Review. *Materials Science Forum*, **2011**, 693, 149-160	0.4	17
58	Thermodynamic analysis of metals recycling out of waste printed circuit board through secondary copper smelting. *Journal of Material Cycles and Waste Management*, **2018**, 20, 386-401	3.4	15
57	Thermodynamics Behavior of Germanium During Equilibrium Reactions between FeOx-CaO-SiO2-MgO Slag and Molten Copper. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2016**, 47, 2889-2903	2.5	15
56	Dynamic Model of Basic Oxygen Steelmaking Process Based on Multizone Reaction Kinetics: Modeling of Decarburization. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2018**, 49, 1022-1033	2.5	14
55	Cathode Characterization with Steel and Copper Collector Bars in an Electrolytic Cell. *Jom*, **2014**, 66, 235-244	2.1	14
54	2D condensation model for the inner Solar Nebula: an enstatite-rich environment. *Monthly Notices of the Royal Astronomical Society*, **2016**, 457, 1359-1370	4.3	13
53	Electrically Enhanced Boron Removal from Silicon Using Slag. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2014**, 45, 1-5	2.5	13
52	Kinetic analysis of silicothermic process under flowing argon atmosphere. *Canadian Metallurgical Quarterly*, **2014**, 53, 17-25	0.9	13
51	Alternative Al production methods. *Institutions of Mining and Metallurgy Transactions Section C: Mineral Processing and Extractive Metallurgy*, **2013**, 122, 87-104		13
50	An Improved Correlation for Predicting Terminal Velocity of Droplets and Bubbles in Slag-Metal-Gas Emulsion.. *ISIJ International*, **2002**, 42, 1182-1184	1.7	13

49	Solid-solution formation between arsenic and antimony oxides. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **1994**, 25, 865-871	2.5	12
48	Thermodynamics of Palladium (Pd) and Tantalum (Ta) Relevant to Secondary Copper Smelting. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2017** , 48, 317-327	2.5	11
47	Online Monitoring of Dynamic Slag Behavior in Ladle Metallurgy. *ISIJ International*, **2003**, 43, 1286-1288	1.7	8
46	Dynamic Model of Basic Oxygen Steelmaking Process Based on Multizone Reaction Kinetics: Modeling of Manganese Removal. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2018**, 49, 2191-2208	2.5	7
45	Analysis of steelmaking kinetics from IMPHOS pilot plant data. *Ironmaking and Steelmaking*, **2016**, 43, 358-370	1.3	7
44	Solar processing of composite iron ore pellets: Preliminary assessments. *Journal of Cleaner Production*, **2018**, 205, 1017-1028	10.3	7
43	Refractory Metal Nuggets Formation of the first condensates in the Solar Nebula. *Icarus*, **2012**, 221, 89-105	3.8	6
42	Alternative Al production methods. *Institutions of Mining and Metallurgy Transactions Section C: Mineral Processing and Extractive Metallurgy*, **2013**, 122, 113-121		6
41	Density segregation of granular material in a rotating cylindrical tumbler **2008**,		5
40	Energy Balance Around Gas Injection into Oxygen Steelmaking. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2016**, 47, 458-466	2.5	5
39	Multivariate Analysis of Ladle Vibration. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2016**, 47, 2681-2689	2.5	5
38	Study of Low Flow Rate Ladle Bottom Gas Stirring Using Triaxial Vibration Signals. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2018**, 49, 423-433	2.5	5
37	Analysis for Optimum Conditions for Recovery of Valuable Metals from E-waste Through Black Copper Smelting. *Minerals, Metals and Materials Series*, **2017**, 419-427	0.3	4
36	Thermodynamic-Based Exergy Analysis of Precious Metal Recovery out of Waste Printed Circuit Board through Black Copper Smelting Process. *Energies*, **2019**, 12, 1313	3.1	4
35	General mass balance for oxygen steelmaking. *Ironmaking and Steelmaking*, **2020**, 1-15	1.3	4
34	Understanding the Anode Porosity as a Means for Improved Aluminium Smelting. *Minerals, Metals and Materials Series*, **2018**, 1235-1242	0.3	4
33	Aluminate Spinels as Sidewall Linings for Aluminum Smelters **2011**, 1085-1090		4
32	Recent Developments in the Environment Process. *Canadian Metallurgical Quarterly*, **1997**, 36, 333-340	0.9	4

31	Thermodynamics and kinetics analyses of ZrB2 formation in molten aluminium alloys. *Canadian Metallurgical Quarterly*, **2016**, 55, 161-172	0.9	4
30	Slag Basicity: What Does It Mean?. *Minerals, Metals and Materials Series*, **2019**, 297-308	0.3	4
29	Neural-Net-Based Predictive Modeling of Spout Eye Size in Steelmaking. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2012**, 43, 571-577	2.5	3
28	Experimental Investigation of Single Bubble Characteristics in a Cold Model of a Hall-Heroult Electrolytic Cell **2011**, 575-580		3
27	The use of secondary ion mass spectrometry for investigating oxygen in pyrometallurgical reactions. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2003**, 34, 355-358	2.5	3
26	Metals Production and Metal Oxides Reduction Using Hydrogen: A Review. *Journal of Sustainable Metallurgy*, **2022**, 8, 1	2.7	3
25	Application of vibration and sound signals in monitoring iron and steelmaking processes. *Ironmaking and Steelmaking*, **2020**, 47, 178-187	1.3	3
24	Application of mass and energy balance in oxygen steelmaking. *Ironmaking and Steelmaking*, **2020**, 1-6	1.3	2
23	Existence of periodic solutions of a continuous flow bioreactor model with impulsive control in microorganisms. *Journal of Applied Mathematics and Computing*, **2017**, 53, 471-486	1.8	1
22	High Temperature Properties of Molten Nitrate Salt for Solar Thermal Energy Storage Application. *Minerals, Metals and Materials Series*, **2017**, 531-539	0.3	1
21	Anode characterisation and gas diffusion behaviour in aluminium smelting **2017**,		1
20	Diffusion and Flow of CO2 in Carbon Anode for Aluminium Smelting. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2019**, 50, 846-856	2.5	1
19	Mass and energy analysis of composite pellet process. *Ironmaking and Steelmaking*, **2018**, 45, 978-983	1.3	1
18	Novel multi-stage aluminium production: part 1 thermodynamic assessment of carbosulphidation of Al2O3/bauxite using H2S and sodiothermic reduction of Al2S3. *Mineral Processing and Extractive Metallurgy: Transactions of the Institute of Mining and Metallurgy*, **2018**, 127, 91-102	0.8	1
17	Numerical modeling of three-phase slurry bubble column: Study of particle effects **2017**,		1
16	Structural Analysis of Germanium (Ge)-Containing Ferrous Calcium Silicate Magnesia Slag for Applications of Black Copper Smelting. *Minerals, Metals and Materials Series*, **2018**, 295-304	0.3	1
15	Development of High Flux Solar Simulators for Solar Thermal Research **2015**, 149-159		1
14	Droplet Heat Transfer in Oxygen Steelmaking. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2021**, 52, 4141	2.5	0

13	Mineral Processing and Metal Extraction on the Lunar Surface - Challenges and Opportunities. *Mineral Processing and Extractive Metallurgy Review*,1-27	3.1	0
12	Contribution of CO2 Emissions from Basic Oxygen Steelmaking Process. *Metals*, **2022**, 12, 797	2.3	0
11	Wetting Characteristics of Cryolite-Based Melts on Spinels Substrate **2014**, 609-614		
10	Cold Modelling of Splashing Phenomena in Oxygen Steelmaking **2014**, 325-332		
9	Heat-transfer considerations in the bath smelting of composite organic and ferrous wastes. *Institutions of Mining and Metallurgy Transactions Section C: Mineral Processing and Extractive Metallurgy*, **2002**, 111, 18-24		
8	Diffusion Measurements of CO2 Within Carbon Anodes for Aluminium Smelting. *Minerals, Metals and Materials Series*, **2020**, 1183-1188	0.3	
7	Structure–Thermodynamics Interrelation for the GeO2 and PdO Containing MgO-Saturated Ferrous Calcium Silicate (FCS) Slag Relevant to E-waste Processing. *Minerals, Metals and Materials Series*, **2020**, 83-93	0.3	
6	Development of High Flux Solar Simulators for Solar Thermal Research147-159		
5	Production of Aluminum Sulfide through Carbosulfidation Utilising H2S. *Minerals, Metals and Materials Series*, **2016**, 1299-1304	0.3	
4	Study of Ni-Impurity Removal from Al Melt **2012**, 1091-1097		
3	Wetting Characteristics of Cryolite-Based Melts on Spinels Substrate **2014**, 609-614		
2	Cold Modelling of Splashing Phenomena in Oxygen Steelmaking **2014**, 325-332		
1	Cold model study of sound signals from gas-stirred ladles. *Ironmaking and Steelmaking*, **2020**, 47, 210-217	1.3	