Sindo Kou

List of Publications by Year in descending order

48 papers	2,221 citations	361413 20 h-index	315739 38 g-index
50 all docs	50 docs citations	50 times ranked	1167 citing authors

#	Article	IF	Citations
1	A criterion for cracking during solidification. Acta Materialia, 2015, 88, 366-374.	7.9	441
2	Fluid flow and weld penetration in stationary arc welds. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1985, 16, 203-213.	1.4	209
3	Al-to-Mg Friction Stir Welding: Effect of Material Position, Travel Speed, and Rotation Speed. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2914-2935.	2.2	196
4	Formation of Liquid and Intermetallics in Al-to-Mg Friction Stir Welding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 3238-3251.	2.2	153
5	Susceptibility of ternary aluminum alloys to cracking during solidification. Acta Materialia, 2017, 125, 513-523.	7.9	128
6	Crack susceptibility of binary aluminum alloys during solidification. Acta Materialia, 2016, 110, 84-94.	7.9	120
7	Effect of diffusion on susceptibility to cracking during solidification. Acta Materialia, 2015, 100, 359-368.	7.9	111
8	Strong, Ductile Magnesium-Zinc Nanocomposites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 3038-3045.	2.2	93
9	A simple test for assessing solidification cracking susceptibility and checking validity of susceptibility prediction. Acta Materialia, 2018, 143, 181-197.	7.9	85
10	Evidence of back diffusion reducing cracking during solidification. Acta Materialia, 2017, 122, 47-59.	7.9	76
11	Al-to-Cu Friction Stir Lap Welding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 303-315.	2.2	67
12	Marangoni convection in weld pools with a free surface. International Journal for Numerical Methods in Fluids, 1989, 9, 1503-1516.	1.6	66
13	Nanoparticle-Induced Superior Hot Tearing Resistance of A206 Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 1897-1907.	2.2	46
14	Susceptibility of magnesium alloys to solidification cracking. Science and Technology of Welding and Joining, 2020, 25, 251-257.	3.1	37
15	Characterization of hot extruded Mg/SiC nanocomposites fabricated by casting. Journal of Materials Science, 2011, 46, 2991-2997.	3.7	36
16	Effect of filler metals on solidification cracking susceptibility of Al alloys 2024 and 6061. Journal of Materials Processing Technology, 2019, 266, 421-428.	6.3	36
17	Predicting susceptibility of magnesium alloys to weld-edge cracking. Acta Materialia, 2015, 90, 242-251.	7.9	34
18	Fluid flow and weld penetration in stationary arc welds. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1985, 16, 203-213.	1.4	30

#	Article	IF	Citations
19	Predicting effect of filler metals on solidification cracking susceptibility of 2024 Al and 6061 Al. Science and Technology of Welding and Joining, 2019, 24, 559-565.	3.1	23
20	Evaluating susceptibility of Ni-base alloys to solidification cracking by transverse-motion weldability test. Science and Technology of Welding and Joining, 2020, 25, 690-697.	3.1	23
21	Role of liquid backfilling in reducing solidification cracking in aluminium welds. Science and Technology of Welding and Joining, 2020, 25, 415-421.	3.1	23
22	Calculating the Susceptibility of Carbon Steels to Solidification Cracking During Welding. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 460-469.	2.1	21
23	Solidification cracking susceptibility of quaternary aluminium alloys. Science and Technology of Welding and Joining, 2021, 26, 244-257.	3.1	20
24	WELD POOL CONVECTION AND EXPANSION DUE TO DENSITY VARIATIONS. Numerical Heat Transfer; Part A: Applications, 1990, 17, 73-89.	2.1	14
25	Thermocapillary flow and natural convection in a melt column with an unknown melt/solid interface. International Journal for Numerical Methods in Fluids, 1991, 12, 59-80.	1.6	14
26	Liquation Cracking in Arc and Friction-Stir Welding of Mg-Zn Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 315-327.	2.2	14
27	Predicting Susceptibility to Solidification Cracking and Liquation Cracking by CALPHAD. Metals, 2021, 11, 1442.	2.3	13
28	Determination of tensile strain causing solidification cracking in welding. Science and Technology of Welding and Joining, 2020, 25, 431-437.	3.1	10
29	Mechanical properties of squeeze-cast Alâ€“7Siâ€“0.3Mg alloys with Sc-modified Fe-rich intermetallic compounds. Rare Metals, 2018, 37, 769-777.	7.1	9
30	Computational Kinetics Simulation of Precipitation and Dissolution of Gamma Prime (Î³â€²) in Heat Treating and Welding of 718plus Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 115-122.	2.2	8
31	Solidification cracking susceptibility associated with a teardrop-shaped weld pool. Science and Technology of Welding and Joining, 2021, 26, 341-347.	3.1	8
32	Prediction of Cracking Susceptibility of Commercial Aluminum Alloys during Solidification. Metals, 2021, 11, 1479.	2.3	8
33	Evaluating susceptibility of carbon steels to solidification cracking by transverse-motion weldability test. Science and Technology of Welding and Joining, 2020, 25, 706-711.	3.1	7
34	Roles of tension and solidification shrinkage in solidification cracking during aluminium arc welding. Science and Technology of Welding and Joining, 2021, 26, 614-621.	3.1	7
35	Weld Metal Solidification Cracking. , 0, , 263-300.		6
36	Back diffusion resisting solidification cracking in austenitic stainless steels. Science and Technology of Welding and Joining, 2021, 26, 606-613.	3.1	6

#	Article	IF	Citations
37	Solidification cracking test of aluminium alloy 5052. Science and Technology of Welding and Joining, 2022, 27, 301-308.	3.1	5
38	An analytical model for intergranular liquid feeding and its effect on solidification cracking. Science and Technology of Welding and Joining, 2022, 27, 319-325.	3.1	5
39	Precipitation-Hardening Materials I: Aluminum Alloys. , 0, , 353-374.		4
40	In Situ Observation of Microstructural and Inclusions Evolution in High-Strength Steel Deposited Metals with Various Rare Earth Pr Contents. Materials, 2022, 15, 1257.	2.9	4
41	Corrosion-Resistant Materials: Stainless Steels. , 0, , 431-454.		2
42	Transformation-Hardening Materials: Carbon and Alloy Steels. , 0, , 393-430.		1
43	Difficulties Associated with the Partially Melted Zone. , 0, , 321-339.		1
44	Work-Hardened Materials. , 0, , 341-352.		1
45	Weld Metal Chemical Inhomogeneities. , 0, , 243-262.		0
46	Precipitation-Hardening Materials II: Nickel-Base Alloys. , 0, , 375-392.		0
47	Formation of the Partially Melted Zone. , 0, , 301-320.		0
48	Effect of pressure on solidification cracking susceptibility of Alâ€“Si alloys. Science and Technology of Welding and Joining, 2019, 24, 713-720.	3.1	0