

Patricio F Mendez

List of Publications by Year in descending order

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Version: 2024-02-01

28
papers

591
citations

759233

12
h-index

610901

24
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29
all docs

29
docs citations

29
times ranked

553
citing authors

#	ARTICLE	IF	CITATIONS
1	Welding processes for wear resistant overlays. Journal of Manufacturing Processes, 2014, 16, 4-25.	5.9	164
2	Strain energy release in ceramic-to-metal joints by ductile metal interlayers. Scripta Materialia, 2005, 53, 857-861.	5.2	53
3	Scaling of coupled heat transfer and plastic deformation around the pin in friction stir welding. Acta Materialia, 2010, 58, 6012-6026.	7.9	52
4	Principal component analysis and dimensional analysis as materials informatics tools to reduce dimensionality in materials science and engineering. Statistical Analysis and Data Mining, 2009, 1, 361-371.	2.8	38
5	Scaling Laws From Statistical Data and Dimensional Analysis. Journal of Applied Mechanics, Transactions ASME, 2005, 72, 648-657.	2.2	35
6	Metal solid freeform fabrication using semi-solid slurries. Jom, 2000, 52, 31-33.	1.9	32
7	Solid fraction measurement using equation-based cooling curve analysis. Scripta Materialia, 2008, 58, 699-702.	5.2	31
8	Scaling Analysis of a Moving Point Heat Source in Steady-State on a Semi-Infinite Solid. Journal of Heat Transfer, 2018, 140, .	2.1	21
9	Cooling Curve Analysis to Determine Phase Fractions in Solid-State Precipitation Reactions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2216-2223.	2.2	18
10	Kinetics of intermetallic compound layers during initial period of reaction between mild steel and molten aluminum. International Journal of Materials Research, 2019, 110, 194-201.	0.3	18
11	Characteristic Values in the Scaling of Differential Equations in Engineering. Journal of Applied Mechanics, Transactions ASME, 2010, 77, .	2.2	15
12	Controlling heat transfer in micro electron beam welding using volumetric heating. International Journal of Heat and Mass Transfer, 2011, 54, 5545-5553.	4.8	14
13	Fatigue life of laser additive manufacturing repaired steel component. Engineering Fracture Mechanics, 2021, 241, 107417.	4.3	12
14	Cooling Curve Analysis as an Alternative to Dilatometry in Continuous Cooling Transformations. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 148-155.	2.2	11
15	Growth mechanism of primary needles during the solidification of chromium carbide overlays. Acta Materialia, 2018, 151, 356-365.	7.9	10
16	Width of thermal features induced by a 2-D moving heat source. International Journal of Heat and Mass Transfer, 2020, 156, 119793.	4.8	10
17	Dimensionless representation of the column characteristics and weld pool interactions for a DC argon arc. Science and Technology of Welding and Joining, 2019, 24, 634-643.	3.1	8
18	Dominant Heat Transfer Mechanisms in the GTAW Plasma Arc Column. Plasma Chemistry and Plasma Processing, 2021, 41, 1497-1515.	2.4	8

#	ARTICLE	IF	CITATIONS
19	Order of Magnitude Scaling: A Systematic Approach to Approximation and Asymptotic Scaling of Equations in Engineering. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2013, 80, .	2.2	7
20	Isotherm penetration depth under a moving Gaussian surface heat source on a thick substrate. <i>International Journal of Thermal Sciences</i> , 2022, 172, 107334.	4.9	7
21	Calibrated expressions for welding and their application to isotherm width in a thick plate. <i>Soldagem E Inspecao</i> , 2014, 19, 212-220.	0.6	6
22	Scaling Analysis of the Thermal Stress Field Produced by a Moving Point Heat Source in a Thin Plate. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2021, 88, .	2.2	5
23	Scaling of non-linear effects in heat transfer of a continuously fed melting wire. <i>International Journal of Heat and Mass Transfer</i> , 2011, 54, 2651-2660.	4.8	4
24	Modeling of Micro Welding Process Using Electron Beam Under High Peclet Number. , 2010, , .		3
25	The Evolution of the Fraction of Individual Phases During a Simultaneous Multiphase Transformation from Timeâ€“Temperature Data. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 622-638.	2.2	3
26	Generalized representation of arc shape, arc column characteristics and arc-weld pool interactions for DC electric arcs burning in monoatomic gases. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 055001.	2.8	3
27	Scaling laws as a tool of materials informatics. <i>Jom</i> , 2008, 60, 60-66.	1.9	2
28	Large anomalous features in the microstructure of chromium carbide weld overlays. <i>Science and Technology of Welding and Joining</i> , 2017, 22, 595-600.	3.1	1