

Patricio F Mendez

List of Publications by Year in descending order

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Version: 2024-02-01

28
papers

591
citations

759233

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h-index

610901

24
g-index

29
all docs

29
docs citations

29
times ranked

553
citing authors

#	ARTICLE	IF	CITATIONS
1	Isotherm penetration depth under a moving Gaussian surface heat source on a thick substrate. International Journal of Thermal Sciences, 2022, 172, 107334.	4.9	7
2	Fatigue life of laser additive manufacturing repaired steel component. Engineering Fracture Mechanics, 2021, 241, 107417.	4.3	12
3	Dominant Heat Transfer Mechanisms in the GTAW Plasma Arc Column. Plasma Chemistry and Plasma Processing, 2021, 41, 1497-1515.	2.4	8
4	Generalized representation of arc shape, arc column characteristics and arc-weld pool interactions for DC electric arcs burning in monoatomic gases. Journal Physics D: Applied Physics, 2021, 54, 055001.	2.8	3
5	Scaling Analysis of the Thermal Stress Field Produced by a Moving Point Heat Source in a Thin Plate. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	5
6	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
7	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
8	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
9	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
10	Growth mechanism of primary needles during the solidification of chromium carbide overlays. Acta Materialia, 2018, 151, 356-365.	7.9	10
11	Large anomalous features in the microstructure of chromium carbide weld overlays. Science and Technology of Welding and Joining, 2017, 22, 595-600.	3.1	1
12	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
13	The Evolution of the Fraction of Individual Phases During a Simultaneous Multiphase Transformation from Time-temperature Data. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 622-638.	2.2	3
14	Welding processes for wear resistant overlays. Journal of Manufacturing Processes, 2014, 16, 4-25.	5.9	164
15	Calibrated expressions for welding and their application to isotherm width in a thick plate. Soldagem E Inspecao, 2014, 19, 212-220.	0.6	6
16	Order of Magnitude Scaling: A Systematic Approach to Approximation and Asymptotic Scaling of Equations in Engineering. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	7
17	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
18	Scaling of non-linear effects in heat transfer of a continuously fed melting wire. International Journal of Heat and Mass Transfer, 2011, 54, 2651-2660.	4.8	4

#	ARTICLE	IF	CITATIONS
19	Modeling of Micro Welding Process Using Electron Beam Under High Peclet Number. , 2010, , .		3
20	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
21	Scaling of coupled heat transfer and plastic deformation around the pin in friction stir welding. Acta Materialia, 2010, 58, 6012-6026.	7.9	52
22	Characteristic Values in the Scaling of Differential Equations in Engineering. Journal of Applied Mechanics, Transactions ASME, 2010, 77, .	2.2	15
23	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
24	Scaling laws as a tool of materials informatics. Jom, 2008, 60, 60-66.	1.9	2
25	Solid fraction measurement using equation-based cooling curve analysis. Scripta Materialia, 2008, 58, 699-702.	5.2	31
26	Strain energy release in ceramic-to-metal joints by ductile metal interlayers. Scripta Materialia, 2005, 53, 857-861.	5.2	53
27	Scaling Laws From Statistical Data and Dimensional Analysis. Journal of Applied Mechanics, Transactions ASME, 2005, 72, 648-657.	2.2	35
28	Metal solid freeform fabrication using semi-solid slurries. Jom, 2000, 52, 31-33.	1.9	32