Thomas F Flint

List of Publications by Citations

16 papers	144 citations	7 h-index	11 g-index
16 ext. papers	206 ext. citations	4.1 avg, IF	3.11 L-index

#	Paper	IF	Citations
16	Extension of the double-ellipsoidal heat source model to narrow-groove and keyhole weld configurations. *Journal of Materials Processing Technology*, **2017**, 246, 123-135	5.3	36
15	Effects of dilution on alloy content and microstructure in multi-pass steel welds. *Journal of Materials Processing Technology*, **2019**, 265, 71-86	5.3	26
14	Semi-analytical solutions for the transient temperature fields induced by a moving heat source in an orthogonal domain. *International Journal of Thermal Sciences*, **2018**, 123, 140-150	4.1	16
13	Characterisation and modelling of tempering during multi-pass welding. *Journal of Materials Processing Technology*, **2019**, 270, 118-131	5.3	16
12	Prediction of grain structure evolution during rapid solidification of high energy density beam induced re-melting. *Materials and Design*, **2018**, 147, 200-210	8.1	9
11	A thermal fluid dynamics framework applied to multi-component substrates experiencing fusion and vaporisation state transitions. *Communications Physics*, **2020**, 3,	5.4	9
10	A semi-analytical solution for the transient temperature field generated by a volumetric heat source developed for the simulation of friction stir welding. *International Journal of Thermal Sciences*, **2019**, 138, 586-595	4.1	9
9	Phase-Field Simulation of Grain Boundary Evolution In Microstructures Containing Second-Phase Particles with Heterogeneous Thermal Properties. *Scientific Reports*, **2019**, 9, 18426	4.9	7
8	Prediction of Dilution and Its Impact on the Metallurgical and Mechanical Behavior of a Multipass Steel Weldment. *Journal of Pressure Vessel Technology, Transactions of the ASME*, **2019**, 141,	1.2	5
7	Effects of dilution on the hardness and residual stresses in multipass steel weldments. *International Journal of Pressure Vessels and Piping*, **2020**, 187, 104154	2.4	5
6	HEDSATS: High energy density semi-analytical thermal solutions. *SoftwareX*, **2019**, 10, 100243	2.7	2
5	Modelling of Dilution Effects on Microstructure and Residual Stress in a Multi-Pass Weldment **2018**,		2
4	Magneto-hydrodynamics of multi-phase flows in heterogeneous systems with large property gradients. *Scientific Reports*, **2021**, 11, 18998	4.9	1
3	beamWeldFoam: Numerical simulation of high energy density fusion and vapourisation-inducing processes. *SoftwareX*, **2022**, 18, 101065	2.7	1
2	A fundamental analysis of factors affecting chemical homogeneity in the laser powder bed fusion process. *International Journal of Heat and Mass Transfer*, **2022**, 194, 122985	4.9	0
1	Electron beam weld modelling of ferritic steel: effect of prior-austenite grain size on transformation kinetics. *Procedia Manufacturing*, **2020**, 51, 842-847	1.5	