Paul Colegrove

List of Publications by Citations

51 papers	3,707 citations	28 h-index	51 g-index
51 ext. papers	4,503 ext. citations	4.5 avg, IF	5.61 L-index

#	Paper	IF	Citations
51	Wire + Arc Additive Manufacturing. *Materials Science and Technology*, **2016**, 32, 641-647	1.5	713
50	Microstructure and Mechanical Properties of Wire and Arc Additive Manufactured Ti-6Al-4V. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2013**, 44, 968-977	2.3	388
49	Investigation of the benefits of plasma deposition for the additive layer manufacture of Ti6Al4V. *Journal of Materials Processing Technology*, **2012**, 212, 1377-1386	5.3	319
48	Microstructure and residual stress improvement in wire and arc additively manufactured parts through high-pressure rolling. *Journal of Materials Processing Technology*, **2013**, 213, 1782-1791	5.3	220
47	The effectiveness of combining rolling deformation with Wire-Arc Additive Manufacture on grain refinement and texture modification in Ti6Al4V. *Materials Characterization*, **2016**, 114, 103-114	3.9	156
46	Model for predicting heat generation and temperature in friction stir welding from the material properties. *Science and Technology of Welding and Joining*, **2007**, 12, 284-297	3.7	116
45	A computationally efficient finite element model of wire and arc additive manufacture. *International Journal of Advanced Manufacturing Technology*, **2014**, 70, 227-236	3.2	109
44	Numerical analysis of heat transfer and fluid flow in multilayer deposition of PAW-based wire and arc additive manufacturing. *International Journal of Heat and Mass Transfer*, **2018**, 124, 504-516	4.9	106
43	Experimental and numerical analysis of aluminium alloy 7075-T7351 friction stir welds. *Science and Technology of Welding and Joining*, **2003**, 8, 360-368	3.7	102
42	Residual stress of as-deposited and rolled wire+arc additive manufacturing Ti6Al4V components. *Materials Science and Technology*, **2016**, 32, 1439-1448	1.5	91
41	CFD modelling of friction stir welding of thick plate 7449 aluminium alloy. *Science and Technology of Welding and Joining*, **2006**, 11, 429-441	3.7	89
40	Interpass rolling of Ti-6Al-4V wire + arc additively manufactured features for microstructural refinement. *Additive Manufacturing*, **2018**, 21, 340-349	6.1	86
39	Application of bulk deformation methods for microstructural and material property improvement and residual stress and distortion control in additively manufactured components. *Scripta Materialia*, **2017**, 135, 111-118	5.6	82
38	Measuring the process efficiency of controlled gas metal arc welding processes. *Science and Technology of Welding and Joining*, **2011**, 16, 412-417	3.7	82
37	A literature review of Ti-6Al-4V linear friction welding. *Progress in Materials Science*, **2018**, 92, 225-257	42.2	78
36	Development of Trivex friction stir welding tool Part 2 three-dimensional flow modelling. *Science and Technology of Welding and Joining*, **2004**, 9, 352-361	3.7	78
35	Control of residual stress and distortion in aluminium wire + arc additive manufacture with rolling. *Additive Manufacturing*, **2018**, 22, 775-783	6.1	69

34	Welding process impact on residual stress and distortion. *Science and Technology of Welding and Joining*, **2009**, 14, 717-725	3.7	64
33	Two-dimensional CFD modelling of flow round profiled FSW tooling. *Science and Technology of Welding and Joining*, **2004**, 9, 483-492	3.7	62
32	A review of Additive Manufacturing technology and Cost Estimation techniques for the defence sector. *CIRP Journal of Manufacturing Science and Technology*, **2017**, 19, 117-128	3.4	61
31	Designing a WAAM Based Manufacturing System for Defence Applications. *Procedia CIRP*, **2015**, 37, 48-53	2.8	57
30	Development of a laminar flow local shielding device for wire + arc additive manufacture. *Journal of Materials Processing Technology*, **2015**, 226, 99-105	5.3	53
29	Analytical process model for wire + arc additive manufacturing. *Additive Manufacturing*, **2018**, 21, 651-657	6.1	40
28	High Pressure Interpass Rolling of Wire + Arc Additively Manufactured Titanium Components. *Advanced Materials Research*, **2014**, 996, 694-700	0.5	37
27	Investigation of post-weld rolling methods to reduce residual stress and distortion. *Journal of Materials Processing Technology*, **2017**, 247, 243-256	5.3	35
26	Numerical investigation of the tool contact condition during friction stir welding of aerospace aluminium alloy. *Computational Materials Science*, **2013**, 71, 101-108	3.2	33
25	Assessment of residual stress of welded structural steel plates with or without post weld rolling using the contour method and neutron diffraction. *Journal of Materials Processing Technology*, **2013**, 213, 2323-2328	5.3	31
24	Realisation of a multi-sensor framework for process monitoring of the wire arc additive manufacturing in producing Ti-6Al-4V parts. *International Journal of Computer Integrated Manufacturing*, **2018**, 31, 785-798	4.3	30
23	Improvement of microstructure and mechanical properties in Wire + Arc Additively Manufactured Ti-6Al-4V with Machine Hammer Peening. *Procedia Engineering*, **2017**, 216, 8-17		28
22	Energy and force analysis of linear friction welds in medium carbon steel. *Science and Technology of Welding and Joining*, **2010**, 15, 479-485	3.7	27
21	Liquation and post-weld heat treatment cracking in Rene 80 laser repair welds. *Journal of Materials Processing Technology*, **2012**, 212, 188-197	5.3	23
20	Alternative friction stir welding technology for titanium□Al□V propellant tanks within the space industry. *Science and Technology of Welding and Joining*, **2017**, 22, 300-318	3.7	22
19	Rolling to control residual stress and distortion in friction stir welds. *Science and Technology of Welding and Joining*, **2010**, 15, 440-447	3.7	22
18	Effect of high pressure rolling on weld-induced residual stresses. *Science and Technology of Welding and Joining*, **2012**, 17, 394-401	3.7	22
17	Metal transfer modes in plasma Wire + Arc additive manufacture. *Journal of Materials Processing Technology*, **2019**, 264, 45-54	5.3	20

16	3D modelling of Ti6Al4V linear friction welds. *Science and Technology of Welding and Joining*, **2017**, 22, 496-504	3.7	19
15	Comparison of joining efficiency and residual stresses in laser and laser hybrid welding. *Science and Technology of Welding and Joining*, **2011**, 16, 244-248	3.7	17
14	Weld-bonded stainless steel to carbon fibre-reinforced plastic joints. *Journal of Materials Processing Technology*, **2018**, 251, 241-250	5.3	16
13	Experimental measurement of biaxial thermal stress fields caused by arc welding. *Journal of Materials Processing Technology*, **2012**, 212, 962-968	5.3	16
12	Hybrid modelling of 7449-T7 aluminium alloy friction stir welded joints. *Science and Technology of Welding and Joining*, **2013**, 18, 147-153	3.7	15
11	A computationally efficient thermal modelling approach of the linear friction welding process. *Journal of Materials Processing Technology*, **2018**, 252, 849-858	5.3	14
10	High pressure rolling of low carbon steel weld seams: Part 2 – Roller geometry and residual stress. *Science and Technology of Welding and Joining*, **2013**, 18, 84-90	3.7	14
9	Investigation of low current gas tungsten arc welding using split anode calorimetry. *Science and Technology of Welding and Joining*, **2017**, 22, 71-78	3.7	8
8	A System Approach for Modelling Additive Manufacturing in Defence Acquisition Programs. *Procedia CIRP*, **2018**, 67, 209-214	1.8	8
7	Neutron Diffraction Analysis of Complete Residual Stress Tensors in Conventional and Rolled Gas Metal Arc Welds. *Experimental Mechanics*, **2013**, 53, 195-204	2.6	7
6	High pressure rolling of low carbon steel weld seams: Part 1 – Effects on mechanical properties and microstructure. *Science and Technology of Welding and Joining*, **2013**, 18, 76-83	3.7	7
5	Residual strain measurement for arc welding and localised high-pressure rolling using resistance strain gauges and neutron diffraction. *Journal of Strain Analysis for Engineering Design*, **2012**, 47, 576-586	1.3	6
4	Effect of nitrogen in backing gas on duplex root weld properties of heavy-walled pipe. *Welding in the World, Le Soudage Dans Le Monde*, **2016**, 60, 877-882	1.9	4
3	Arc instabilities during split anode calorimetry with the TIG welding process. *Welding in the World, Le Soudage Dans Le Monde*, **2018**, 62, 831-845	1.9	3
2	Influence of shielding gas nozzle design on power density distribution in low-current TIG welding arcs. *Welding in the World, Le Soudage Dans Le Monde*, **2020**, 64, 831-845	1.9	1
1	Additive manufacturing applications in Defence Support Services: current practices and framework for implementation. *International Journal of Systems Assurance Engineering and Management*, **2018**, 9, 657-674	1.3	1