Alec Davis

List of Publications by Year
in descending order

23 papers	566 citations	687220 13 h-index	677027 22 g-index
23 all docs	23 docs citations	23 times ranked	368 citing authors

#	Article	IF	Citations
1	Î² Grain refinement by yttrium addition in Ti-6Al-4V Wire-Arc Additive Manufacturing. Journal of Alloys and Compounds, 2022, 895, 162735.	2.8	10
2	Modelling the Effect of Deformation on Discontinuous Precipitation in Magnesiumâ€"Aluminium Alloy. , 2022, 1, 54-69.		1
3	Preageing of magnesium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 809, 141002.	2.6	6
4	The potential for grain refinement of Wire-Arc Additive Manufactured (WAAM) Ti-6Al-4V by ZrN and TiN inoculation. Additive Manufacturing, 2021, 40, 101928.	1.7	13
5	Effect of deposition strategies on fatigue crack growth behaviour of wire + arc additive manufactured titanium alloy Tiâ€"6Alâ€"4V. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 814, 141194.	2.6	33
6	In-situ observation of single variant Î± colony formation in Ti-6Al-4V. Acta Materialia, 2021, 220, 117315.	3.8	26
7	Tailoring equiaxed Î²-grain structures in Ti-6Al-4V coaxial electron beam wire additive manufacturing. Materialia, 2021, 20, 101202.	1.3	16
8	The evolution of abnormally coarse grain structures in beta-annealed Ti-6Al%-4V% rolled plates, observed by in-situ investigation. Acta Materialia, 2021, 221, 117362.	3.8	3
9	Microstructure transition gradients in titanium dissimilar alloy (Ti-5Al-5V-5Mo-3Cr/Ti-6Al-4V) tailored wire-arc additively manufactured components. Materials Characterization, 2021, 182, 111577.	1.9	9
10	On the observation of annealing twins during simulating Î²-grain refinement in Tiâ€"6Alâ€"4V high deposition rate AM with in-process deformation. Acta Materialia, 2020, 186, 229-241.	3.8	33
11	Quantification of strain fields and grain refinement in Ti-6Al-4V inter-pass rolled wire-arc AM by EBSD misorientation analysis. Materials Characterization, 2020, 170, 110673.	1.9	18
12	Microscopic strain localisation in WAAM Ti-6Al-4V during uniaxial tensile loading. MATEC Web of Conferences, 2020, 321, 03008.	0.1	2
13	Confirmation of rapid-heating Î² recrystallization in wire-arc additively manufactured Ti-6Al-4V. Materialia, 2020, 13, 100857.	1.3	8
14	Isomorphic grain inoculation in Ti-6Al-4V during additive manufacturing. Materials Letters: X, 2020, 8, 100057.	0.3	1
15	The Effectiveness of Grain Refinement by Machine Hammer Peening in High Deposition Rate Wire-Arc AM Ti-6Al-4V. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 3692-3703.	1.1	44
16	The effect of processing parameters on rapid-heating Î² recrystallization in inter-pass deformed Ti-6Al-4V wire-arc additive manufacturing. Materials Characterization, 2020, 163, 110298.	1.9	20
17	The effect of loading direction on strain localisation in wire arc additively manufactured Tiâ€"6Alâ€"4V. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139608.	2.6	20
18	Analysis of the Development of Abnormal Grains Structures During Beta Annealing of Ti-64 Wrought Products. MATEC Web of Conferences, 2020, 321, 12043.	0.1	3

#	Article	IF	Citations
19	Mechanical performance and microstructural characterisation of titanium alloy-alloy composites built by wire-arc additive manufacture. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 765, 138289.	2.6	26
20	On the origin of microstructural banding in Ti-6Al4V wire-arc based high deposition rate additive manufacturing. Acta Materialia, 2019, 166, 306-323.	3.8	181
21	Automated image mapping and quantification of microstructure heterogeneity in additive manufactured Ti6Al4V. Materials Characterization, 2019, 147, 131-145.	1.9	28
22	Reducing yield asymmetry and anisotropy in wrought magnesium alloys â€“ A comparative study. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 525-537.	2.6	34
23	The effect of multiple precipitate types and texture on yield asymmetry in Mg-Sn-Zn(-Al-Na-Ca) alloys. Acta Materialia, 2018, 158, 1-12.	3.8	31