Hang Z Yu

List of Publications by Year
in descending order

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35 papers	1,181 citations	430843 18 h-index	434170 31 g-index
36 all docs	36 docs citations	36 times ranked	737 citing authors

#	Article	IF	Citations
1	Non-beam-based metal additive manufacturing enabled by additive friction stir deposition. Scripta Materialia, 2018, 153, 122-130.	5.2	183
2	Grain growth and complex stress evolution during Volmerâ€“Weber growth of polycrystalline thin films. Acta Materialia, 2014, 67, 189-198.	7.9	112
3	Additive friction stir deposition: a deformation processing route to metal additive manufacturing. Materials Research Letters, 2021, 9, 71-83.	8.7	96
4	Solid-state additive manufacturing of aluminum and copper using additive friction stir deposition: Process-microstructure linkages. Materialia, 2021, 15, 100967.	2.7	87
5	A Perspective on Solid-State Additive Manufacturing of Aluminum Matrix Composites Using MELD. Journal of Materials Engineering and Performance, 2019, 28, 648-656.	2.5	75
6	Integration of physically-based and data-driven approaches for thermal field prediction in additive manufacturing. Materials and Design, 2018, 139, 473-485.	7.0	71
7	Additive Friction Stir-Enabled Solid-State Additive Manufacturing for the Repair of 7075 Aluminum Alloy. Applied Sciences (Switzerland), 2019, 9, 3486.	2.5	66
8	Deformation-based additive manufacturing of 7075 aluminum with wrought-like mechanical properties. Materials and Design, 2021, 198, 109288.	7.0	54
9	Morphological and microstructural investigation of the non-planar interface formed in solid-state metal additive manufacturing by additive friction stir deposition. Additive Manufacturing, 2020, 35, 101293.	3.0	47
10	Solid-state cladding on thin automotive sheet metals enabled by additive friction stir deposition. Journal of Materials Processing Technology, 2021, 291, 117045.	6.3	46
11	In situ investigation into temperature evolution and heat generation during additive friction stir deposition: A comparative study of Cu and Al-Mg-Si. Additive Manufacturing, 2020, 34, 101386.	3.0	39
12	Tracing plastic deformation path and concurrent grain refinement during additive friction stir deposition. Materialia, 2021, 18, 101159.	2.7	36
13	Unraveling pore evolution in post-processing of binder jetting materials: X-ray computed tomography, computer vision, and machine learning. Additive Manufacturing, 2020, 34, 101183.	3.0	31
14	Correlation of shape changes of grain surfaces and reversible stress evolution during interruptions of polycrystalline film growth. Applied Physics Letters, 2014, 104, .	3.3	28
15	Fast and slow stress evolution mechanisms during interruptions of Volmer-Weber growth. Journal of Applied Physics, 2014, 115, 043521.	2.5	28
16	In situ investigation of stress-induced martensitic transformation in granular shape memory ceramic packings. Acta Materialia, 2019, 168, 362-375.	7.9	21
17	Mesostructure optimization in multi-material additive manufacturing: a theoretical perspective. Journal of Materials Science, 2017, 52, 4288-4298.	3.7	20
18	Granular shape memory ceramic packings. Acta Materialia, 2017, 132, 455-466.	7.9	20

#	Article	IF	Citations
19	Mesoscale design of heterogeneous material systems in multi-material additive manufacturing. Journal of Materials Research, 2018, 33, 58-67.	2.6	19
20	Effects of oblique-angle deposition on intrinsic stress evolution during polycrystalline film growth. Acta Materialia, 2014, 77, 284-293.	7.9	18
21	Quantitative microstructure analysis for solid-state metal additive manufacturingviadeep learning. Journal of Materials Research, 2020, 35, 1936-1948.	2.6	18
22	Solid-State Metal Additive Manufacturing for Structural Repair. Accounts of Materials Research, 2021, 2, 780-792.	11.7	14
23	Stress engineering using low oxygen background pressures during Volmerâ€“Weber growth of polycrystalline nickel films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, 021504.	2.1	11
24	Heterogeneous materials design in additive manufacturing: Model calibration and uncertainty-guided model selection. Additive Manufacturing, 2019, 27, 61-71.	3.0	8
25	Stress-induced phase transformation in shape memory ceramic nanoparticles. Journal of Applied Physics, 2019, 126, .	2.5	6
26	Fracture characterization of overmold composite adhesion. Journal of Thermoplastic Composite Materials, 2022, 35, 977-997.	4.2	6
27	A Bayesian learning framework for fast prediction and uncertainty quantification of additively manufactured multi-material components. Journal of Materials Processing Technology, 2022, 303, 117528.	6.3	5
28	Oxidation behaviors of matrix-grade graphite during water vapor ingress accidents for high temperature gas-cooled reactors. Carbon, 2021, 185, 161-176.	10.3	4
29	Additive manufacturing of yttrium-stabilized tetragonal zirconia: Progressive wall collapse, martensitic transformation, and energy dissipation in micro-honeycombs. Additive Manufacturing, 2022, 52, 102692.	3.0	4
30	Effects of mechanical constraint on thermally induced reverse martensitic transformation in granular shape memory ceramic packings. Journal of Applied Physics, 2020, 128, .	2.5	3
31	Response to â€œComment on â€˜Correlation of shape changes of grain surfaces and reversible stress evolution during interruptions of polycrystalline film growthâ€™â€•[Appl. Phys. Lett. 105, 246101 (2014)]. Applied Physics Letters, 2014, 105, 246102.	3.3	2
32	Emerging Processes â€“ Friction Stir Based. , 2022, , 153-161.		1
33	Deformation Processes in Additive Manufacturing. , 2020, , 261-264.		1
34	Additive Friction Stir Deposition for Fabrication of Silicon Carbide Metal Matrix Composites. , 2020, , .		1
35	Chapter 2. Fundamentals of Sunlightâ€“Materials Interactions. RSC Green Chemistry, 2015, , 13-33.	0.1	0