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List of Publications by Year
in descending order

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43 papers	1,568 citations	331259 21 h-index	315357 38 g-index
43 all docs	43 docs citations	43 times ranked	1048 citing authors

#	Article	IF	Citations
1	Microstructure and enhanced strength of laser aided additive manufactured CoCrFeNiMn high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 137-144.	2.6	166
2	Progress and perspectives in laser additive manufacturing of key aeroengine materials. International Journal of Machine Tools and Manufacture, 2021, 170, 103804.	6.2	156
3	Thermo-mechanical model for simulating laser cladding induced residual stresses with single and multiple clad beads. Journal of Materials Processing Technology, 2015, 224, 89-101.	3.1	120
4	Numerical and experimental study of laser aided additive manufacturing for melt-pool profile and grain orientation analysis. Materials and Design, 2018, 137, 286-297.	3.3	95
5	Thermal field prediction for laser scanning paths in laser aided additive manufacturing by physics-based machine learning. Computer Methods in Applied Mechanics and Engineering, 2020, 362, 112734.	3.4	77
6	Thermo-mechanical analyses for optimized path planning in laser aided additive manufacturing processes. Materials and Design, 2019, 162, 80-93.	3.3	75
7	Additive manufacturing of steelâ€“copper functionally graded material with ultrahigh bonding strength. Journal of Materials Science and Technology, 2021, 72, 217-222.	5.6	64
8	Energy harvesting from a convection-driven Rijke-Zhao thermoacoustic engine. Journal of Applied Physics, 2012, 112, .	1.1	62
9	The effect of different shapes of holes on the crushing characteristics of aluminum square windowed tubes under dynamic axial loading. Thin-Walled Structures, 2017, 119, 412-420.	2.7	58
10	Microstructure and mechanical properties of Inconel 625/nano-TiB2 composite fabricated by LAAM. Materials and Design, 2016, 111, 70-79.	3.3	55
11	Additive manufacturing of multi-scale heterostructured high-strength steels. Materials Research Letters, 2021, 9, 291-299.	4.1	49
12	Effects of laser cladding on fatigue performance of AISI 4340 steel in the as-clad and machine treated conditions. Journal of Materials Processing Technology, 2017, 243, 246-257.	3.1	39
13	Mechanical properties and microstructure evolution of selective laser melting Inconel 718 along building direction and sectional dimension. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 794, 139941.	2.6	38
14	Comparison of carbon-based reinforcement on laser aided additive manufacturing Inconel 625 composites. Applied Surface Science, 2019, 490, 522-534.	3.1	35
15	Thermal analyses for optimal scanning pattern evaluation in laser aided additive manufacturing. Journal of Materials Processing Technology, 2019, 271, 178-188.	3.1	33
16	Laves phase tuning for enhancing high temperature mechanical property improvement in laser directed energy deposited Inconel 718. Composites Part B: Engineering, 2021, 215, 108819.	5.9	33
17	Achieving grain refinement and ultrahigh yield strength in laser aided additive manufacturing of Tiâ€'6Alâ€"4V alloy by trace Ni addition. Virtual and Physical Prototyping, 2021, 16, 417-427.	5.3	32
18	Influence of oxides on the cryogenic tensile properties of the laser aided additive manufactured CoCrNi medium entropy alloy. Composites Part B: Engineering, 2021, 216, 108837.	5.9	30

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19	Effects of laser pulse modulation on intermetallic compounds formation for welding of Ti-6Al-4V and AA7075 using AA4047 filler. Materials and Design, 2022, 213, 110325.	3.3	27
20	Laser aided additive manufacturing of spatially heterostructured steels. International Journal of Machine Tools and Manufacture, 2022, 172, 103817.	6.2	26
21	Enhanced corrosion resistance of laser aided additive manufactured CoCrNi medium entropy alloys with oxide inclusion. Corrosion Science, 2022, 195, 109965.	3.0	26
22	Fatigue life prediction model for laser clad AISI 4340 specimens with multiple surface cracks. International Journal of Fatigue, 2016, 87, 235-244.	2.8	22
23	Numerical study of temperature and cooling rate in selective laser melting with functionally graded support structures. Additive Manufacturing, 2018, 24, 543-551.	1.7	20
24	Characterization of wear properties of the functionally graded material deposited on cast iron by laser-aided additive manufacturing. International Journal of Advanced Manufacturing Technology, 2019, 105, 4097-4105.	1.5	20
25	Double-side friction stir welding of thick magnesium alloy: microstructure and mechanical properties. Science and Technology of Welding and Joining, 2020, 25, 359-368.	1.5	20
26	Microstructure and mechanical behavior of laser aided additive manufactured low carbon interstitial Fe49.5Mn30Co10Cr10C0.5 multicomponent alloy. Journal of Materials Science and Technology, 2021, 77, 38-46.	5.6	18
27	Study of the intrinsic mechanisms of nickel additive for grain refinement and strength enhancement of laser aided additively manufactured Tiâ€“6Alâ€“4V. International Journal of Extreme Manufacturing, 2022, 4, 035102.	6.3	18
28	Superior strength-ductility in laser aided additive manufactured high-strength steel by combination of intrinsic tempering and heat treatment. Virtual and Physical Prototyping, 2021, 16, 460-480.	5.3	17
29	Excellent combination of strength and ductility of CoCrNi medium entropy alloy fabricated by laser aided additive manufacturing. Additive Manufacturing, 2020, 34, 101202.	1.7	17
30	IN100 Ni-based superalloy fabricated by micro-laser aided additive manufacturing: Correlation of the microstructure and fracture mechanism. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139467.	2.6	16
31	Integrated numerical modelling and deep learning for multi-layer cube deposition planning in laser aided additive manufacturing. Virtual and Physical Prototyping, 2021, 16, 318-332.	5.3	16
32	Effect of cyclic heat treatment on microstructure and mechanical properties of laser aided additive manufacturing Tiâ€“6Alâ€“2Snâ€“4Zrâ€“2Mo alloy. , 2022, 1, 100002.		13
33	Data-Driven Adaptive Control for Laser-Based Additive Manufacturing with Automatic Controller Tuning. Applied Sciences (Switzerland), 2020, 10, 7967.	1.3	12
34	On the heterogeneous cooling rates in laser-clad Al-50Si alloy. Surface and Coatings Technology, 2021, 408, 126780.	2.2	12
35	Fatigue Growth Analysis of Pre Induced Surface Defects Using Piezoelectric Wafer Based Impedance Method and Digital Image Correlation System. Journal of Nondestructive Evaluation, 2014, 33, 413-426.	1.1	11
36	Thermo-metallurgical simulation and performance evaluation of hybrid laser arc welding of chromium-molybdenum steel. Materials and Design, 2021, 210, 110029.	3.3	11

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37	Additive manufacturing of voxelized heterostructured materials with hierarchical phases. Additive Manufacturing, 2022, 54, 102775.	1.7	7
38	Microstructure and mechanical behavior of the laser synthesized composites modified by micro/nano scale rare earth oxides. Journal of Alloys and Compounds, 2022, 895, 162641.	2.8	6
39	Fatigue Monitoring of Double Surface Defects Using PZT Based Electromechanical Impedance and Digital Image Correlation Methods. Advanced Materials Research, 0, 891-892, 551-556.	0.3	5
40	Microstructure and mechanical properties of ASTM A131 EH36 steel fabricated by laser aided additive manufacturing. Materials Characterization, 2021, 174, 110949.	1.9	4
41	Repair feasibility of SS416 stainless steel via laser aided additive manufacturing with SS410/Inconel625 powders. IOP Conference Series: Materials Science and Engineering, 0, 744, 012031.	0.3	3
42	Fatigue Crack Growth and Coalescence Algorithm Starting from Multiple Surface Cracks. Advanced Materials Research, 0, 891-892, 1003-1008.	0.3	2
43	Process study and characterization of properties of FerCrNiMnCo high-entropy alloys fabricated by laser-aided additive manufacturing. , 2018, , .		2