

# Youxiang Chew

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3798767/publications.pdf>

Version: 2024-02-01

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	Laser aided additive manufacturing of spatially heterostructured steels. International Journal of Machine Tools and Manufacture, 2022, 172, 103817.	6.2	26
2	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
3	Enhanced corrosion resistance of laser aided additive manufactured CoCrNi medium entropy alloys with oxide inclusion. Corrosion Science, 2022, 195, 109965.	3.0	26
4	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
5	Effect of cyclic heat treatment on microstructure and mechanical properties of laser aided additive manufacturing Ti-6Al-2Sn-4Zr-2Mo alloy. , 2022, 1, 100002.		13
6	Additive manufacturing of voxelized heterostructured materials with hierarchical phases. Additive Manufacturing, 2022, 54, 102775.	1.7	7
7	Study of the intrinsic mechanisms of nickel additive for grain refinement and strength enhancement of laser aided additively manufactured Ti-6Al-4V. International Journal of Extreme Manufacturing, 2022, 4, 035102.	6.3	18
8	Microstructure and mechanical behavior of laser aided additive manufactured low carbon interstitial Fe <sub>49.5</sub> Mn <sub>30</sub> Co <sub>10</sub> Cr <sub>10</sub> Co <sub>0.5</sub> multicomponent alloy. Journal of Materials Science and Technology, 2021, 77, 38-46.	5.6	18
9	Additive manufacturing of steel-copper functionally graded material with ultrahigh bonding strength. Journal of Materials Science and Technology, 2021, 72, 217-222.	5.6	64
10	On the heterogeneous cooling rates in laser-clad Al-50Si alloy. Surface and Coatings Technology, 2021, 408, 126780.	2.2	12
11	Additive manufacturing of multi-scale heterostructured high-strength steels. Materials Research Letters, 2021, 9, 291-299.	4.1	49
12	Microstructure and mechanical properties of ASTM A131 EH36 steel fabricated by laser aided additive manufacturing. Materials Characterization, 2021, 174, 110949.	1.9	4
13	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
14	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
15	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
16	Achieving grain refinement and ultrahigh yield strength in laser aided additive manufacturing of Ti-6Al-4V alloy by trace Ni addition. Virtual and Physical Prototyping, 2021, 16, 417-427.	5.3	32
17	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
18	Progress and perspectives in laser additive manufacturing of key aeroengine materials. International Journal of Machine Tools and Manufacture, 2021, 170, 103804.	6.2	156

#	ARTICLE	IF	CITATIONS
19	Thermo-metallurgical simulation and performance evaluation of hybrid laser arc welding of chromium-molybdenum steel. <i>Materials and Design</i> , 2021, 210, 110029.	3.3	11
20	Double-side friction stir welding of thick magnesium alloy: microstructure and mechanical properties. <i>Science and Technology of Welding and Joining</i> , 2020, 25, 359-368.	1.5	20
21	Data-Driven Adaptive Control for Laser-Based Additive Manufacturing with Automatic Controller Tuning. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 7967.	1.3	12
22	Mechanical properties and microstructure evolution of selective laser melting Inconel 718 along building direction and sectional dimension. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 794, 139941.	2.6	38
23	IN100 Ni-based superalloy fabricated by micro-laser aided additive manufacturing: Correlation of the microstructure and fracture mechanism. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 788, 139467.	2.6	16
24	Excellent combination of strength and ductility of CoCrNi medium entropy alloy fabricated by laser aided additive manufacturing. <i>Additive Manufacturing</i> , 2020, 34, 101202.	1.7	17
25	Thermal field prediction for laser scanning paths in laser aided additive manufacturing by physics-based machine learning. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 362, 112734.	3.4	77
26	Comparison of carbon-based reinforcement on laser aided additive manufacturing Inconel 625 composites. <i>Applied Surface Science</i> , 2019, 490, 522-534.	3.1	35
27	Thermal analyses for optimal scanning pattern evaluation in laser aided additive manufacturing. <i>Journal of Materials Processing Technology</i> , 2019, 271, 178-188.	3.1	33
28	Characterization of wear properties of the functionally graded material deposited on cast iron by laser-aided additive manufacturing. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 105, 4097-4105.	1.5	20
29	Thermo-mechanical analyses for optimized path planning in laser aided additive manufacturing processes. <i>Materials and Design</i> , 2019, 162, 80-93.	3.3	75
30	Microstructure and enhanced strength of laser aided additive manufactured CoCrFeNiMn high entropy alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 744, 137-144.	2.6	166
31	Numerical and experimental study of laser aided additive manufacturing for melt-pool profile and grain orientation analysis. <i>Materials and Design</i> , 2018, 137, 286-297.	3.3	95
32	Numerical study of temperature and cooling rate in selective laser melting with functionally graded support structures. <i>Additive Manufacturing</i> , 2018, 24, 543-551.	1.7	20
33	Process study and characterization of properties of FeCrNiMnCo high-entropy alloys fabricated by laser-aided additive manufacturing. , 2018, , .		2
34	Effects of laser cladding on fatigue performance of AISI 4340 steel in the as-clad and machine treated conditions. <i>Journal of Materials Processing Technology</i> , 2017, 243, 246-257.	3.1	39
35	The effect of different shapes of holes on the crushing characteristics of aluminum square windowed tubes under dynamic axial loading. <i>Thin-Walled Structures</i> , 2017, 119, 412-420.	2.7	58
36	Microstructure and mechanical properties of Inconel 625/nano-TiB <sub>2</sub> composite fabricated by LAAM. <i>Materials and Design</i> , 2016, 111, 70-79.	3.3	55

#	ARTICLE	IF	CITATIONS
37	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
38	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
39	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
40	Energy harvesting from a convection-driven Rijke-Zhao thermoacoustic engine. Journal of Applied Physics, 2012, 112, .	1.1	62
41	Fatigue Crack Growth and Coalescence Algorithm Starting from Multiple Surface Cracks. Advanced Materials Research, 0, 891-892, 1003-1008.	0.3	2
42	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
43	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