

# Brandon Lane

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/73352/publications.pdf>

Version: 2024-02-01

38  
papers

2,025  
citations

361045

20  
h-index

360668

35  
g-index

41  
all docs

41  
docs citations

41  
times ranked

1741  
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of finite element, phase-field, and CALPHAD-based methods to additive manufacturing of Ni-based superalloys. <i>Acta Materialia</i> , 2017, 139, 244-253.	3.8	294
2	Effect of Process Parameters on the Surface Roughness of Overhanging Structures in Laser Powder Bed Fusion Additive Manufacturing. <i>Procedia CIRP</i> , 2016, 45, 131-134.	1.0	259
3	Laser powder bed fusion of nickel alloy 625: Experimental investigations of effects of process parameters on melt pool size and shape with spatter analysis. <i>International Journal of Machine Tools and Manufacture</i> , 2017, 121, 22-36.	6.2	200
4	A review on measurement science needs for real-time control of additive manufacturing metal powder bed fusion processes. <i>International Journal of Production Research</i> , 2017, 55, 1400-1418.	4.9	161
5	Thermographic measurements of the commercial laser powder bed fusion process at NIST. <i>Rapid Prototyping Journal</i> , 2016, 22, 778-787.	1.6	129
6	Influence of scan strategy and process parameters on microstructure and its optimization in additively manufactured nickel alloy 625 via laser powder bed fusion. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 90, 1393-1417.	1.5	119
7	Identifying Uncertainty in Laser Powder Bed Fusion Additive Manufacturing Models. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2016, 138, .	1.7	60
8	Measurements of Melt Pool Geometry and Cooling Rates of Individual Laser Traces on IN625 Bare Plates. <i>Integrating Materials and Manufacturing Innovation</i> , 2020, 9, 16-30.	1.2	56
9	Diamond tool wear when machining Al6061 and 1215 steel. <i>Wear</i> , 2010, 268, 1434-1441.	1.5	52
10	Outcomes and Conclusions from the 2018 AM-Bench Measurements, Challenge Problems, Modeling Submissions, and Conference. <i>Integrating Materials and Manufacturing Innovation</i> , 2020, 9, 1-15.	1.2	47
11	Infrared thermography for laser-based powder bed fusion additive manufacturing processes. <i>AIP Conference Proceedings</i> , 2014, . .	0.3	46
12	Implementation of Advanced Laser Control Strategies for Powder Bed Fusion Systems. <i>Procedia Manufacturing</i> , 2018, 26, 871-879.	1.9	43
13	Thermo-chemical wear model and worn tool shapes for single-crystal diamond tools cutting steel. <i>Wear</i> , 2013, 300, 216-224.	1.5	39
14	Predictive modeling and optimization of multi-track processing for laser powder bed fusion of nickel alloy 625. <i>Additive Manufacturing</i> , 2017, 13, 14-36.	1.7	39
15	On thermal properties of metallic powder in laser powder bed fusion additive manufacturing. <i>Journal of Manufacturing Processes</i> , 2019, 47, 382-392.	2.8	39
16	Part geometry and conduction-based laser power control for powder bed fusion additive manufacturing. <i>Additive Manufacturing</i> , 2019, 30, 100844.	1.7	34
17	Toward determining melt pool quality metrics via coaxial monitoring in laser powder bed fusion. <i>Manufacturing Letters</i> , 2018, 15, 119-121.	1.1	33
18	In Situ Measurements of Melt-Pool Length and Cooling Rate During 3D Builds of the Metal AM-Bench Artifacts. <i>Integrating Materials and Manufacturing Innovation</i> , 2020, 9, 31-53.	1.2	32

#	ARTICLE	IF	CITATIONS
19	Process Monitoring Dataset from the Additive Manufacturing Metrology Testbed (AMMT): "Three-Dimensional Scan Strategies". Journal of Research of the National Institute of Standards and Technology, 2019, 124, 1-14.	0.4	26
20	A Combined Experimental-Numerical Method to Evaluate Powder Thermal Properties in Laser Powder Bed Fusion. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2018, 140, .	1.3	22
21	Multiple sensor detection of process phenomena in laser powder bed fusion. Proceedings of SPIE, 2016, 986104, .	0.8	21
22	Numerical Evaluation of Advanced Laser Control Strategies Influence on Residual Stresses for Laser Powder Bed Fusion Systems. Integrating Materials and Manufacturing Innovation, 2020, 9, 435-445.	1.2	20
23	Measurement of process dynamics through coaxially aligned high speed near-infrared imaging in laser powder bed fusion additive manufacturing. Proceedings of SPIE, 2017, , .	0.8	19
24	Transient Laser Energy Absorption, Co-axial Melt Pool Monitoring, and Relationship to Melt Pool Morphology. Additive Manufacturing, 2020, 36, 101504.	1.7	13
25	Process Monitoring Dataset from the Additive Manufacturing Metrology Testbed (AMMT): Overhang Part X4. Journal of Research of the National Institute of Standards and Technology, 2020, 125, .	0.4	11
26	Development of computational framework for titanium alloy phase transformation prediction in laser powder-bed fusion additive manufacturing. Materialia, 2020, 14, 100934.	1.3	10
27	In Situ Thermography of the Metal Bridge Structures Fabricated for the 2018 Additive Manufacturing Benchmark Test Series (AM-Bench 2018). Journal of Research of the National Institute of Standards and Technology, 2020, 125, .	0.4	9
28	Optical design and initial results from NIST's AMMT/TEMPS facility. Proceedings of SPIE, 2016, 9738, .	0.8	8
29	In-situ calibration of laser/galvo scanning system using dimensional reference artefacts. CIRP Annals - Manufacturing Technology, 2020, 69, 441-444.	1.7	8
30	Topographic Measurement of Individual Laser Tracks in Alloy 625 Bare Plates. Integrating Materials and Manufacturing Innovation, 2019, 8, 521-536.	1.2	7
31	Accurate determination of laser spot position during laser powder bed fusion process thermography. Manufacturing Letters, 2020, 23, 49-52.	1.1	7
32	Measurement Uncertainty of Surface Temperature Distributions for Laser Powder Bed Fusion Processes. Journal of Research of the National Institute of Standards and Technology, 2021, 126, .	0.4	4
33	Accurate determination of laser spot position during laser powder bed fusion process thermography. Manufacturing Letters, 2020, 23, .	1.1	2
34	X-ray Computed Tomography Data of Additive Manufacturing Metrology Testbed (AMMT) Parts: "Overhang Part X4". Journal of Research of the National Institute of Standards and Technology, 2020, 125, .	0.4	1
35	On thermal properties of metallic powder in laser powder bed fusion additive manufacturing. Journal of Manufacturing Processes, 2019, 47, .	2.8	1
36	Assessing the use of an infrared spectrum hyperpixel array imager to measure temperature during additive and subtractive manufacturing. Proceedings of SPIE, 2016, 9861, .	0.8	0

#	ARTICLE	IF	CITATIONS
37	Powder thermal conductivity measurements in laser powder-bed fusion: an uncertainty study with sensitivity analysis. Measurement Science and Technology, 2021, 32, 055007.	1.4	0
38	A Combined Experimental-Numerical Method to Evaluate Powder Thermal Properties in Laser Powder Bed Fusion. , 2018, , .		0