

# Sarah J Wolff

## List of Publications by Year in descending order

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Version: 2024-02-01

30  
papers

1,228  
citations

471061

17  
h-index

476904

29  
g-index

30  
all docs

30  
docs citations

30  
times ranked

1015  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synchronized in situ X-ray and infrared imaging of laser deposition. <i>Manufacturing Letters</i> , 2022, 31, 87-90.	1.1	2
2	In situ X-ray and thermal imaging of refractory high entropy alloying during laser directed deposition. <i>Journal of Materials Processing Technology</i> , 2022, 299, 117363.	3.1	13
3	In situ high-speed synchrotron X-ray imaging of laser-based directed energy deposition of the alloying process with dissimilar powders. <i>Journal of Manufacturing Processes</i> , 2022, 75, 1003-1011.	2.8	10
4	Convolutional Neural Network applications in additive manufacturing: A review. <i>Advances in Industrial and Manufacturing Engineering</i> , 2022, 4, 100072.	1.2	15
5	In situ X-ray imaging of directed energy deposition of metals: The comparisons of delivery performance between spherical and irregular powders. <i>Journal of Manufacturing Processes</i> , 2022, 79, 11-18.	2.8	1
6	Investigation of pore formation mechanisms induced by spherical-powder delivery in directed energy deposition using in situ high-speed X-ray imaging. <i>Additive Manufacturing Letters</i> , 2022, 3, 100050.	0.9	5
7	Powder-borne porosity in directed energy deposition. <i>Journal of Manufacturing Processes</i> , 2022, 80, 69-74.	2.8	6
8	In Situ Analysis of Laser Powder Bed Fusion Using Simultaneous High-Speed Infrared and X-ray Imaging. <i>Jom</i> , 2021, 73, 201-211.	0.9	51
9	In-situ Observations of Directed Energy Deposition Additive Manufacturing Using High-Speed X-ray Imaging. <i>Jom</i> , 2021, 73, 189-200.	0.9	40
10	High-speed synchrotron X-ray imaging of directed energy deposition of titanium: effects of processing parameters on the formation of entrapped-gas pores. <i>Procedia Manufacturing</i> , 2021, 53, 148-154.	1.9	3
11	Eco-friendly additive manufacturing of metals: Energy efficiency and life cycle analysis. <i>Journal of Manufacturing Systems</i> , 2021, 60, 459-472.	7.6	67
12	In situ X-ray imaging of pore formation mechanisms and dynamics in laser powder-blown directed energy deposition additive manufacturing. <i>International Journal of Machine Tools and Manufacture</i> , 2021, 166, 103743.	6.2	58
13	A VIBRATION-ASSISTED POWDER DELIVERY SYSTEM FOR ADDITIVE MANUFACTURING - An experimental investigation -. <i>Additive Manufacturing</i> , 2020, 34, 101170.	1.7	6
14	Correlations between thermal history and keyhole porosity in laser powder bed fusion. <i>Additive Manufacturing</i> , 2020, 34, 101213.	1.7	28
15	Preliminary Study on the Influence of an External Magnetic Field on Melt Pool Behavior in Laser Melting of 4140 Steel Using In-Situ X-Ray Imaging. <i>Journal of Micro and Nano-Manufacturing</i> , 2020, 8, .	0.8	6
16	Data-Driven Microstructure and Microhardness Design in Additive Manufacturing Using a Self-Organizing Map. <i>Engineering</i> , 2019, 5, 730-735.	3.2	40
17	Porosity Formation and Meltpool Geometry Analysis Using High-speed, <i>in situ</i> Imaging of Directed Energy Deposition. <i>Microscopy and Microanalysis</i> , 2019, 25, 2556-2557.	0.2	13
18	In-situ high-speed X-ray imaging of piezo-driven directed energy deposition additive manufacturing. <i>Scientific Reports</i> , 2019, 9, 962.	1.6	96

#	ARTICLE	IF	CITATIONS
19	Experimentally validated predictions of thermal history and microhardness in laser-deposited Inconel 718 on carbon steel. <i>Additive Manufacturing</i> , 2019, 27, 540-551.	1.7	64
20	High-speed Synchrotron X-ray Imaging of Laser Powder Bed Fusion Process. <i>Synchrotron Radiation News</i> , 2019, 32, 4-8.	0.2	17
21	Modeling process-structure-property relationships for additive manufacturing. <i>Frontiers of Mechanical Engineering</i> , 2018, 13, 482-492.	2.5	64
22	Data-driven multi-scale multi-physics models to derive process-structure-property relationships for additive manufacturing. <i>Computational Mechanics</i> , 2018, 61, 521-541.	2.2	162
23	Cooling rate effect on tensile strength of laser deposited Inconel 718. <i>Procedia Manufacturing</i> , 2018, 26, 912-919.	1.9	18
24	Data-driven prediction of the high-dimensional thermal history in directed energy deposition processes via recurrent neural networks. <i>Manufacturing Letters</i> , 2018, 18, 35-39.	1.1	110
25	A framework to link localized cooling and properties of directed energy deposition (DED)-processed Ti-6Al-4V. <i>Acta Materialia</i> , 2017, 132, 106-117.	3.8	119
26	Thermal effect on clad dimension for laser deposited Inconel 718. <i>Journal of Manufacturing Processes</i> , 2017, 28, 550-557.	2.8	46
27	Anisotropic properties of directed energy deposition (DED)-processed Ti-6Al-4V. <i>Journal of Manufacturing Processes</i> , 2016, 24, 397-405.	2.8	104
28	Unidirectional magnetic field assisted Laser Induced Plasma Micro-Machining. <i>Manufacturing Letters</i> , 2015, 3, 1-4.	1.1	35
29	An information classification system for life cycle and manufacturing standards. , 2014, , .		0
30	A preliminary study on the effect of external magnetic fields on Laser-Induced Plasma Micromachining (LIPMM). <i>Manufacturing Letters</i> , 2014, 2, 54-59.	1.1	29