

Samuel J Clark

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6548338/publications.pdf>

Version: 2024-02-01

25
papers

494
citations

759233

12
h-index

677142

22
g-index

26
all docs

26
docs citations

26
times ranked

343
citing authors

#	ARTICLE	IF	CITATIONS
1	Keyhole fluctuation and pore formation mechanisms during laser powder bed fusion additive manufacturing. <i>Nature Communications</i> , 2022, 13, 1170.	12.8	98
2	Sinter formation during directed energy deposition of titanium alloy powders. <i>International Journal of Machine Tools and Manufacture</i> , 2022, 176, 103887.	13.4	12
3	Mitigating keyhole pore formation by nanoparticles during laser powder bed fusion additive manufacturing. <i>Additive Manufacturing Letters</i> , 2022, 3, 100068.	2.1	8
4	Time resolved in-situ multi-contrast X-ray imaging of melting in metals. <i>Scientific Reports</i> , 2022, 12, .	3.3	0
5	In situ X-ray quantification of melt pool behaviour during directed energy deposition additive manufacturing of stainless steel. <i>Materials Letters</i> , 2021, 286, 129205.	2.6	28
6	Synchrotron X-ray imaging of directed energy deposition additive manufacturing of titanium alloy Ti-6242. <i>Additive Manufacturing</i> , 2021, 41, 101969.	3.0	17
7	Correlative Synchrotron X-ray Imaging and Diffraction of Directed Energy Deposition Additive Manufacturing. <i>Acta Materialia</i> , 2021, 209, 116777.	7.9	47
8	Unraveling compacted graphite evolution during solidification of cast iron using in-situ synchrotron X-ray tomography. <i>Carbon</i> , 2021, 184, 799-810.	10.3	6
9	Achieving homogeneity in a high-Fe $\hat{1}^2$ -Ti alloy laser-printed from blended elemental powders. <i>Materials and Design</i> , 2021, 210, 110072.	7.0	15
10	Modelling the complex evaporated gas flow and its impact on particle spattering during laser powder bed fusion. <i>Additive Manufacturing</i> , 2021, 47, 102332.	3.0	4
11	In situ synchrotron investigation of degenerate graphite nodule evolution in ductile cast iron. <i>Acta Materialia</i> , 2021, 221, 117367.	7.9	6
12	Dynamic Multicontrast X-Ray Imaging Method Applied to Additive Manufacturing. <i>Physical Review Letters</i> , 2021, 127, 215503.	7.8	7
13	In situ radiographic and ex situ tomographic analysis of pore interactions during multilayer builds in laser powder bed fusion. <i>Additive Manufacturing</i> , 2020, 36, 101512.	3.0	20
14	In-situ Synchrotron imaging of keyhole mode multi-layer laser powder bed fusion additive manufacturing. <i>Applied Materials Today</i> , 2020, 20, 100650.	4.3	46
15	Growth mechanism of primary needles during the solidification of chromium carbide overlays. <i>Acta Materialia</i> , 2018, 151, 356-365.	7.9	10
16	Investigating nano-precipitation in a V-containing HSLA steel using small angle neutron scattering. <i>Acta Materialia</i> , 2018, 145, 84-96.	7.9	47
17	A phase-field model investigating the role of elastic strain energy during the growth of closely spaced neighbouring interphase precipitates. <i>Computational Materials Science</i> , 2018, 142, 437-443.	3.0	5
18	Machine learning for predicting occurrence of interphase precipitation in HSLA steels. <i>Computational Materials Science</i> , 2018, 154, 169-177.	3.0	20

#	ARTICLE	IF	CITATIONS
19	Nano-mechanical properties of Fe-Mn-Al-C lightweight steels. Scientific Reports, 2018, 8, 9065.	3.3	22
20	A phase-field model for interphase precipitation in V-micro-alloyed structural steels. Computational Materials Science, 2017, 137, 257-265.	3.0	5
21	A novel approach for interpreting the solidification behaviour of peritectic steels by combining CSLM and DSC. Materials Characterization, 2017, 133, 25-32.	4.4	28
22	Interphase Precipitation – An Interfacial Segregation Model. ISIJ International, 2017, 57, 524-532.	1.4	10
23	Analysis of the extent of interphase precipitation in V-HSLA steels through in-situ characterization of the γ/α transformation. Materials Characterization, 2016, 115, 83-89.	4.4	20
24	<i>In Situ</i> Characterisation of Austenite/Ferrite Transformation Kinetics and Modelling of Interphase Precipitation Inter-Sheet Spacing in V Microalloyed HSLA Steels. Materials Science Forum, 2016, 879, 356-362.	0.3	1
25	Quantification of evolution of multiple simultaneous phase transformations using dilation curve analysis (DCA). Acta Materialia, 2016, 102, 231-240.	7.9	11