

# Qimin Shi

## List of Publications by Year in descending order

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Version: 2024-02-01

22  
papers

1,306  
citations

567144

15  
h-index

677027

22  
g-index

22  
all docs

22  
docs citations

22  
times ranked

1168  
citing authors

#	ARTICLE	IF	CITATIONS
1	In-situ formation of particle reinforced Aluminium matrix composites by laser powder bed fusion of Fe <sub>2</sub> O <sub>3</sub> /AlSi <sub>12</sub> powder mixture using laser melting/remelting strategy. <i>Journal of Materials Processing Technology</i> , 2022, 299, 117357.	3.1	22
2	In-situ formation of Ti-Mo biomaterials by selective laser melting of Ti/Mo and Ti/Mo <sub>2</sub> C powder mixtures: A comparative study on microstructure, mechanical and wear performance, and thermal mechanisms. <i>Journal of Materials Science and Technology</i> , 2022, 115, 81-96.	5.6	15
3	Photocurable resin-silica composites with low thermal expansion for 3D printing microfluidic components onto printed circuit boards. <i>Materials Today Communications</i> , 2022, 31, 103482.	0.9	7
4	Biomechanical validation of structural optimized patient-specific mandibular reconstruction plate orienting additive manufacturing. <i>Computer Methods and Programs in Biomedicine</i> , 2022, 224, 107023.	2.6	5
5	Failure analysis of an in-vivo fractured patient-specific Ti6Al4V mandible reconstruction plate fabricated by selective laser melting. <i>Engineering Failure Analysis</i> , 2021, 124, 105353.	1.8	20
6	Effects of laser melting+remelting on interfacial macrosegregation and resulting microstructure and microhardness of laser additive manufactured H13/IN625 bimetals. <i>Journal of Manufacturing Processes</i> , 2021, 71, 345-355.	2.8	14
7	Biomechanical comparison of locking and non-locking patient-specific mandibular reconstruction plate using finite element analysis. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 124, 104849.	1.5	15
8	Silver-doped biphasic calcium phosphate/alginate microclusters with antibacterial property and controlled doxorubicin delivery. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50433.	1.3	14
9	Preclinical study of additive manufactured plates with shortened lengths for complete mandible reconstruction: Design, biomechanics simulation, and fixation stability assessment. <i>Computers in Biology and Medicine</i> , 2021, 139, 105008.	3.9	11
10	The Role of Reinforcing Particle Size in Tailoring Interfacial Microstructure and Wear Performance of Selective Laser Melting WC/Inconel 718 Composites. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2018, 140, .	1.3	21
11	Microstructure and performance evolution and underlying thermal mechanisms of Ni-based parts fabricated by selective laser melting. <i>Additive Manufacturing</i> , 2018, 22, 265-278.	1.7	66
12	Relation of thermal behavior and microstructure evolution during multi-track laser melting deposition of Ni-based material. <i>Optics and Laser Technology</i> , 2018, 108, 207-217.	2.2	48
13	Porosity evolution and its thermodynamic mechanism of randomly packed powder-bed during selective laser melting of Inconel 718 alloy. <i>International Journal of Machine Tools and Manufacture</i> , 2017, 116, 96-106.	6.2	205
14	Structural optimization of re-entrant negative Poisson's ratio structure fabricated by selective laser melting. <i>Materials and Design</i> , 2017, 120, 307-316.	3.3	55
15	A Multiscale Understanding of the Thermodynamic and Kinetic Mechanisms of Laser Additive Manufacturing. <i>Engineering</i> , 2017, 3, 675-684.	3.2	86
16	Relation of microstructure, microhardness and underlying thermodynamics in molten pools of laser melting deposition processed TiC/Inconel 625 composites. <i>Journal of Alloys and Compounds</i> , 2017, 692, 758-769.	2.8	85
17	Selective laser melting 3D printing of Ni-based superalloy: understanding thermodynamic mechanisms. <i>Science Bulletin</i> , 2016, 61, 1013-1022.	4.3	93
18	Effects of laser processing parameters on thermal behavior and melting/solidification mechanism during selective laser melting of TiC/Inconel 718 composites. <i>Optics and Laser Technology</i> , 2016, 84, 9-22.	2.2	198

#	ARTICLE	IF	CITATIONS
19	On the role of processing parameters in thermal behavior, surface morphology and accuracy during laser 3D printing of aluminum alloy. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 135501.	1.3	59
20	Effects of tailored gradient interface on wear properties of WC/Inconel 718 composites using selective laser melting. <i>Surface and Coatings Technology</i> , 2016, 307, 418-427.	2.2	96
21	Influence of hatch spacing on heat and mass transfer, thermodynamics and laser processability during additive manufacturing of Inconel 718 alloy. <i>International Journal of Machine Tools and Manufacture</i> , 2016, 109, 147-157.	6.2	154
22	Formation mechanism and microstructural and mechanical properties of in-situ Ti-Ni-based composite coatings by laser metal deposition. <i>Surface and Coatings Technology</i> , 2016, 291, 43-53.	2.2	17