

Shoujin Sun

List of Publications by Year in descending order

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54
papers

3,937
citations

236925

25
h-index

206112

48
g-index

54
all docs

54
docs citations

54
times ranked

3211
citing authors

#	ARTICLE	IF	CITATIONS
1	Additive manufacturing of strong and ductile Ti-6Al-4V by selective laser melting via in situ martensite decomposition. <i>Acta Materialia</i> , 2015, 85, 74-84.	7.9	897
2	Characteristics of cutting forces and chip formation in machining of titanium alloys. <i>International Journal of Machine Tools and Manufacture</i> , 2009, 49, 561-568.	13.4	374
3	New observations on tool life, cutting forces and chip morphology in cryogenic machining Ti-6Al-4V. <i>International Journal of Machine Tools and Manufacture</i> , 2011, 51, 500-511.	13.4	302
4	Thermally enhanced machining of hard-to-machine materials—A review. <i>International Journal of Machine Tools and Manufacture</i> , 2010, 50, 663-680.	13.4	252
5	Experimental investigation and 3D finite element prediction of the heat affected zone during laser assisted machining of Ti6Al4V alloy. <i>Journal of Materials Processing Technology</i> , 2010, 210, 2215-2222.	6.3	216
6	Parametric investigation of pulsed Nd: YAG laser cladding of stellite 6 on stainless steel. <i>Surface and Coatings Technology</i> , 2005, 194, 225-231.	4.8	159
7	Properties of thermomechanically processed dual-phase steels containing fibrous martensite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002, 335, 298-308.	5.6	147
8	Machining Ti-6Al-4V alloy with cryogenic compressed air cooling. <i>International Journal of Machine Tools and Manufacture</i> , 2010, 50, 933-942.	13.4	142
9	An investigation of cutting forces and cutting temperatures during laser-assisted machining of the Ti-6Cr-5Mo-5V-4Al beta titanium alloy. <i>International Journal of Machine Tools and Manufacture</i> , 2012, 63, 58-69.	13.4	126
10	Metal Alloys for Fusion-Based Additive Manufacturing. <i>Advanced Engineering Materials</i> , 2018, 20, 1700952.	3.5	126
11	High-Value SLM Aerospace Components: From Design to Manufacture. <i>Advanced Materials Research</i> , 0, 633, 135-147.	0.3	97
12	Deformation and failure behaviour of Ti-6Al-4V lattice structures manufactured by selective laser melting (SLM). <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 84, 1391.	3.0	83
13	Effect of cryogenic compressed air on the evolution of cutting force and tool wear during machining of Ti-6Al-4V alloy. <i>Journal of Materials Processing Technology</i> , 2015, 221, 243-254.	6.3	80
14	Parametric Investigation of Laser-Assisted Machining of Commercially Pure Titanium. <i>Advanced Engineering Materials</i> , 2008, 10, 565-572.	3.5	77
15	Manganese partitioning in dual-phase steel during annealing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 276, 167-174.	5.6	63
16	Evolution of tool wear and its effect on cutting forces during dry machining of Ti-6Al-4V alloy. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2014, 228, 191-202.	2.4	63
17	The effect of laser power on the machinability of the Ti-6Cr-5Mo-5V-4Al beta titanium alloy during laser assisted machining. <i>International Journal of Machine Tools and Manufacture</i> , 2012, 63, 41-43.	13.4	59
18	Tool wear mechanisms involved in crater formation on uncoated carbide tool when machining Ti6Al4V alloy. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 83, 1457-1465.	3.0	58

#	ARTICLE	IF	CITATIONS
19	Effect of tool wear evolution on chip formation during dry machining of Ti-6Al-4V alloy. International Journal of Machine Tools and Manufacture, 2018, 126, 13-17.	13.4	47
20	Laser cladding repair of turbine blades in power plants: from research to commercialisation. International Heat Treatment and Surface Engineering, 2009, 3, 105-114.	0.2	43
21	Wear mechanisms and performance of abrasively ground polycrystalline diamond tools of different diamond grains in machining titanium alloy. Journal of Manufacturing Processes, 2017, 29, 320-331.	5.9	43
22	Compressive deformation behavior of a near-beta titanium alloy. Materials & Design, 2012, 34, 739-745.	5.1	41
23	The response of the high strength Ti-10V-2Fe-3Al beta titanium alloy to laser assisted cutting. Precision Engineering, 2013, 37, 461-472.	3.4	41
24	A study on laser assisted machining of Ti-10V-2Fe-3Al alloy with varying laser power. International Journal of Advanced Manufacturing Technology, 2014, 74, 219-224.	3.0	37
25	Performance and wear analysis of polycrystalline diamond (PCD) tools manufactured with different methods in turning titanium alloy Ti-6Al-4V. International Journal of Advanced Manufacturing Technology, 2016, 85, 825-841.	3.0	32
26	Numerical modeling of laser assisted machining of a beta titanium alloy. Computational Materials Science, 2014, 92, 149-156.	3.0	30
27	The influence of stellite 6 particle size on the inter-track porosity in multi-track cladding. Surface and Coatings Technology, 2006, 201, 998-1005.	4.8	25
28	Experimental investigation of laser assisted machining of AZ91 magnesium alloy. International Journal of Precision Engineering and Manufacturing, 2013, 14, 1263-1265.	2.2	22
29	Exploring Macroporosity of Additively Manufactured Titanium Metamaterials for Bone Regeneration with Quality by Design: A Systematic Literature Review. Materials, 2020, 13, 4794.	2.9	22
30	Effect of tool wear on chip formation during dry machining of Ti-6Al-4V alloy, part 1: Effect of gradual tool wear evolution. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2017, 231, 1559-1574.	2.4	21
31	Effect of Si on the microstructure and mechanical properties of as drawn Cu-15Cr in situ composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 303, 187-196.	5.6	20
32	Microstructure and hardness characterisation of laser coatings produced with a mixture of AISI 420 stainless steel and Fe-C-Cr-Nb-B-Mo steel alloy powders. Surface and Coatings Technology, 2016, 296, 76-87.	4.8	20
33	Challenges in laser-assisted milling of titanium alloys. International Journal of Extreme Manufacturing, 2021, 3, 015001.	12.7	20
34	Chip formation characteristics of selective laser melted Ti-6Al-4V. Australian Journal of Mechanical Engineering, 2019, 17, 109-126.	2.1	19
35	Effect of tool wear on chip formation during dry machining of Ti-6Al-4V alloy, part 2: Effect of tool failure modes. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2017, 231, 1575-1586.	2.4	16
36	Laser Beam Machining, , 2013, , 35-96.		16

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37	Mechanical properties and deformation mechanisms of martensitic Ti6Al4V alloy processed by laser powder bed fusion and water quenching. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 839, 142817.	5.6	14
38	The preparation of C/C-SiC nanomatrix composites by chemical vapour infiltration. <i>Journal of Materials Science Letters</i> , 1993, 12, 886-888.	0.5	13
39	Experimental study on quality of PCD tools machined by different electric discharge grinding processes. <i>Cogent Engineering</i> , 2016, 3, 1228234.	2.2	11
40	Insights into Machining of a \hat{I}^2 Titanium Biomedical Alloy from Chip Microstructures. <i>Metals</i> , 2018, 8, 710.	2.3	10
41	Machinability Analysis of Finish-Turning Operations for Ti6Al4V Tubes Fabricated by Selective Laser Melting. <i>Metals</i> , 2022, 12, 806.	2.3	7
42	TEM Observation of Cr Fibres in Cu–15Cr–0.5Fe <I>In Situ</I> Composites. <i>Materials Transactions, JIM</i> , 2000, 41, 613-616.	0.9	6
43	Interfacial properties in steelâsteel composite materials. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 318, 320-327.	5.6	6
44	Wear Mechanism of pcd tools of different grain sizes manufactured by conventionally abrasive grinding and electrical discharge grinding. <i>Materials Today: Proceedings</i> , 2017, 4, 5248-5258.	1.8	6
45	A case-study on the mechanism of flank wear during laser-assisted machining of a titanium alloy. <i>International Journal of Machining and Machinability of Materials</i> , 2017, 19, 538.	0.1	6
46	Fabrication and mechanical properties of steelâsteel composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 300, 135-141.	5.6	5
47	Melt pool temperature and its effect on clad formation in pulsed Nd:yttrium-aluminum-garnet laser cladding of Stellite 6. <i>Journal of Laser Applications</i> , 2007, 19, 32-40.	1.7	5
48	Comparison of Endmill Tool Coating Performance during Machining of Ti6Al4V Alloy. <i>Advanced Materials Research</i> , 2014, 974, 126-131.	0.3	4
49	Laser Assisted Machining of Ti10V2Fe3Al and Ti6Cr5Mo5V4Al \hat{I}^2 Titanium Alloys. <i>Advanced Materials Research</i> , 2014, 974, 121-125.	0.3	3
50	Advances in Metallic Materials Processing. <i>Advances in Materials Science and Engineering</i> , 2011, 2011, 1-2.	1.8	2
51	Design of Exotic Materials Machining System. <i>Advanced Materials Research</i> , 0, 633, 36-46.	0.3	1
52	Mechanical properties of selective laser melted Ti-6Al-4V with different layer thickness. , 2014, , .		1
53	Deformation and failure behaviour of Ti-6Al-4V lattice structures manufactured by selective laser melting (SLM). , 2016, 84, 1391.		1
54	Effect of laser beam on the chip formation in machining of titanium alloys. , 2008, , .		0