Shoujin Sun

List of Publications by Year
in descending order

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	Mechanical properties and deformation mechanisms of martensitic Ti6Al4V alloy processed by laser powder bed fusion and water quenching. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 839, 142817.	5.6	14
2	Machinability Analysis of Finish-Turning Operations for Ti6Al4V Tubes Fabricated by Selective Laser Melting. Metals, 2022, 12, 806.	2.3	7
3	Challenges in laser-assisted milling of titanium alloys. International Journal of Extreme Manufacturing, 2021, 3, 015001.	12.7	20
4	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
5	Chip formation characteristics of selective laser melted Tiâ€“6Alâ€“4V. Australian Journal of Mechanical Engineering, 2019, 17, 109-126.	2.1	19
6	Metal Alloys for Fusionâ€Based Additive Manufacturing. Advanced Engineering Materials, 2018, 20, 1700952.	3.5	126
7	Effect of tool wear evolution on chip formation during dry machining ofÂTi-6Al-4V alloy. International Journal of Machine Tools and Manufacture, 2018, 126, 13-17.	13.4	47
8	Insights into Machining of a Î² Titanium Biomedical Alloy from Chip Microstructures. Metals, 2018, 8, 710.	2.3	10
9	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
10	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
11	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
12	Wear Mechanism of pcd tools of different grain sizes manufactured by conventionally abrasive grinding and electrical discharge grinding. Materials Today: Proceedings, 2017, 4, 5248-5258.	1.8	6
13	A case-study on the mechanism of flank wear during laser-assisted machining of a titanium alloy. International Journal of Machining and Machinability of Materials, 2017, 19, 538.	0.1	6
14	Deformation and failure behaviour of Ti-6Al-4V lattice structures manufactured by selective laser melting (SLM). International Journal of Advanced Manufacturing Technology, 2016, 84, 1391.	3.0	83
15	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
16	Experimental study on quality of PCD tools machined by different electric discharge grinding processes. Cogent Engineering, 2016, 3, 1228234.	2.2	11
17	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
18	Tool wear mechanisms involved in crater formation on uncoated carbide tool when machining Ti6Al4V alloy. International Journal of Advanced Manufacturing Technology, 2016, 83, 1457-1465.	3.0	58

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19	Deformation and failure behaviour of Ti-6Al-4V lattice structures manufactured by selective laser melting (SLM). , 2016, 84, 1391.		1
20	Effect of cryogenic compressed air on the evolution of cutting force and tool wear during machining of Tiâ€“6Alâ€“4V alloy. Journal of Materials Processing Technology, 2015, 221, 243-254.	6.3	80
21	Additive manufacturing of strong and ductile Tiâ€“6Alâ€“4V by selective laser melting via in situ martensite decomposition. Acta Materialia, 2015, 85, 74-84.	7.9	897
22	Mechanical properties of selective laser melted Ti-6Al-4V with different layer thickness. , 2014, , .		1
23	Evolution of tool wear and its effect on cutting forces during dry machining of Ti-6Al-4V alloy. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2014, 228, 191-202.	2.4	63
24	Comparison of Endmill Tool Coating Performance during Machining of Ti6Al4V Alloy. Advanced Materials Research, 2014, 974, 126-131.	0.3	4
25	Laser Assisted Machining of Ti10V2Fe3Al and Ti6Cr5Mo5V4Al Î² Titanium Alloys. Advanced Materials Research, 2014, 974, 121-125.	0.3	3
26	A study on laser assisted machining of Ti10V2Fe3Al alloy with varying laser power. International Journal of Advanced Manufacturing Technology, 2014, 74, 219-224.	3.0	37
27	Numerical modeling of laser assisted machining of a beta titanium alloy. Computational Materials Science, 2014, 92, 149-156.	3.0	30
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	The response of the high strength Tiâ€“10Vâ€“2Feâ€“3Al beta titanium alloy to laser assisted cutting. Precision Engineering, 2013, 37, 461-472.	3.4	41
30	Laser Beam Machining. , 2013, , 35-96.		16
31	An investigation of cutting forces and cutting temperatures during laser-assisted machining of the Tiâ€“6Crâ€“5Moâ€“5Vâ€“4Al beta titanium alloy. International Journal of Machine Tools and Manufacture, 2012, 63, 58-69.	13.4	126
32	The effect of laser power on the machinability of the Ti-6Cr-5Mo-5V-4Al beta titanium alloy during laser assisted machining. International Journal of Machine Tools and Manufacture, 2012, 63, 41-43.	13.4	59
33	Compressive deformation behavior of a near-beta titanium alloy. Materials & Design, 2012, 34, 739-745.	5.1	41
34	New observations on tool life, cutting forces and chip morphology in cryogenic machining Ti-6Al-4V. International Journal of Machine Tools and Manufacture, 2011, 51, 500-511.	13.4	302
35	Advances in Metallic Materials Processing. Advances in Materials Science and Engineering, 2011, 2011, 1-2.	1.8	2
36	Experimental investigation and 3D finite element prediction of the heat affected zone during laser assisted machining of Ti6Al4V alloy. Journal of Materials Processing Technology, 2010, 210, 2215-2222.	6.3	216

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37	Thermally enhanced machining of hard-to-machine materialsâ€"A review. International Journal of Machine Tools and Manufacture, 2010, 50, 663-680.	13.4	252
38	Machining Tiâ€"6Alâ€"4V alloy with cryogenic compressed air cooling. International Journal of Machine Tools and Manufacture, 2010, 50, 933-942.	13.4	142
39	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
40	Characteristics of cutting forces and chip formation in machining of titanium alloys. International Journal of Machine Tools and Manufacture, 2009, 49, 561-568.	13.4	374
41	Parametric Investigation of Laserâ€Assisted Machining of Commercially Pure Titanium. Advanced Engineering Materials, 2008, 10, 565-572.	3.5	77
42	Effect of laser beam on the chip formation in machining of titanium alloys. , 2008, , .		0
43	Melt pool temperature and its effect on clad formation in pulsed Nd:yttrium-aluminum-garnet laser cladding of Stellite 6. Journal of Laser Applications, 2007, 19, 32-40.	1.7	5
44	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
45	Parametric investigation of pulsed Nd: YAG laser cladding of stellite 6 on stainless steel. Surface and Coatings Technology, 2005, 194, 225-231.	4.8	159
46	Properties of thermomechanically processed dual-phase steels containing fibrous martensite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 335, 298-308.	5.6	147
47	Fabrication and mechanical properties of steelâ€"steel composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 300, 135-141.	5.6	5
48	Interfacial properties in steelâ€"steel composite materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 318, 320-327.	5.6	6
49	Effect of Si on the microstructure and mechanical properties of as drawn Cuâ€"15Cr in situ composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 303, 187-196.	5.6	20
50	TEM Observation of Cr Fibres in Cu–15Cr–0.5Fe <I>In Situ</I> Composites. Materials Transactions, JIM, 2000, 41, 613-616.	0.9	6
51	Manganese partitioning in dual-phase steel during annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 276, 167-174.	5.6	63
52	The preparation of C/C-SiC nanomatrix composites by chemical vapour infiltration. Journal of Materials Science Letters, 1993, 12, 886-888.	0.5	13
53	Design of Exotic Materials Machining System. Advanced Materials Research, 0, 633, 36-46.	0.3	1
54	High-Value SLM Aerospace Components: From Design to Manufacture. Advanced Materials Research, 0, 633, 135-147.	0.3	97