Pratik P Shukla

List of Publications by Year
in descending order

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Version: 2024-02-01

34	657	623574	580701
papers	citations	14 h-index	25 g-index

35	35	35	613
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Laser shock peening without coating induced residual stress distribution, wettability characteristics and enhanced pitting corrosion resistance of austenitic stainless steel. Applied Surface Science, 2018, 428, 17-30.	3.1	104
2	Improvement in mechanical properties of titanium alloy (Ti-6Al-7Nb) subject to multiple laser shock peening. Surface and Coatings Technology, 2017, 327, 101-109.	2.2	72
3	Laser shock peening and mechanical shot peening processes applicable for the surface treatment of technical grade ceramics: A review. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2014, 228, 639-652.	1.5	55
4	Understanding laser beam brightness: A review and new prospective in material processing. Optics and Laser Technology, 2015, 75, 40-51.	2.2	48
5	Residual stress, phase, microstructure and mechanical property studies of ultrafine bainitic steel through laser shock peening. Optics and Laser Technology, 2019, 115, 447-458.	2.2	41
6	Residual stresses induced by laser shock peening in orthopaedic Ti-6Al-7Nb alloy. Optics and Laser Technology, 2020, 131, 106446.	2.2	39
7	Surface property modifications of silicon carbide ceramic following laser shock peening. Journal of the European Ceramic Society, 2017, 37, 3027-3038.	2.8	30
8	Enhanced surface and mechanical properties of bioinspired nanolaminate graphene-aluminum alloy nanocomposites through laser shock processing for engineering applications. Materials Today Communications, 2018, 16, 81-89.	0.9	26
9	Shock-wave induced compressive stress on alumina ceramics by laser peening. Materials and Design, 2019, 167, 107626.	3.3	24
10	Altering the wetting properties of orthopaedic titanium alloy (Tiâ€“6Alâ€“7Nb) using laser shock peening. Journal of Alloys and Compounds, 2019, 801, 327-342.	2.8	21
11	Evaluation of fracture toughness of ZrO2 and Si3N4 engineering ceramics following CO2 and fibre laser surface treatment. Optics and Lasers in Engineering, 2011, 49, 229-239.	2.0	20
12	Improving the fretting performance of aero-engine tenon joint materials using surface strengthening. Materials Science and Technology, 2019, 35, 1781-1788.	0.8	18
13	Laser surface structuring of ceramics, metals and polymers for biomedical applications. , 2016, , 281-299.		17
14	Characterization and compositional study of a ZrO2 engineering ceramic irradiated with a fibre laser beam. Optics and Laser Technology, 2011, 43, 1292-1300.	2.2	15
15	Surface engineering alumina armour ceramics with laser shock peening. Materials and Design, 2017, 134, 523-538.	3.3	15
16	Examination of temperature distribution and the thermal effects on Si3N4 engineering ceramics during fibre laser surface treatment. Optics and Lasers in Engineering, 2011, 49, 998-1011.	2.0	14
17	Laser shock peening modified surface texturing, microstructure and mechanical properties of graphene dispersion strengthened aluminium nanocomposites. Surfaces and Interfaces, 2019, 14, 127-137.	1.5	12
18	Effect of Laser Shock Peening on Commercially Pure Titanium-1 Weldment Fabricated by Gas Tungsten Arc Welding Technique. Transactions of the Indian Institute of Metals, 2019, 72, 1569-1573.	0.7	11

#	Article	IF	Citations
19	The influence of brightness during laser surface treatment of Si3N4 engineering ceramics. Optics and Lasers in Engineering, 2012, 50, 1746-1751.	2.0	10
20	Modulating the wettability characteristics and bioactivity of polymeric materials using laser surface treatment. Journal of Laser Applications, 2016, 28, .	0.8	10
21	Response of silicon nitride ceramics subject to laser shock treatment. Ceramics International, 2021, 47, 34538-34553.	2.3	10
22	Micro-shot peening of zirconia-advanced ceramic: an examination of surface integrity. Journal of Materials Science, 2015, 50, 1728-1739.	1.7	8
23	Modification of fracture toughness parameter K_{1c} following CO_2 laser surface treatment of Si_3N_4 engineering ceramic. Surface Engineering, 2011, 27, 734-741.	1.1	6
24	Distribution of temperature during fibre laser radiation and effects thereon phase transformation of ZrO_2 engineering ceramic. Surface Engineering, 2011, 27, 742-748.	1.1	6
25	A comparative study on the processing parameters during fibre and CO2 laser surface treatments of silicon nitride engineering ceramic. International Journal of Advanced Manufacturing Technology, 2012, 59, 143-155.	1.5	6
26	Role of laser beam radiance in different ceramic processing: A two wavelengths comparison. Optics and Laser Technology, 2013, 54, 380-388.	2.2	5
27	Biological and mechanical response of laser shock peening orthopaedic titanium alloy (Ti-6Al-7Nb). Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2022, 236, 1169-1187.	1.0	4
28	Investigation into the high-speed laser welding feasibility of tin-plated steels available for three-piece food packaging can manufacture. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2014, 228, 715-729.	1.5	3
29	On restructuring the microstructure of Ti-6Al-7Nb alloy before surface engineering. Materials Characterization, 2020, 169, 110629.	1.9	3
30	Identification of optical parameters for determination of radiance. Journal of Optics (India), 2015, 44, 12-19.	0.8	2
31	Development in laser peening of advanced ceramics. Proceedings of SPIE, 2015, , .	0.8	1
32	Laser sealing of dissimilar polymers for manufacturing packaging products. Journal of Laser Applications, 2016, 28, 022428.	0.8	1
33	Laser surface treatment of polyamide and NiTi alloy and the effects on mesenchymal stem cell response. Proceedings of SPIE, 2015, , .	0.8	0
34	Alteration of fracture toughness (KIC) following laser shock peening of silicon nitride ceramics. , 2016, , .		0