Pratik P Shukla

List of Publications by Year
in descending order

34 papers	657 citations	623574 14 h-index	580701 25 g-index
35 all docs	35 docs citations	35 times ranked	613 citing authors

#	Article	IF	Citations
1	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
2	Response of silicon nitride ceramics subject to laser shock treatment. Ceramics International, 2021, 47, 34538-34553.	2.3	10
3	On restructuring the microstructure of Ti-6Al-7Nb alloy before surface engineering. Materials Characterization, 2020, 169, 110629.	1.9	3
4	Residual stresses induced by laser shock peening in orthopaedic Ti-6Al-7Nb alloy. Optics and Laser Technology, 2020, 131, 106446.	2.2	39
5	Improving the fretting performance of aero-engine tenon joint materials using surface strengthening. Materials Science and Technology, 2019, 35, 1781-1788.	0.8	18
6	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
7	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
8	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
9	Shock-wave induced compressive stress on alumina ceramics by laser peening. Materials and Design, 2019, 167, 107626.	3.3	24
10	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
11	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
12	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
13	Surface property modifications of silicon carbide ceramic following laser shock peening. Journal of the European Ceramic Society, 2017, 37, 3027-3038.	2.8	30
14	Surface engineering alumina armour ceramics with laser shock peening. Materials and Design, 2017, 134, 523-538.	3.3	15
15	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
16	Alteration of fracture toughness (KIC) following laser shock peening of silicon nitride ceramics. , 2016, , .		0
17	Laser sealing of dissimilar polymers for manufacturing packaging products. Journal of Laser Applications, 2016, 28, 022428.	0.8	1
18	Modulating the wettability characteristics and bioactivity of polymeric materials using laser surface treatment. Journal of Laser Applications, 2016, 28, .	0.8	10

#	Article	IF	Citations
19	Laser surface structuring of ceramics, metals and polymers for biomedical applications. , 2016, , 281-299.		17
20	Micro-shot peening of zirconia-advanced ceramic: an examination of surface integrity. Journal of Materials Science, 2015, 50, 1728-1739.	1.7	8
21	Laser surface treatment of polyamide and NiTi alloy and the effects on mesenchymal stem cell response. Proceedings of SPIE, 2015, , .	0.8	0
22	Development in laser peening of advanced ceramics. Proceedings of SPIE, 2015, , .	0.8	1
23	Understanding laser beam brightness: A review and new prospective in material processing. Optics and Laser Technology, 2015, 75, 40-51.	2.2	48
24	Identification of optical parameters for determination of radiance. Journal of Optics (India), 2015, 44, 12-19.	0.8	2
25	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
26	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
27	Role of laser beam radiance in different ceramic processing: A two wavelengths comparison. Optics and Laser Technology, 2013, 54, 380-388.	2.2	5
28	The influence of brightness during laser surface treatment of Si3N4 engineering ceramics. Optics and Lasers in Engineering, 2012, 50, 1746-1751.	2.0	10
29	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
30	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
31	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
32	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
33	Modification of fracture toughness parameter <i>K</i>_{1c} following CO₂ laser surface treatment of Si₃N₄ engineering ceramic. Surface Engineering, 2011, 27, 734-741.	1.1	6
34	Distribution of temperature during fibre laser radiation and effects thereon phase transformation of ZrO₂ engineering ceramic. Surface Engineering, 2011, 27, 742-748.	1.1	6