

Steffen Weissmantel

List of Publications by Year in descending order

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18
papers

292
citations

840776

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888059

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18
docs citations

18
times ranked

157
citing authors

#	ARTICLE	IF	CITATIONS
1	Ripple formation in various metals and super-hard tetrahedral amorphous carbon films in consequence of femtosecond laser irradiation. Applied Physics A: Materials Science and Processing, 2013, 110, 655-659.	2.3	34
2	Fundamental investigations of ultrashort pulsed laser ablation on stainless steel and cemented tungsten carbide. International Journal of Advanced Manufacturing Technology, 2020, 109, 1167-1175.	3.0	31
3	Laser micromachining of silicon and cemented tungsten carbide using picosecond laser pulses in burst mode: ablation mechanisms and heat accumulation. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	29
4	High-quality surface treatment using GHz burst mode with tunable ultrashort pulses. Applied Surface Science, 2020, 531, 147270.	6.1	26
5	Ablation of steel using picosecond laser pulses in burst mode. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	25
6	Optimization of the ablation process using ultrashort pulsed laser radiation in different burst modes. Journal of Laser Applications, 2021, 33, .	1.7	23
7	Influence of heat accumulation during laser micromachining of CoCrMo alloy with ultrashort pulses in burst mode. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	19
8	X-ray generation by laser ablation using MHz to GHz pulse bursts. Journal of Laser Applications, 2021, 33, .	1.7	16
9	Investigations of qualitative aspects with burst mode ablation of silicon and cemented tungsten carbide. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	15
10	Burst mode ablation of stainless steel with tunable ultrashort laser pulses. Journal of Laser Applications, 2021, 33, .	1.7	14
11	Experimental and Theoretical Determination of the Effective Penetration Depth of Ultrafast Laser Radiation in Stainless Steel. Lasers in Manufacturing and Materials Processing, 2020, 7, 478-495.	2.2	12
12	Comparative study on microstructuring of steel using pico-and femtosecond laser pulses. , 2012, , .		10
13	Microstructuring of fused silica using femtosecond laser pulses of various wavelengths. Applied Physics A: Materials Science and Processing, 2015, 121, 689-693.	2.3	7
14	Properties of boron carbide thin films deposited by pulsed laser deposition. Surface and Coatings Technology, 2021, 422, 127480.	4.8	7
15	Production of microstructures in wide-band-gap and organic materials using pulsed laser ablation at 157Ånm wavelength. Applied Physics A: Materials Science and Processing, 2010, 101, 491-495.	2.3	6
16	Manufacturing of high quality 3D microstructures in stainless steel with ultrashort laser pulses using different burst modes. Journal of Laser Applications, 2021, 33, 042002.	1.7	6
17	Surface treatment on cobalt and titanium alloys using picosecond laser pulses in burst mode. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	6
18	Study on laser ablation of glass using MHz-to-GHz burst pulses. Applied Physics A: Materials Science and Processing, 2022, 128, .	2.3	6