

# Jiri Martan

## List of Publications by Year in descending order

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45  
papers

590  
citations

623188

14  
h-index

676716

22  
g-index

45  
all docs

45  
docs citations

45  
times ranked

539  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal properties of cutting tool coatings at high temperatures. <i>Thermochimica Acta</i> , 2012, 539, 51-55.	1.2	57
2	On surface temperatures during high power pulsed magnetron sputtering using a hot target. <i>Surface and Coatings Technology</i> , 2011, 206, 1155-1159.	2.2	44
3	Nanosecond pulse laser melting investigation by IR radiometry and reflection-based methods. <i>Applied Surface Science</i> , 2006, 253, 1170-1177.	3.1	40
4	New experimental device for high-temperature normal spectral emissivity measurements of coatings. <i>Measurement Science and Technology</i> , 2014, 25, 095501.	1.4	40
5	Using pulsed and modulated photothermal radiometry to measure the thermal conductivity of thin films. <i>Thermochimica Acta</i> , 2013, 556, 1-5.	1.2	28
6	Thermal properties characterization of conductive thin films and surfaces by pulsed lasers. <i>Applied Surface Science</i> , 2005, 247, 57-63.	3.1	27
7	Non-contact charge temperature measurement on industrial continuous furnaces and steel charge emissivity analysis. <i>Infrared Physics and Technology</i> , 2013, 61, 20-26.	1.3	24
8	Method for emissivity measurement of semitransparent coatings at ambient temperature. <i>Scientific Reports</i> , 2017, 7, 1386.	1.6	21
9	Thermal, mechanical and electrical properties of hard B4C, BCN, ZrBC and ZrBCN ceramics. <i>Ceramics International</i> , 2016, 42, 4361-4369.	2.3	20
10	LIPSS-based functional surfaces produced by multi-beam nanostructuring with 2601 beams and real-time thermal processes measurement. <i>Scientific Reports</i> , 2021, 11, 22944.	1.6	19
11	Thermal Characterization of Tungsten Thin Films by Pulsed Photothermal Radiometry. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2006, 10, 333-344.	1.4	18
12	Heat accumulation temperature measurement in ultrashort pulse laser micromachining. <i>International Journal of Heat and Mass Transfer</i> , 2021, 168, 120866.	2.5	17
13	Uncertainty determination in high-temperature spectral emissivity measurement method of coatings. <i>Applied Thermal Engineering</i> , 2017, 124, 261-270.	3.0	16
14	Two-detector measurement system of pulse photothermal radiometry for the investigation of the thermal properties of thin films. <i>Journal of Applied Physics</i> , 2007, 102, 064903.	1.1	14
15	Composite fillers and their influence on emissivity. <i>Journal of Physics and Chemistry of Solids</i> , 2012, 73, 1550-1555.	1.9	13
16	Shifted laser surface texturing for bearings applications. <i>Journal of Physics: Conference Series</i> , 2017, 843, 012076.	0.3	13
17	Theory and verification of a method for parameter-free laser-flash diffusivity measurement of a single-side object. <i>International Journal of Heat and Mass Transfer</i> , 2016, 102, 574-584.	2.5	12
18	Time-resolved temperature measurement during laser marking of stainless steel. <i>International Journal of Heat and Mass Transfer</i> , 2018, 125, 1061-1068.	2.5	12

#	ARTICLE	IF	CITATIONS
19	The Role of Laser Texturing in Improving the Adhesion of Plasma Sprayed Tungsten Coatings. Journal of Thermal Spray Technology, 2019, 28, 1346-1362.	1.6	12
20	Performance and Accuracy of the Shifted Laser Surface Texturing Method. Micromachines, 2020, 11, 520.	1.4	12
21	Precise nanosecond time resolved infrared radiometry measurements of laser induced silicon phase change and melting front propagation. Journal of Applied Physics, 2008, 103, 084909.	1.1	11
22	Laser scanning heating method for high-temperature spectral emissivity analyses. Applied Thermal Engineering, 2016, 94, 76-81.	3.0	11
23	Laser surface texturing with shifted methodâ€”Functional surfaces at high speed. Journal of Laser Applications, 2019, 31, 022507.	0.8	11
24	Measurement of thermal properties of thin films up to high temperaturesâ€”Pulsed photothermal radiometry system and Siâ€”Baâ€”Caâ€”N films. Review of Scientific Instruments, 2010, 81, 124902.	0.6	9
25	Picosecond Laser Surface Cleaning of AM1 Superalloy. Physics Procedia, 2016, 83, 249-257.	1.2	9
26	Measurement of core temperature through semi-transparent polyamide 6 using scanner-integrated pyrometer in laser welding. International Journal of Heat and Mass Transfer, 2020, 146, 118814.	2.5	9
27	IR Radiometry Optical System View Factor and Its Application to Emissivity Investigations of Solid and Liquid Phases. International Journal of Thermophysics, 2007, 28, 1342-1352.	1.0	8
28	Modeling of Thermal Spraying Heat Transfer Processes by Exodus Stochastic Method. Journal of Thermal Spray Technology, 2009, 18, 1014-1021.	1.6	8
29	Composite Fillers and their Influence on Emissivity. Physics Procedia, 2013, 44, 262-269.	1.2	8
30	Enhancement of the wettability of graphite-based lithium-ion battery anodes by selective laser surface modification using low energy nanosecond pulses. International Journal of Advanced Manufacturing Technology, 2022, 118, 1987-1997.	1.5	8
31	Experimental mathematical model as a generalization of sensitivity analysis of high temperature spectral emissivity measurement method. Measurement: Journal of the International Measurement Confederation, 2016, 90, 475-482.	2.5	7
32	Experimental mathematical model of nanosecond laser interaction with material. Applied Surface Science, 2007, 253, 3525-3532.	3.1	6
33	Porous micro/nano structured oxidic titanium surface decorated with silicon monoxide. Surfaces and Interfaces, 2021, 26, 101304.	1.5	6
34	Sensitivity analysis of high temperature spectral emissivity measurement method. Infrared Physics and Technology, 2015, 71, 217-222.	1.3	5
35	Optical layer development for thin films thermal conductivity measurement by pulsed photothermal radiometry. Review of Scientific Instruments, 2015, 86, 014902.	0.6	4
36	Analysis of short wavelength infrared radiation during laser welding of plastics. Applied Optics, 2018, 57, D145.	0.9	4

#	ARTICLE	IF	CITATIONS
37	Radiation damage evolution in pure W and W-Cr-Hf alloy caused by 5ÂMeV Au ions in a broad range of dpa. Nuclear Materials and Energy, 2021, 29, 101085.	0.6	3
38	Coupled photo-thermal and time resolved reflectivity methods to original investigation of laser/material nanosecond interaction. , 2006, 6261, 528.		2
39	The influence of emissivity on measured temperature in dependence on spectral range of IR camera detector and its approximate calculation. , 0, , .		1
40	Shifted Laser Surface Texturing (sLST) in Burst Regime. Journal of Laser Micro Nanoengineering, 0, , .	0.4	1
41	Time resolved optical methods for investigation of phase transformations in materials exposed to nanosecond laser pulses. Proceedings of SPIE, 2011, , .	0.8	0
42	The Stamp method for processing of high noise data from infrared sensor in harsh environment. Sensors and Actuators A: Physical, 2017, 263, 480-487.	2.0	0
43	Infrared camera comparative measurement methods for thermally optical properties of materials. AIP Conference Proceedings, 2019, , .	0.3	0
44	Hydrophobic and antibacterial properties of laser micromachined steel surfaces. , 2020, , .		0
45	Coating thickness inspection with a flash lamp and an infrared detector. , 2021, , .		0