

# Florian KlÄmpfl

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

538  
citations

759233

12  
h-index

677142

22  
g-index

63  
all docs

63  
docs citations

63  
times ranked

619  
citing authors

#	ARTICLE	IF	CITATIONS
1	Laser beam melting 3D printing of Ti6Al4V based porous structured dental implants: fabrication, biocompatibility analysis and photoelastic study. <i>Scientific Reports</i> , 2017, 7, 45360.	3.3	57
2	Analysis of the correlation between plasma plume and keyhole behavior in laser metal welding for the modeling of the keyhole geometry. <i>Optics and Lasers in Engineering</i> , 2015, 64, 32-41.	3.8	51
3	Qualitative tissue differentiation by analysing the intensity ratios of atomic emission lines using laser induced breakdown spectroscopy (LIBS): prospects for a feedback mechanism for surgical laser systems. <i>Journal of Biophotonics</i> , 2015, 8, 153-161.	2.3	36
4	Laser induced breakdown spectroscopy for bone and cartilage differentiation - ex vivo study as a prospect for a laser surgery feedback mechanism. <i>Biomedical Optics Express</i> , 2014, 5, 4013.	2.9	35
5	Investigation of the differentiation of <i>ex vivo</i> nerve and fat tissues using laser-induced breakdown spectroscopy (LIBS): Prospects for tissue-specific laser surgery. <i>Journal of Biophotonics</i> , 2016, 9, 1021-1032.	2.3	33
6	<i>in vivo</i> multispectral video endoscopy towards <i>in vivo</i> hyperspectral video endoscopy. <i>Journal of Biophotonics</i> , 2017, 10, 553-564.	2.3	30
7	Remote photoacoustic sensing using speckle-analysis. <i>Scientific Reports</i> , 2019, 9, 1057.	3.3	30
8	Investigation of random lasing as a feedback mechanism for tissue differentiation during laser surgery. <i>Biomedical Optics Express</i> , 2019, 10, 807.	2.9	26
9	The differentiation of oral soft and hard tissues using laser induced breakdown spectroscopy – a prospect for tissue specific laser surgery. <i>Journal of Biophotonics</i> , 2017, 10, 1250-1261.	2.3	24
10	Experimental approach for quantification of fluid dynamics in laser metal welding. <i>Journal of Laser Applications</i> , 2015, 27, .	1.7	23
11	Experimental and Numerical Analysis of Gas Dynamics in the Keyhole During Laser Metal Welding. <i>Physics Procedia</i> , 2014, 56, 1268-1276.	1.2	21
12	Detection of Weld Defects by High Speed Imaging of the Vapor Plume. <i>Physics Procedia</i> , 2013, 41, 539-543.	1.2	13
13	Preparation of a skin equivalent phantom with interior micron-scale vessel structures for optical imaging experiments. <i>Biomedical Optics Express</i> , 2014, 5, 3140.	2.9	12
14	Direct measurement of the scattering coefficient. <i>Biomedical Optics Express</i> , 2021, 12, 320.	2.9	12
15	Investigation of Laser Induced Breakdown Spectroscopy (LIBS) for the Differentiation of Nerve and Gland Tissue – A Possible Application for a Laser Surgery Feedback Control Mechanism. <i>Plasma Science and Technology</i> , 2016, 18, 654-660.	1.5	11
16	Development of a hyperspectral imaging technique for monitoring laser-based material processing. <i>Journal of Laser Applications</i> , 2017, 29, .	1.7	9
17	Diffuse reflectance spectroscopy and Raman spectroscopy for label-free molecular characterization and automated detection of human cartilage and subchondral bone. <i>Sensors and Actuators B: Chemical</i> , 2019, 301, 127121.	7.8	9
18	All-optical, an ultra-thin endoscopic photoacoustic sensor using multi-mode fiber. <i>Scientific Reports</i> , 2020, 10, 9142.	3.3	9

#	ARTICLE	IF	CITATIONS
19	Random laser as a potential tool for the determination of the scattering coefficient. Biomedical Optics Express, 2021, 12, 5439.	2.9	9
20	Novel method for early signs of clinical shock detection by monitoring blood capillary/vessel spatial pattern. Journal of Biophotonics, 2014, 7, 841-849.	2.3	8
21	Ultrashort Pulse Laser Cutting of Intraocular Lens Polymers. Journal of Laser Micro Nanoengineering, 2014, 9, 103-107.	0.1	8
22	Measurement of optical properties of pig esophagus by using a modified spectrometer set-up. Journal of Biophotonics, 2018, 11, e201600187.	2.3	7
23	Contact-free endoscopic photoacoustic sensing using speckle analysis. Journal of Biophotonics, 2019, 12, e201900130.	2.3	7
24	Simulation of Light Propagation within Glass Fiber Filled Thermoplastics for Laser Transmission Welding. Physics Procedia, 2014, 56, 1198-1207.	1.2	6
25	Extension of depth-resolved reconstruction of attenuation coefficients in optical coherence tomography for slim samples. , 2015, , .		5
26	A quantitative evaluation of the use of medical lasers in German hospitals. Journal of Biophotonics, 2020, 13, e201900238.	2.3	5
27	Fabrication of a turbid optofluidic phantom device with tunable $\mu$ a and $\mu$ s to simulate cutaneous vascular perfusion. Scientific Reports, 2016, 6, 30567.	3.3	4
28	[INVITED] Evaluation of process observation features for laser metal welding. Optics and Laser Technology, 2016, 80, 77-83.	4.6	4
29	Towards shifted position-diffuse reflectance imaging of anatomically correctly scaled human microvasculature. Scientific Reports, 2020, 10, 17391.	3.3	4
30	Determination of the diameter of simulated human capillaries using shifted position-diffuse reflectance imaging. Journal of Biophotonics, 2021, 14, e202000465.	2.3	4
31	Ultrafast Laser Surface Structuring of Intraocular Lens Polymers. Journal of Laser Micro Nanoengineering, 2013, 8, 51-55.	0.1	4
32	Spectral Spatial Variation. Scientific Reports, 2019, 9, 7512.	3.3	3
33	Ultra-fast remote photoacoustic imaging with a non-scanning speckle-based setup. OSA Continuum, 2021, 4, 1135.	1.8	3
34	Factors influencing the accuracy for tissue classification in multi spectral in-vivo endoscopy for the upper gastro-intestinal tract. Scientific Reports, 2020, 10, 3546.	3.3	2
35	Remote Photoacoustic Sensing Using Single Speckle Analysis by an Ultra-Fast Four Quadrant Photo-Detector. Sensors, 2021, 21, 2109.	3.8	2
36	Proof of Principle for Direct Reconstruction of Qualitative Depth Information from Turbid Media by a Single Hyper Spectral Image. Sensors, 2021, 21, 2860.	3.8	2

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37	Analysis of diffuse reflectance spectroscopy by means of Bayesian inference and separation of the parameters for scattering strength and spectral dependence of the scattering. Journal of Biophotonics, 2021, 14, e202100205.	2.3	2
38	Irradiation planning for automated treatment of psoriasis with a high-power excimer laser. , 2006, , .		1
39	Irradiation system for two-photon induced activation of agents in novel intraocular lenses. Physics Procedia, 2010, 5, 665-670.	1.2	1
40	Mapping the microvascular and the associated absolute values of oxy-hemoglobin concentration through turbid media via local off-set diffuse optical imaging. Proceedings of SPIE, 2014, , .	0.8	1
41	Improved cancer diagnostics by different image processing techniques on OCT images. Proceedings of SPIE, 2015, , .	0.8	1
42	Remote photoacoustic tomography using speckle sensing with a high-speed camera. , 2016, , .		1
43	LIBS based Tissue Differentiation for Er:YAG Surgical Laser. , 2018, , .		1
44	The influence of the optical properties on the determination of capillary diameters. Scientific Reports, 2022, 12, 270.	3.3	1
45	In vivo multi spectral colonoscopy in mice. Scientific Reports, 2022, 12, .	3.3	1
46	Automated online planning of localized laser process parameters using simulated annealing. Production Engineering, 2008, 2, 171-178.	2.3	0
47	A novel microfluidic model to mimic the turbid nature and microvasculature of cutaneous tissue for optical imaging experiments. Proceedings of SPIE, 2015, , .	0.8	0
48	Towards non-contact photo-acoustic endoscopy using speckle pattern analysis. Proceedings of SPIE, 2017, , .	0.8	0
49	Tissue Ablation and Laser Surgery. Journal of Biophotonics, 2017, 10, 1238-1239.	2.3	0
50	Influence of vapor on hyperspectral imaging for monitoring laser-based material processing. , 2017, , .		0
51	Dependence of the Capillary/Vessel Spatial Pattern Estimated by Measuring Diffuse Reflectance Spectra on the Hemoglobin Concentration Level. , 2013, , .		0
52	Dependence of the Capillary/Vessel Spatial Pattern Estimated by Measuring Diffuse Reflectance Spectra on the Hemoglobin Concentration Level. , 2013, , .		0
53	Laser-induced Breakdown Spectroscopy (LIBS) based tissue type mapping of ex-vivo soft tissues - A prospect for tissue specific Laser surgery. , 2017, , .		0
54	Direct reconstruction of qualitative depth information from turbid media by a single hyper spectral image. , 2019, , .		0

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55	Acoustic differentiation of dental soft and hard tissues using remote speckle-analysis during Er:YAG ablation. , 2019, , .		0
56	Remote speckle-sensing for improved differentiation between different types of tissues. , 2019, , .		0
57	Model for the description of remote photoacoustic sensing using speckle-analysis. , 2019, , .		0
58	Physical Fundamentals. , 2020, , 3-8.		0
59	Remote photoacoustic tomography using diode-array and speckle-analysis. , 2020, , .		0
60	Calibration routine for incoherent optical fiber bundles for medical ultra-high spatial resolution fiber spectroscopy. , 2020, , .		0
61	Planning the use of high-power excimer laser for psoriasis treatment. , 2008, , 349-354.		0
62	Numerical Aperture for Photon Detection within Shifted Position-Diffuse Reflectance Imaging. , 2021, , .		0
63	Lateral resolution and imaging depth of shifted position-diffuse reflectance imaging. , 2021, , .		0