

Maciej Trusiak

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5223038/publications.pdf>

Version: 2024-02-01

65
papers

1,195
citations

361413

20
h-index

377865

34
g-index

70
all docs

70
docs citations

70
times ranked

571
citing authors

#	ARTICLE	IF	CITATIONS
1	Advanced processing of optical fringe patterns by automated selective reconstruction and enhanced fast empirical mode decomposition. <i>Optics and Lasers in Engineering</i> , 2014, 52, 230-240.	3.8	108
2	High-speed 3D shape measurement using the optimized composite fringe patterns and stereo-assisted structured light system. <i>Optics Express</i> , 2019, 27, 2411.	3.4	92
3	Temporal phase unwrapping using deep learning. <i>Scientific Reports</i> , 2019, 9, 20175.	3.3	81
4	Adaptive enhancement of optical fringe patterns by selective reconstruction using FABEMD algorithm and Hilbert spiral transform. <i>Optics Express</i> , 2012, 20, 23463.	3.4	74
5	Single shot fringe pattern phase demodulation using Hilbert-Huang transform aided by the principal component analysis. <i>Optics Express</i> , 2016, 24, 4221.	3.4	60
6	Two-shot fringe pattern phase-amplitude demodulation using Gram-Schmidt orthonormalization with Hilbert-Huang pre-filtering. <i>Optics Express</i> , 2015, 23, 4672.	3.4	59
7	Off-axis digital holographic multiplexing for rapid wavefront acquisition and processing. <i>Advances in Optics and Photonics</i> , 2020, 12, 556.	25.5	55
8	Quantitative phase imaging by single-shot Hilbert-Huang phase microscopy. <i>Optics Letters</i> , 2016, 41, 4344.	3.3	53
9	Single-shot slightly off-axis digital holographic microscopy with add-on module based on beamsplitter cube. <i>Optics Express</i> , 2019, 27, 5655.	3.4	52
10	Hilbert-Huang processing for single-exposure two-dimensional grating interferometry. <i>Optics Express</i> , 2013, 21, 28359.	3.4	43
11	Fourier domain interpretation of real and pseudo-moiré phenomena. <i>Optics Express</i> , 2011, 19, 26065.	3.4	40
12	Optically-sectioned two-shot structured illumination microscopy with Hilbert-Huang processing. <i>Optics Express</i> , 2014, 22, 9517.	3.4	36
13	Variational Hilbert Quantitative Phase Imaging. <i>Scientific Reports</i> , 2020, 10, 13955.	3.3	34
14	Hilbert-Huang single-shot spatially multiplexed interferometric microscopy. <i>Optics Letters</i> , 2018, 43, 1007.	3.3	32
15	DarkFocus: numerical autofocusing in digital in-line holographic microscopy using variance of computational dark-field gradient. <i>Optics and Lasers in Engineering</i> , 2020, 134, 106195.	3.8	30
16	Single-shot isotropic quantitative phase microscopy based on color-multiplexed differential phase contrast. <i>APL Photonics</i> , 2019, 4, 121301.	5.7	29
17	Simultaneous extraction of phase and phase shift from two interferograms using Lissajous figure and ellipse fitting technology with Hilbert-Huang prefiltering. <i>Journal of Optics (United Kingdom)</i> , 2016, 18, 105604.	2.2	28
18	Automatized fringe pattern preprocessing using unsupervised variational image decomposition. <i>Optics Express</i> , 2019, 27, 22542.	3.4	27

#	ARTICLE	IF	CITATIONS
19	Evaluation of adaptively enhanced two-shot fringe pattern phase and amplitude demodulation methods. <i>Applied Optics</i> , 2017, 56, 5489.	1.8	24
20	Highly contrasted Bessel fringe minima visualization for time-averaged vibration profilometry using Hilbert transform two-frame processing. <i>Optics Express</i> , 2013, 21, 16863.	3.4	22
21	Single-shot two-frame π -shifted spatially multiplexed interference phase microscopy. <i>Journal of Biomedical Optics</i> , 2019, 24, 1.	2.6	21
22	Circular-linear grating Talbot interferometry with moiré Fresnel imaging for beam collimation. <i>Optics Letters</i> , 2014, 39, 291.	3.3	19
23	Hilbert-Huang transform based advanced Bessel fringe generation and demodulation for full-field vibration studies of specular reflection micro-objects. <i>Optics and Lasers in Engineering</i> , 2018, 110, 100-112.	3.8	18
24	Diffraction grating three-beam interferometry without self-imaging regime contrast modulations. <i>Optics Letters</i> , 2015, 40, 1089.	3.3	17
25	Numerically Enhanced Stimulated Emission Depletion Microscopy with Adaptive Optics for Deep-Tissue Super-Resolved Imaging. <i>ACS Nano</i> , 2020, 14, 394-405.	14.6	15
26	Single-shot 3λ -3 beam grating interferometry for self-imaging free extended range wave front sensing. <i>Optics Letters</i> , 2016, 41, 4417.	3.3	12
27	Automatic fringe pattern enhancement using truly adaptive period-guided bidimensional empirical mode decomposition. <i>Optics Express</i> , 2020, 28, 6277.	3.4	12
28	Fringe analysis: single-shot or two-frames? Quantitative phase imaging answers. <i>Optics Express</i> , 2021, 29, 18192.	3.4	11
29	DeepDensity: Convolutional neural network based estimation of local fringe pattern density. <i>Optics and Lasers in Engineering</i> , 2021, 145, 106675.	3.8	9
30	Grating deployed total-shear 3-beam interference microscopy with reduced temporal coherence. <i>Optics Express</i> , 2020, 28, 6893.	3.4	9
31	Space domain interpretation of incoherent moiré superimpositions using FABEMD. , 2012, , .		8
32	Single-shot fringe pattern phase retrieval using improved period-guided bidimensional empirical mode decomposition and Hilbert transform. <i>Optics Express</i> , 2021, 29, 31632.	3.4	8
33	Common-path intrinsically achromatic optical diffraction tomography. <i>Biomedical Optics Express</i> , 2021, 12, 4219.	2.9	6
34	Subtractive two-frame three-beam phase-stepping interferometry for testing surface shape of quasi-parallel plates. <i>Optics Express</i> , 2016, 24, 30505.	3.4	5
35	Generation of phase edge singularities by coplanar three-beam interference and their detection. <i>Optics Express</i> , 2017, 25, 2432.	3.4	5
36	Enhancing single-shot fringe pattern phase demodulation using advanced variational image decomposition. <i>Journal of Optics (United Kingdom)</i> , 2019, 21, 045702.	2.2	5

#	ARTICLE	IF	CITATIONS
37	Spatially multiplexed interferometric microscopy: principles and applications to biomedical imaging. JPhys Photonics, 2021, 3, 034005.	4.6	5
38	5-beam grating interferometry for extended phase gradient sensing. Optics Express, 2018, 26, 26872.	3.4	5
39	FPM app: an open-source MATLAB application for simple and intuitive Fourier ptychographic reconstruction. Bioinformatics, 2021, 37, 3695-3696.	4.1	4
40	Versatile optimization-based speed-up method for autofocusing in digital holographic microscopy. Optics Express, 2021, 29, 33297.	3.4	4
41	Three-level transmittance 2D grating with reduced spectrum and its self-imaging. Optics Express, 2019, 27, 1854.	3.4	3
42	Full-field vibration profilometry using time-averaged interference microscopy aided by variational analysis. Optics Express, 2020, 28, 435.	3.4	3
43	Tailoring 2D fast iterative filtering algorithm for low-contrast optical fringe pattern preprocessing. Optics and Lasers in Engineering, 2022, 155, 107069.	3.8	3
44	Adaptive automatic data analysis in full-field fringe-pattern-based optical metrology. Proceedings of SPIE, 2016, , .	0.8	1
45	Single and two-shot quantitative phase imaging using Hilbert-Huang Transform based fringe pattern analysis. , 2016, , .		1
46	Interferometric Methods in NDE. , 2019, , 361-382.		1
47	Single-frame fringe pattern analysis using modified variational image decomposition aided by the Hilbert transform for fast full-field quantitative phase imaging. , 2018, , .		1
48	Analysis of fringe patterns with variable density using modified variational image decomposition aided by the Hilbert Transform. , 2018, , .		1
49	Biological phase sample study using variational Hilbert imaging technique. , 2019, , .		1
50	Optical methods for measurements of surface shape in optical components for high power laser beam forming. Proceedings of SPIE, 2016, , .	0.8	0
51	Evaluation of single-shot and two-shot fringe pattern phase demodulation algorithms aided by the Hilbert-Huang transform. , 2016, , .		0
52	Interferometric Methods in NDE. , 2018, , 1-22.		0
53	Coplanar three-beam interference and phase edge dislocations. , 2016, , .		0
54	Amplitude checker grating-based multichannel lateral shear interferometry for extended aberration sensing. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
55	Multi-beam spatially multiplexed interference microscopy for phase objects examination. , 2018, , .		0
56	Moiré effect-based interference microscopy for biospecimen characterization. , 2018, , .		0
57	Common-path two-shot binary checker grating based interference microscope for quantitative bio-phase imaging. , 2019, , .		0
58	Upgrading a brightfield optical microscope into a robust numerically advanced interference-based phase imager. , 2019, , .		0
59	10.1063/1.5124535.1. , 2019, , .		0
60	Total-shear grating based optical diffraction tomography. , 2021, , .		0
61	High space-bandwidth product phase imaging using VHQPI numerical add-on. , 2021, , .		0
62	Applying an Iterative Filtering Method for Optical Fringe Patterns Preprocessing. , 2021, , .		0
63	Deep-learning Accelerated Fringe Pattern Filtration Using Variational Image Decomposition. , 2020, , .		0
64	Snap-shot fringe pattern enhancement using period-guided bidimensional empirical mode decomposition. , 2020, , .		0
65	Noise influence on DeepDensity: convolutional neural network for local fringe density map estimation. , 2021, , .		0