

Giancarlo Pedrini

List of Publications by Year in descending order

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Version: 2024-02-01

59
papers

2,735
citations

257101

24
h-index

174990

52
g-index

59
all docs

59
docs citations

59
times ranked

1361
citing authors

#	ARTICLE	IF	CITATIONS
1	Wave-front reconstruction from a sequence of interferograms recorded at different planes. Optics Letters, 2005, 30, 833.	1.7	264
2	Recent advances in digital holography [Invited]. Applied Optics, 2014, 53, G44.	0.9	207
3	High-speed digital holographic interferometry for vibration measurement. Applied Optics, 2006, 45, 3456.	2.1	195
4	Complete wavefront reconstruction using sequential intensity measurements of a volume speckle field. Applied Optics, 2006, 45, 8596.	2.1	175
5	Phase retrieval of arbitrary complex-valued fields through aperture-plane modulation. Physical Review A, 2007, 75, .	1.0	172
6	Phase retrieval using multiple illumination wavelengths. Optics Letters, 2008, 33, 309.	1.7	170
7	Roadmap on digital holography [Invited]. Optics Express, 2021, 29, 35078.	1.7	133
8	Simultaneous three-dimensional dynamic deformation measurements with pulsed digital holography. Applied Optics, 1999, 38, 7056.	2.1	130
9	Structured illumination for resolution enhancement and autofocusing in digital holographic microscopy. Optics Letters, 2013, 38, 1328.	1.7	112
10	Exploiting scattering media for exploring 3D objects. Light: Science and Applications, 2017, 6, e16219-e16219.	7.7	104
11	Looking through a diffuser and around an opaque surface: A holographic approach. Optics Express, 2014, 22, 7694.	1.7	88
12	Nanoscale imaging using deep ultraviolet digital holographic microscopy. Optics Express, 2010, 18, 14159.	1.7	84
13	Pulsed digital holography for high-speed contouring that uses a two-wavelength method. Applied Optics, 1999, 38, 3460.	2.1	77
14	Aberration compensation in digital holographic reconstruction of microscopic objects. Journal of Modern Optics, 2001, 48, 1035-1041.	0.6	77
15	Scatter-plate microscope for lensless microscopy with diffraction limited resolution. Scientific Reports, 2017, 7, 10687.	1.6	59
16	Dual-wavelength image-plane digital holography for dynamic measurement. Optics and Lasers in Engineering, 2009, 47, 552-557.	2.0	58
17	Resolution improvement in digital holography by angular and polarization multiplexing. Applied Optics, 2011, 50, B6.	2.1	57
18	Digital holography of self-luminous objects by using a Mach-Zehnder setup. Optics Letters, 2012, 37, 713.	1.7	51

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19	Phase retrieval with resolution enhancement by using structured illumination. <i>Optics Letters</i> , 2013, 38, 5204.	1.7	44
20	Surface relief and refractive index gratings patterned in chalcogenide glasses and studied by off-axis digital holography. <i>Applied Optics</i> , 2018, 57, 507.	0.9	35
21	Phase microscopy of technical and biological samples through random phase modulation with a diffuser. <i>Optics Letters</i> , 2010, 35, 1028.	1.7	34
22	Digital holographic microscopy in the deep (193 nm) ultraviolet. <i>Applied Optics</i> , 2007, 46, 7829.	2.1	31
23	Roadmap on chaos-inspired imaging technologies (CI2-Tech). <i>Applied Physics B: Lasers and Optics</i> , 2022, 128, 1.	1.1	27
24	Quantitative phase imaging using a deep UV LED source. <i>Optics Letters</i> , 2014, 39, 3468.	1.7	26
25	Iterative phase retrieval based on variable wavefront curvature. <i>Applied Optics</i> , 2017, 56, F134.	2.1	24
26	Feasibility study of digital holography for erosion measurements under extreme environmental conditions inside the International Thermonuclear Experimental Reactor tokamak [invited]. <i>Applied Optics</i> , 2019, 58, A147.	0.9	24
27	Accurate depth estimation in structured light fields. <i>Optics Express</i> , 2019, 27, 13532.	1.7	21
28	Light-field-based absolute phase unwrapping. <i>Optics Letters</i> , 2018, 43, 5717.	1.7	19
29	Holographic Correloscopy—Unconventional Holographic Techniques For Imaging a Three-Dimensional Object Through an Opaque Diffuser or Via a Scattering Wall: A Review. <i>IEEE Transactions on Industrial Informatics</i> , 2016, 12, 1631-1640.	7.2	18
30	Improving reconstruction of speckle correlation imaging by using a modified phase retrieval algorithm with the number of nonzero-pixels constraint. <i>Applied Optics</i> , 2019, 58, 473.	0.9	18
31	Accuracy enhanced and synthetic wavelength adjustable optical metrology via spectrally resolved digital holography. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2018, 35, 546.	0.8	17
32	Spectral Object Recognition in Hyperspectral Holography with Complex-Domain Denoising. <i>Sensors</i> , 2019, 19, 5188.	2.1	17
33	Structured-light-field 3D imaging without phase unwrapping. <i>Optics and Lasers in Engineering</i> , 2020, 129, 106047.	2.0	15
34	High-contrast multilayer imaging of biological organisms through dark-field digital refocusing. <i>Journal of Biomedical Optics</i> , 2013, 18, 1.	1.4	13
35	Image reconstruction and enhancement by deconvolution in scatter-plate microscopy. <i>Optics Express</i> , 2019, 27, 23049.	1.7	13
36	Opposed-view dark-field digital holographic microscopy. <i>Biomedical Optics Express</i> , 2014, 5, 728.	1.5	12

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37	Quantitative phase imaging in dual-wavelength interferometry using a single wavelength illumination and deep learning. Optics Express, 2020, 28, 28140.	1.7	12
38	Light-field depth estimation considering plenoptic imaging distortion. Optics Express, 2020, 28, 4156.	1.7	10
39	Phase retrieval by pinhole scanning. Optics Letters, 2011, 36, 1113.	1.7	9
40	Single-shot structured-light-field three-dimensional imaging. Optics Letters, 2020, 45, 3256.	1.7	9
41	Snap-shot topography measurement via dual-VCSEL and dual wavelength digital holographic interferometry. Light Advanced Manufacturing, 2021, 2, 1.	2.2	9
42	Scatter-plate microscopy with spatially coherent illumination and temporal scatter modulation. Optics Express, 2021, 29, 4530.	1.7	8
43	Unfocused plenoptic metric modeling and calibration. Optics Express, 2019, 27, 20177.	1.7	8
44	Intrinsic parameter-free calibration of FPP using a ray phase mapping model. Optics Letters, 2022, 47, 3564.	1.7	8
45	Numerical calculation of temperature and surface topology during a laser ablation process for ceramic coatings. Meccanica, 2016, 51, 279-289.	1.2	6
46	Out-of-plane electrostatic microactuators with tunable stiffness. , 2010, , .		5
47	DL-SI-DHM: a deep network generating the high-resolution phase and amplitude images from wide-field images. Optics Express, 2021, 29, 19247.	1.7	5
48	Numerical dark-field imaging using deep-learning. Optics Express, 2020, 28, 34266.	1.7	5
49	Residual Stress Evaluation in Ceramic Coating Under Industrial Conditions by Digital Holography. IEEE Transactions on Industrial Informatics, 2020, 16, 1102-1110.	7.2	4
50	Tunable output-frequency filter algorithm for imaging through scattering media under LED illumination. Optics Communications, 2018, 410, 160-163.	1.0	3
51	Single-pixel scatter-plate microscopy. Optics Letters, 2021, 46, 2473.	1.7	3
52	Lensless phase imaging microscopy using multiple intensity diffraction patterns obtained under coherent and partially coherent illumination. Applied Optics, 2022, 61, B271.	0.9	3
53	Oblique illumination lateral shearing digital holographic microscopy. Journal of Optics (United Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.0	2
54	55 Years of Holographic Non-Destructive Testing and Experimental Stress Analysis: Is there still Progress to be expected?. Light Advanced Manufacturing, 2022, 3, 1.	2.2	2

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55	Variable Wavefront Curvature Phase Retrieval Compared to Off-Axis Holography and Its Useful Application to Support Intraoperative Tissue Discrimination. Applied Sciences (Switzerland), 2018, 8, 2147.	1.3	1
56	Phase retrieval using 3D Fourier transforms of volume diffraction pattern. Optics Letters, 2021, 46, 1716.	1.7	1
57	Differential phase measurement based on synchronous phase shift determination. Optics Express, 2022, 30, 12545.	1.7	1
58	Phase retrieval using bidirectional interference. Applied Optics, 2021, 60, 3517.	0.9	0
59	Using wrapped phases for light-field three-dimensional imaging. , 2019, , .		0