Giancarlo Pedrini

List of Publications by Year
in descending order

59 papers	2,735 citations	257450 24 h-index	175258 52 g-index
59 all docs	59 docs citations	59 times ranked	1361 citing authors

#	Article	IF	Citations
1	Lensless phase imaging microscopy using multiple intensity diffraction patterns obtained under coherent and partially coherent illumination. Applied Optics, 2022, 61, B271.	1.8	3
2	55 Years of Holographic Non-Destructive Testing and Experimental Stress Analysis: Is there still Progress to be expected?. Light Advanced Manufacturing, 2022, 3, 1.	5.1	2
3	Roadmap on chaos-inspired imaging technologies (CI2-Tech). Applied Physics B: Lasers and Optics, 2022, 128, 1.	2.2	27
4	Differential phase measurement based on synchronous phase shift determination. Optics Express, 2022, 30, 12545.	3.4	1
5	Intrinsic parameter-free calibration of FPP using a ray phase mapping model. Optics Letters, 2022, 47, 3564.	3.3	8
6	Scatter-plate microscopy with spatially coherent illumination and temporal scatter modulation. Optics Express, 2021, 29, 4530.	3.4	8
7	Phase retrieval using 3D Fourier transforms of volume diffraction pattern. Optics Letters, 2021, 46, 1716.	3.3	1
8	Phase retrieval using bidirectional interference. Applied Optics, 2021, 60, 3517.	1.8	0
9	Single-pixel scatter-plate microscopy. Optics Letters, 2021, 46, 2473.	3.3	3
10	DL-SI-DHM: a deep network generating the high-resolution phase and amplitude images from wide-field images. Optics Express, 2021, 29, 19247.	3.4	5
11	Roadmap on digital holography [Invited]. Optics Express, 2021, 29, 35078.	3.4	133
12	Snap-shot topography measurement via dual-VCSEL and dual wavelength digital holographic interferometry. Light Advanced Manufacturing, 2021, 2, 1.	5.1	9
13	Residual Stress Evaluation in Ceramic Coating Under Industrial Conditions by Digital Holography. IEEE Transactions on Industrial Informatics, 2020, 16, 1102-1110.	11.3	4
14	Oblique illumination lateral shearing digital holographic microscopy. Journal of Optics (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222	2.2	2
15	Light-field depth estimation considering plenoptic imaging distortion. Optics Express, 2020, 28, 4156.	3.4	10
16	Structured-light-field 3D imaging without phase unwrapping. Optics and Lasers in Engineering, 2020, 129, 106047.	3.8	15
17	Numerical dark-field imaging using deep-learning. Optics Express, 2020, 28, 34266.	3.4	5
18	Single-shot structured-light-field three-dimensional imaging. Optics Letters, 2020, 45, 3256.	3.3	9

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19	Quantitative phase imaging in dual-wavelength interferometry using a single wavelength illumination and deep learning. Optics Express, 2020, 28, 28140.	3.4	12
20	Spectral Object Recognition in Hyperspectral Holography with Complex-Domain Denoising. Sensors, 2019, 19, 5188.	3.8	17
21	Improving reconstruction of speckle correlation imaging by using a modified phase retrieval algorithm with the number of nonzero-pixels constraint. Applied Optics, 2019, 58, 473.	1.8	18
22	Feasibility study of digital holography for erosion measurements under extreme environmental conditions inside the International Thermonuclear Experimental Reactor tokamak [invited]. Applied Optics, 2019, 58, A147.	1.8	24
23	Accurate depth estimation in structured light fields. Optics Express, 2019, 27, 13532.	3.4	21
24	Unfocused plenoptic metric modeling and calibration. Optics Express, 2019, 27, 20177.	3.4	8
25	Image reconstruction and enhancement by deconvolution in scatter-plate microscopy. Optics Express, 2019, 27, 23049.	3.4	13
26	Using wrapped phases for light-field three-dimensional imaging. , 2019, , .		0
27	Tunable output-frequency filter algorithm for imaging through scattering media under LED illumination. Optics Communications, 2018, 410, 160-163.	2.1	3
28	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.	2.5	1
29	Accuracy enhanced and synthetic wavelength adjustable optical metrology via spectrally resolved digital holography. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2018, 35, 546.	1.5	17
30	Surface relief and refractive index gratings patterned in chalcogenide glasses and studied by off-axis digital holography. Applied Optics, 2018, 57, 507.	1.8	35
31	Light-field-based absolute phase unwrapping. Optics Letters, 2018, 43, 5717.	3.3	19
32	Exploiting scattering media for exploring 3D objects. Light: Science and Applications, 2017, 6, e16219-e16219.	16.6	104
33	Scatter-plate microscope for lensless microscopy with diffraction limited resolution. Scientific Reports, 2017, 7, 10687.	3.3	59
34	Iterative phase retrieval based on variable wavefront curvature. Applied Optics, 2017, 56, F134.	2.1	24
35	Holographic Correloscopyâ€"Unconventional Holographic Techniques For Imaging a Three-Dimensional Object Through an Opaque Diffuser or Via a Scattering Wall: A Review. IEEE Transactions on Industrial Informatics, 2016, 12, 1631-1640.	11.3	18
36	Numerical calculation of temperature and surface topology during a laser ablation process for ceramic coatings. Meccanica, 2016, 51, 279-289.	2.0	6

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37	Quantitative phase imaging using a deep UV LED source. Optics Letters, 2014, 39, 3468.	3.3	26
38	Opposed-view dark-field digital holographic microscopy. Biomedical Optics Express, 2014, 5, 728.	2.9	12
39	Recent advances in digital holography [Invited]. Applied Optics, 2014, 53, G44.	1.8	207
40	Looking through a diffuser and around an opaque surface: A holographic approach. Optics Express, 2014, 22, 7694.	3.4	88
41	Structured illumination for resolution enhancement and autofocusing in digital holographic microscopy. Optics Letters, 2013, 38, 1328.	3.3	112
42	Phase retrieval with resolution enhancement by using structured illumination. Optics Letters, 2013, 38, 5204.	3.3	44
43	High-contrast multilayer imaging of biological organisms through dark-field digital refocusing. Journal of Biomedical Optics, 2013, 18, 1.	2.6	13
44	Digital holography of self-luminous objects by using a Machâ€“Zehnder setup. Optics Letters, 2012, 37, 713.	3.3	51
45	Resolution improvement in digital holography by angular and polarization multiplexing. Applied Optics, 2011, 50, B6.	2.1	57
46	Phase retrieval by pinhole scanning. Optics Letters, 2011, 36, 1113.	3.3	9
47	Nanoscale imaging using deep ultraviolet digital holographic microscopy. Optics Express, 2010, 18, 14159.	3.4	84
48	Phase microscopy of technical and biological samples through random phase modulation with a diffuser. Optics Letters, 2010, 35, 1028.	3.3	34
49	Out-of-plane electrostatic microactuators with tunable stiffness. , 2010, , .		5
50	Dual-wavelength image-plane digital holography for dynamic measurement. Optics and Lasers in Engineering, 2009, 47, 552-557.	3.8	58
51	Phase retrieval using multiple illumination wavelengths. Optics Letters, 2008, 33, 309.	3.3	170
52	Phase retrieval of arbitrary complex-valued fields through aperture-plane modulation. Physical Review A, 2007, 75, .	2.5	172
53	Digital holographic microscopy in the deep (193 nm) ultraviolet. Applied Optics, 2007, 46, 7829.	2.1	31
54	High-speed digital holographic interferometry for vibration measurement. Applied Optics, 2006, 45, 3456.	2.1	195

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55	Complete wavefront reconstruction using sequential intensity measurements of a volume speckle field. Applied Optics, 2006, 45, 8596.	2.1	175
56	Wave-front reconstruction from a sequence of interferograms recorded at different planes. Optics Letters, 2005, 30, 833.	3.3	264
57	Aberration compensation in digital holographic reconstruction of microscopic objects. Journal of Modern Optics, 2001, 48, 1035-1041.	1.3	77
58	Pulsed digital holography for high-speed contouring that uses a two-wavelength method. Applied Optics, 1999, 38, 3460.	2.1	77
59	Simultaneous three-dimensional dynamic deformation measurements with pulsed digital holography. Applied Optics, 1999, 38, 7056.	2.1	130