

# Vittorio Bianco

## List of Publications by Year in descending order

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Version: 2024-02-01

82  
papers

2,247  
citations

185998

28  
h-index

223531

46  
g-index

86  
all docs

86  
docs citations

86  
times ranked

1611  
citing authors

#	ARTICLE	IF	CITATIONS
1	Differential diagnosis of hereditary anemias from a fraction of blood drop by digital holography and hierarchical machine learning. Biosensors and Bioelectronics, 2022, 201, 113945.	5.3	19
2	Kinematic analysis and visualization of Tetraselmis microalgae 3D motility by digital holography. Applied Optics, 2022, 61, B331.	0.9	6
3	Intelligent polarization-sensitive holographic flow-cytometer: Towards specificity in classifying natural and microplastic fibers. Science of the Total Environment, 2022, 815, 152708.	3.9	21
4	Toward an All-Optical Fingerprint of Synthetic and Natural Microplastic Fibers by Polarization-Sensitive Holographic Microscopy. ACS Photonics, 2022, 9, 694-705.	3.2	12
5	Speeding up reconstruction of 3D tomograms in holographic flow cytometry <i>via</i> deep learning. Lab on A Chip, 2022, 22, 793-804.	3.1	39
6	Deep Learning-Based, Misalignment Resilient, Real-Time Fourier Ptychographic Microscopy Reconstruction of Biological Tissue Slides. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-10.	1.9	16
7	Fourier ptychographic microscope allows multi-scale monitoring of cells layout onto micropatterned substrates. Optics and Lasers in Engineering, 2022, 156, 107103.	2.0	12
8	Miscalibration-Tolerant Fourier Ptychography. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-17.	1.9	18
9	Label-free microfluidic platform for blood analysis based on phase-contrast imaging. , 2021, , .		0
10	Identification of Microplastics Based on the Fractal Properties of Their Holographic Fingerprint. ACS Photonics, 2021, 8, 2148-2157.	3.2	31
11	Three-Dimensional Quantitative Intracellular Visualization of Graphene Oxide Nanoparticles by Tomographic Flow Cytometry. Nano Letters, 2021, 21, 5958-5966.	4.5	34
12	Dehydration of plant cells shoves nuclei rotation allowing for 3D phase-contrast tomography. Light: Science and Applications, 2021, 10, 187.	7.7	21
13	Neuroblastoma Cells Classification Through Learning Approaches by Direct Analysis of Digital Holograms. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-9.	1.9	19
14	Induced dehydration as a method to enhance phase-contrast observation of plant cells intracellular dynamics. , 2021, , .		0
15	Web Based Methodology for Holographic Learning on Microscopy Patterns Recognition. , 2021, , .		1
16	Drug Resistance Classification of Cancer Cells Based on Digital Holographic Flow Cytometry and Machine Learning. , 2021, , .		0
17	Microalgae as potential bioindicators for heavy metal pollution. , 2021, , .		0
18	Holographic tracking and imaging of free-swimming Tetraselmis by off-axis holographic microscopy.. , 2021, , .		2

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19	A fractal analysis of the holographic diffraction patterns for detecting microplastics among diatoms. , 2021, , .		0
20	Biospeckle Analysis and Biofilm Electrostatic Tests, Two Useful Methods in Microbiology. Applied Microbiology, 2021, 1, 557-572.	0.7	2
21	Label-Free Assessment of the Drug Resistance of Epithelial Ovarian Cancer Cells in a Microfluidic Holographic Flow Cytometer Boosted through Machine Learning. ACS Omega, 2021, 6, 31046-31057.	1.6	26
22	Compact holographic microscope for imaging flowing microplastics. , 2021, , .		5
23	Microplastic Identification via Holographic Imaging and Machine Learning. Advanced Intelligent Systems, 2020, 2, 1900153.	3.3	88
24	Learning Diatoms Classification from a Dry Test Slide by Holographic Microscopy. Sensors, 2020, 20, 6353.	2.1	22
25	Perspectives on liquid biopsy for label-free detection of circulating tumor cells through intelligent lab-on-a-chips. View, 2020, 1, 20200034.	2.7	69
26	Quantitative phase imaging trends in biomedical applications. Optics and Lasers in Engineering, 2020, 135, 106188.	2.0	63
27	Compact off-axis holographic slide microscope: design guidelines. Biomedical Optics Express, 2020, 11, 2511.	1.5	38
28	Field-deployable, cost-effective holographic slide microscope: a 3D-printed prototype. , 2020, , .		0
29	Holographic phase imaging to observe intracellular dynamics of plant cells during dehydration. , 2020, , .		0
30	Improving spatial resolution, field of view and phase-contrast of plant cells under induced dehydration by space-time digital holography. , 2020, , .		0
31	Holographic imaging boosts machine learning for accurate micro-plastics recognition in seawater sample. , 2020, , .		1
32	2D resolution improvement via 1D scanning Space-Time Digital Holography (STDH) in Optofluidics. EPJ Web of Conferences, 2019, 215, 15001.	0.1	0
33	Off-axis self-reference digital holography in the visible and far-infrared region. ETRI Journal, 2019, 41, 84-92.	1.2	7
34	High-accuracy identification of micro-plastics by holographic microscopy enabled support vector machine. , 2019, , .		2
35	3D imaging in microfluidics: new holographic methods and devices. , 2019, , .		2
36	Long-term holographic phase-contrast time lapse reveals cytoplasmic circulation in dehydrating plant cells. Applied Optics, 2019, 58, 7416.	0.9	8

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37	Comparative study of multi-look processing for phase map de-noising in digital Fresnel holographic interferometry. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2019, 36, A59.	0.8	34
38	2D resolution enhancement from 1D scanning Space-Time Digital Holography (STDH). , 2019, , .		0
39	Holographic imaging and acoustofluidics: an advantageous combination. , 2019, , .		0
40	Merging optical and numerical methods for denoising in digital holography. , 2019, , .		1
41	Compact modules for off-axis holography in microfluidics: features and design solutions. , 2019, , .		0
42	Quasi noise-free reconstruction of long-wavelength digital holograms. , 2019, , .		0
43	Holographic imaging for tracking and phase retrieval in acoustophoresis platforms. , 2019, , .		0
44	Detection of self-propelling bacteria by speckle correlation assessment and applications to food industry. , 2019, , .		1
45	Characterization of microplastics by holographic features for automatic detection in heterogeneous samples. , 2019, , .		2
46	How holographic imaging can improve machine learning. , 2019, , .		2
47	Digital Holography, a metrological tool for quantitative analysis: Trends and future applications. <i>Optics and Lasers in Engineering</i> , 2018, 104, 32-47.	2.0	101
48	Motility-based label-free detection of parasites in bodily fluids using holographic speckle analysis and deep learning. <i>Light: Science and Applications</i> , 2018, 7, 108.	7.7	45
49	Flexural behavior and damage extent in woven natural fibers/polypropylene composite laminates. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 406, 012041.	0.3	2
50	Multi-look approaches for phase map de-noising in digital Fresnel holography: comparative analysis. , 2018, , .		1
51	A deep learning-enabled portable imaging flow cytometer for cost-effective, high-throughput, and label-free analysis of natural water samples. <i>Light: Science and Applications</i> , 2018, 7, 66.	7.7	131
52	Label-Free Optical Marker for Red-Blood-Cell Phenotyping of Inherited Anemias. <i>Analytical Chemistry</i> , 2018, 90, 7495-7501.	3.2	49
53	Retrieving acoustic energy densities and local pressure amplitudes in microfluidics by holographic time-lapse imaging. <i>Lab on A Chip</i> , 2018, 18, 1921-1927.	3.1	14
54	Strategies for reducing speckle noise in digital holography. <i>Light: Science and Applications</i> , 2018, 7, 48.	7.7	182

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55	Resolution gain in space-time digital holography by self-assembling of the object frequencies. Optics Letters, 2018, 43, 4248.	1.7	10
56	Application of optical interferometric techniques for non-destructive evaluation of novel "green" composite materials. , 2018, , .		3
57	Endowing a plain fluidic chip with micro-optics: a holographic microscope slide. Light: Science and Applications, 2017, 6, e17055-e17055.	7.7	92
58	Holographic microscope slide in a spatio-temporal imaging modality for reliable 3D cell counting. Lab on A Chip, 2017, 17, 2831-2838.	3.1	53
59	A method for total noise removal in digital holography based on enhanced grouping and sparsity enhancement filtering. , 2017, , .		0
60	On-speckle suppression in IR digital holography. Optics Letters, 2016, 41, 5226.	1.7	39
61	A new method for noise suppression in Digital Holography. , 2016, , .		1
62	Quasi noise-free digital holography. Light: Science and Applications, 2016, 5, e16142-e16142.	7.7	124
63	Forward electrohydrodynamic inkjet printing of optical microlenses on microfluidic devices. Lab on A Chip, 2016, 16, 326-333.	3.1	92
64	A one-shot denoising method in Digital Holography based on numerical multi-look and 3D block matching filtering. , 2016, , .		2
65	Overcoming the trade-off between magnification and FoV by optofluidic Digital Holography microscopy. , 2016, , .		0
66	Diagnostic Tools for Lab-on-Chip Applications Based on Coherent Imaging Microscopy. Proceedings of the IEEE, 2015, 103, 192-204.	16.4	68
67	Optofluidic holographic microscopy with custom field of view (FoV) using a linear array detector. Lab on A Chip, 2015, 15, 2117-2124.	3.1	57
68	Self-propelling bacteria mimic coherent light decorrelation. Optics Express, 2015, 23, 9388.	1.7	33
69	Portable IR Laser System for Real-Time Display of Alive People in Fire Scenes. Journal of Display Technology, 2015, 11, 834-838.	1.3	15
70	Holographic microscopy in different turbid layer conditions. , 2014, , .		0
71	Spatio-temporal scanning modality for synthesizing interferograms and digital holograms. Optics Express, 2014, 22, 22328.	1.7	42
72	Encoding multiple holograms for speckle-noise reduction in optical display. Optics Express, 2014, 22, 25768.	1.7	78

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73	Imaging adherent cells in the microfluidic channel hidden by flowing RBCs as occluding objects by a holographic method. Lab on A Chip, 2014, 14, 2499.	3.1	65
74	Looking beyond Smoke and Flames by Lensless Infrared Digital Holography. , 2014, , 911-916.		1
75	Seeing through smoke and flames: a challenge for imaging capabilities, met thanks to digital holography at far infrared. , 2013, , .		0
76	Non-Bayesian noise reduction in digital holography by random resampling masks. Proceedings of SPIE, 2013, , .	0.8	3
77	Random resampling masks: a non-Bayesian one-shot strategy for noise reduction in digital holography. Optics Letters, 2013, 38, 619.	1.7	87
78	Imaging through scattering microfluidic channels by digital holography for information recovery in lab on chip. Optics Express, 2013, 21, 23985.	1.7	53
79	Imaging live humans through smoke and flames using far-infrared digital holography. Optics Express, 2013, 21, 5379.	1.7	106
80	Clear coherent imaging in turbid microfluidics by multiple holographic acquisitions. Optics Letters, 2012, 37, 4212.	1.7	64
81	Quantitative phase contrast microscopy in turbid microfluidic channels by digital holography. Proceedings of SPIE, 2012, , .	0.8	0
82	Seeing through Turbid Fluids: A New Perspective in Microfluidics. Optics and Photonics News, 2012, 23, 33.	0.4	8