

Osamu Matoba

List of Publications by Year in descending order

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355
papers

5,612
citations

94433

37
h-index

98798

67
g-index

361
all docs

361
docs citations

361
times ranked

1790
citing authors

#	ARTICLE	IF	CITATIONS
1	Encrypted optical memory system using three-dimensional keys in the Fresnel domain. Optics Letters, 1999, 24, 762.	3.3	476
2	Optical Techniques for Information Security. Proceedings of the IEEE, 2009, 97, 1128-1148.	21.3	295
3	Optoelectronic information encryption with phase-shifting interferometry. Applied Optics, 2000, 39, 2313.	2.1	199
4	Parallel two-step phase-shifting digital holography. Applied Optics, 2008, 47, D183.	2.1	193
5	Real-time three-dimensional object reconstruction by use of a phase-encoded digital hologram. Applied Optics, 2002, 41, 6187.	2.1	187
6	Three-Dimensional Imaging and Processing Using Computational Holographic Imaging. Proceedings of the IEEE, 2006, 94, 636-653.	21.3	159
7	High-speed phase imaging by parallel phase-shifting digital holography. Optics Letters, 2011, 36, 4131.	3.3	157
8	Digital holography and its multidimensional imaging applications: a review. Microscopy (Oxford), Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4	1.5	142
9	Parallel three-step phase-shifting digital holography. Applied Optics, 2006, 45, 2995.	2.1	117
10	Encrypted optical storage with angular multiplexing. Applied Optics, 1999, 38, 7288.	2.1	111
11	Shift-invariant three-dimensional object recognition by means of digital holography. Applied Optics, 2001, 40, 3877.	2.1	103
12	Parallel phase-shifting digital holographic microscopy. Biomedical Optics Express, 2010, 1, 610.	2.9	94
13	Experimental demonstration of parallel two-step phase-shifting digital holography. Optics Express, 2010, 18, 18975.	3.4	93
14	Secure optical storage that uses fully phase encryption. Applied Optics, 2000, 39, 6689.	2.1	88
15	Secure optical memory system with polarization encryption. Applied Optics, 2001, 40, 2310.	2.1	87
16	Encrypted optical storage with wavelength-key and random phase codes. Applied Optics, 1999, 38, 6785.	2.1	76
17	Secure holographic memory by double-random polarization encryption. Applied Optics, 2004, 43, 2915.	2.1	75
18	Real-time three-dimensional object recognition with multiple perspectives imaging. Applied Optics, 2001, 40, 3318.	2.1	73

#	ARTICLE	IF	CITATIONS
19	Optical retrieval of encrypted digital holograms for secure real-time display. Optics Letters, 2002, 27, 321.	3.3	71
20	Transmissive optical imaging device with micromirror array. , 2006, 6392, 130.		68
21	Single-shot incoherent digital holography using a dual-focusing lens with diffraction gratings. Optics Letters, 2017, 42, 383.	3.3	68
22	Parallel phase-shifting digital holography with adaptive function using phase-mode spatial light modulator. Applied Optics, 2012, 51, 2633.	1.8	63
23	Optical voice recorder by off-axis digital holography. Optics Letters, 2014, 39, 6549.	3.3	63
24	Image quality improvement of parallel four-step phase-shifting digital holography by using the algorithm of parallel two-step phase-shifting digital holography. Optics Express, 2010, 18, 9555.	3.4	59
25	Phase and fluorescence imaging by combination of digital holographic microscopy and fluorescence microscopy. Optical Review, 2015, 22, 349-353.	2.0	58
26	Single-shot femtosecond-pulsed phase-shifting digital holography. Optics Express, 2012, 20, 20286.	3.4	56
27	High-Speed Three-Dimensional Microscope for Dynamically Moving Biological Objects Based on Parallel Phase-Shifting Digital Holographic Microscopy. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 1387-1393.	2.9	56
28	Improvement of color reproduction in color digital holography by using spectral estimation technique. Applied Optics, 2011, 50, H177.	2.1	52
29	Common-path multimodal three-dimensional fluorescence and phase imaging system. Journal of Biomedical Optics, 2020, 25, 1.	2.6	52
30	Comparison of passive ranging integral imaging and active imaging digital holography for three-dimensional object recognition. Applied Optics, 2004, 43, 452.	2.1	51
31	Three-dimensional polarimetric integral imaging. Optics Letters, 2004, 29, 2375.	3.3	50
32	Multidimensional optical sensor and imaging system. Applied Optics, 2006, 45, 2986.	2.1	48
33	Parallel phase-shifting color digital holography using two phase shifts. Applied Optics, 2009, 48, H244.	2.1	48
34	Fabrication experiment of photorefractive three-dimensional waveguides in lithium niobate. Optics Letters, 1994, 19, 652.	3.3	45
35	One million fps digital holography. Electronics Letters, 2014, 50, 1693-1695.	1.0	42
36	Three-dimensional stimulation and imaging-based functional optical microscopy of biological cells. Optics Letters, 2018, 43, 5447.	3.3	42

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37	Imaging Characteristics of Transmission-Type Volume Holographic Imaging Elements. Japanese Journal of Applied Physics, 2007, 46, 605-611.	1.5	37
38	Four-Wavelength Color Digital Holography. Journal of Display Technology, 2012, 8, 570-576.	1.2	37
39	Single-shot polarization-imaging digital holography based on simultaneous phase-shifting interferometry. Optics Letters, 2011, 36, 3254.	3.3	36
40	Optical voice encryption based on digital holography. Optics Letters, 2017, 42, 4619.	3.3	36
41	Improvement in holographic storage capacity by use of double-random phase encryption. Applied Optics, 2001, 40, 4721.	2.1	34
42	Comparative analysis and quantitative evaluation of the field of view and the viewing zone of single-shot phase-shifting digital holography using space-division multiplexing. Optical Review, 2010, 17, 519-524.	2.0	34
43	Multimodal Imaging Based on Digital Holography. Proceedings of the IEEE, 2017, 105, 906-923.	21.3	34
44	Pain induces stable, active microcircuits in the somatosensory cortex that provide a therapeutic target. Science Advances, 2021, 7, .	10.3	34
45	Parallel two-step phase-shifting digital holography using polarization. Optical Review, 2010, 17, 108-113.	2.0	30
46	Single-shot dual-wavelength phase unwrapping in parallel phase-shifting digital holography. Optics Letters, 2014, 39, 2374.	3.3	30
47	Single-shot common-path off-axis digital holography: applications in bioimaging and optical metrology [Invited]. Applied Optics, 2021, 60, A195.	1.8	30
48	Digital four-step phase-shifting technique from a single fringe pattern using Riesz transform. Optics Letters, 2019, 44, 3434.	3.3	30
49	Reflection-type holographic disk memory with random phase shift multiplexing. Applied Optics, 2006, 45, 3270.	2.1	29
50	Image reconstruction algorithm for recovering high-frequency information in parallel phase-shifting digital holography [Invited]. Applied Optics, 2013, 52, A210.	1.8	29
51	Three-dimensional imaging of distribution of refractive index by parallel phase-shifting digital holography using Abel inversion. Optics Express, 2017, 25, 18066.	3.4	29
52	Injection locking of a broad-area diode laser through a double phase-conjugate mirror. Optics Communications, 1998, 146, 6-10.	2.1	28
53	Secure three-dimensional data transmission and display. Applied Optics, 2004, 43, 2285.	2.1	28
54	Array of photorefractive waveguides for massively parallel optical interconnections in lithium niobate. Optics Letters, 1996, 21, 122.	3.3	26

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55	Performance comparison of bilinear interpolation, bicubic interpolation, and B-spline interpolation in parallel phase-shifting digital holography. <i>Optical Review</i> , 2013, 20, 193-197.	2.0	26
56	Speckle denoising by variant nonlocal means methods. <i>Applied Optics</i> , 2019, 58, 7110.	1.8	26
57	Space-Bandwidth Capacity-Enhanced Digital Holography. <i>Applied Physics Express</i> , 2013, 6, 022502.	2.4	26
58	Multiwavelength parallel phase-shifting digital holography using angular multiplexing. <i>Optics Letters</i> , 2013, 38, 2789.	3.3	25
59	Characteristics of vibration frequency measurement based on sound field imaging by digital holography. <i>OSA Continuum</i> , 2018, 1, 200.	1.8	25
60	Narrow bandwidth operation of high-power broad-area diode laser using cascaded phase-conjugate injection locking. <i>Applied Physics B: Lasers and Optics</i> , 1999, 68, 1021-1025.	2.2	24
61	Segmented photorefractive waveguides in LiNbO ₃ :Fe. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1998, 15, 2006.	2.1	23
62	Astigmatism and deformation correction for a holographic head-mounted display with a wedge-shaped holographic waveguide. <i>Applied Optics</i> , 2018, 57, 7094.	1.8	23
63	Single-shot common-path off-axis dual-wavelength digital holographic microscopy. <i>Applied Optics</i> , 2020, 59, 7144.	1.8	23
64	Fast acquisition system for digital holograms and image processing for three-dimensional display with data manipulation. <i>Applied Optics</i> , 2006, 45, 8945.	2.1	22
65	Parallel phase-shifting color digital holographic microscopy. <i>3D Research</i> , 2010, 1, 1.	1.8	22
66	Digital Holographic Multimodal Cross-Sectional Fluorescence and Quantitative Phase Imaging System. <i>Scientific Reports</i> , 2020, 10, 7580.	3.3	22
67	Parallel Phase-Shifting Digital Holography Capable of Simultaneously Capturing Visible and Invisible Three-Dimensional Information. <i>Journal of Display Technology</i> , 2010, 6, 472-478.	1.2	21
68	Secure ultrafast communication with spatial-temporal converters. <i>Applied Optics</i> , 2000, 39, 2975.	2.1	20
69	Spatial-carrier phase-shifting digital holography utilizing spatial frequency analysis for the correction of the phase-shift error. <i>Optics Letters</i> , 2012, 37, 148.	3.3	20
70	Single-shot dual-illumination phase unwrapping using a single wavelength. <i>Optics Letters</i> , 2012, 37, 4002.	3.3	20
71	Parallel optical-path-length-shifting digital holography. <i>Applied Optics</i> , 2009, 48, H160.	2.1	19
72	Light-in-Flight Recording by Parallel Phase-Shifting Digital Holography. <i>Applied Physics Express</i> , 2013, 6, 092501.	2.4	19

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73	Speckle denoising techniques in imaging systems. <i>Journal of Optics (United Kingdom)</i> , 2020, 22, 063001.	2.2	19
74	Three-dimensional fluorescence imaging using the transport of intensity equation. <i>Journal of Biomedical Optics</i> , 2019, 25, 1.	2.6	19
75	High-speed imaging of the sound field by parallel phase-shifting digital holography. <i>Applied Optics</i> , 2021, 60, A179.	1.8	19
76	Improvement of Image Quality of 3D Display by Using Optimized Binary Phase Modulation and Intensity Accumulation. <i>Journal of Display Technology</i> , 2016, 12, 472-477.	1.2	18
77	Sound wave detection by common-path digital holography. <i>Optics and Lasers in Engineering</i> , 2021, 137, 106331.	3.8	18
78	Quantitative dynamic evolution of physiological parameters of RBC by highly stable digital holographic microscopy. <i>Optics and Lasers in Engineering</i> , 2022, 151, 106887.	3.8	18
79	Photorefractive and photochromic properties of Ru doped Sr _{0.61} Ba _{0.39} Nb ₂ O ₆ crystal. <i>Optics Communications</i> , 2002, 213, 373-378.	2.1	17
80	Numerical estimation of storage capacity in reflection-type holographic disk memory with three-dimensional speckle-shift multiplexing. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2009, 26, 2269.	1.5	17
81	Numerical evaluation of angular multiplexing in reflection-type holographic data storage in photopolymer with shrinkage. <i>Applied Optics</i> , 2010, 49, 694.	2.1	17
82	Image-based numerical evaluation techniques in volume holographic memory systems. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2007, 24, 792.	2.1	16
83	Image recovery from defocused 2D fluorescent images in multimodal digital holographic microscopy. <i>Optics Letters</i> , 2017, 42, 1796.	3.3	16
84	Construction of a portable parallel phase-shifting digital holography system. <i>Optical Engineering</i> , 2011, 50, 091304.	1.0	15
85	Comparative evaluation of the image-reconstruction algorithms of single-shot phase-shifting digital holography. <i>Journal of Electronic Imaging</i> , 2012, 21, 013021.	0.9	15
86	Assessment of weak light condition in parallel four-step phase-shifting digital holography. <i>Applied Optics</i> , 2013, 52, A131.	1.8	15
87	High Dynamic Range Digital Holography and Its Demonstration by Off-Axis Configuration. <i>IEEE Transactions on Industrial Informatics</i> , 2016, 12, 1658-1663.	11.3	15
88	Holographic multi-parameter imaging of dynamic phenomena with visual and audio features. <i>Optics Letters</i> , 2019, 44, 995.	3.3	15
89	Iterative algorithm of phase determination in digital holography for real-time recording of real objects. <i>Applied Optics</i> , 2007, 46, 6849.	2.1	14
90	Optical authentication method using a three-dimensional phase object with various wavelength readouts. <i>Applied Optics</i> , 2008, 47, 4400.	2.1	14

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91	Fabrication of controlled volume scattering medium in poly(methyl methacrylate) by focused femtosecond laser pulses. <i>Applied Physics Letters</i> , 2009, 95, 221114.	3.3	14
92	Algorithm for reconstructing wide space-bandwidth information in parallel two-step phase-shifting digital holography. <i>Optics Express</i> , 2012, 20, 19806.	3.4	14
93	Dynamic phase measurement of a transparent object by parallel phase-shifting digital holography with dual polarization imaging cameras. <i>Optics and Lasers in Engineering</i> , 2021, 141, 106583.	3.8	14
94	Astigmatism correction and quality optimization of computer-generated holograms for holographic waveguide displays. <i>Optics Express</i> , 2020, 28, 5519.	3.4	14
95	Modification of Photorefractive Waveguides in Lithium Niobate by Guided Beam for Optical Dynamic Interconnection. <i>Optical Review</i> , 1995, 2, 438-443.	2.0	13
96	Structural Design of Nonlinear optical Chromophores for High-Performance Photorefractive Polymers. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 2699-2704.	1.5	13
97	Parallel phase-shifting digital holography using spectral estimation technique. <i>Applied Optics</i> , 2014, 53, C123.	1.8	13
98	A4-Sized Parallel Phase-Shifting Digital Holography System. <i>Journal of Display Technology</i> , 2014, 10, 132-137.	1.2	13
99	Security-enhanced optical voice encryption in various domains and comparative analysis. <i>Applied Optics</i> , 2019, 58, 3013.	1.8	13
100	Fabrication of a two-dimensional array of photorefractive waveguides in LiNbO ₃ :Fe using non-diffracting checkered pattern. <i>Optics Communications</i> , 1998, 145, 150-154.	2.1	12
101	The keys to holographic data security. <i>IEEE Circuits and Devices: the Magazine of Electronic and Photonic Systems</i> , 2000, 16, 8-15.	0.4	12
102	Compensation algorithm for the phase-shift error of polarization-based parallel two-step phase-shifting digital holography. <i>Applied Optics</i> , 2011, 50, B31.	2.1	12
103	Half-data-page insertion method for increasing recording density in angular multiplexing holographic memory. <i>Applied Optics</i> , 2011, 50, 2361.	2.1	12
104	Multimodal Microscopy: Fast Acquisition of Quantitative Phase and Fluorescence Imaging in 3D Space. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2021, 27, 1-11.	2.9	12
105	Optical multimodal biometric encryption that uses digital holography. <i>Journal of Optics (United Kingdom)</i> , 2014, 11, 113001.	2.2	12
106	Advances in passive imaging elements with micromirror array. <i>Proceedings of SPIE</i> , 2008, , .	0.8	11
107	Wide-Angle Wavefront Reconstruction Near Display Plane in Three-Dimensional Display System. <i>Journal of Display Technology</i> , 2010, 6, 517-521.	1.2	11
108	Removing the Residual Zeroth-Order Diffraction Wave in Polarization-Based Parallel Phase-Shifting Digital Holography System. <i>Applied Physics Express</i> , 2011, 4, 072501.	2.4	11

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109	Space-bandwidth extension in parallel phase-shifting digital holography using a four-channel polarization-imaging camera. <i>Optics Letters</i> , 2013, 38, 2463.	3.3	11
110	Three-dimensional shift selectivity in reflection-type holographic disk memory with speckle shift recording. <i>Applied Optics</i> , 2007, 46, 1460.	2.1	10
111	Interferenceless coded aperture correlation holography with synthetic point spread holograms. <i>Applied Optics</i> , 2020, 59, 7321.	1.8	10
112	Superresolution of interference fringes in parallel four-step phase-shifting digital holography. <i>Optics Letters</i> , 2014, 39, 1673.	3.3	9
113	Digital Holography Using Spectral Estimation Technique. <i>Journal of Display Technology</i> , 2014, 10, 235-242.	1.2	9
114	Three-dimensional motion-picture imaging of dynamic object by parallel-phase-shifting digital holographic microscopy using an inverted magnification optical system. <i>Optical Review</i> , 2017, 24, 206-211.	2.0	9
115	Nonuniform and off-axis structures for photorefractive waveguides in lithium niobate. <i>Optical Engineering</i> , 1996, 35, 2175.	1.0	8
116	Speckle-Shift Multiplexing along Axial Direction in Reflection-Type Holographic Memory. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 3832-3836.	1.5	8
117	Parallel processing for multiplication modulo by means of phase modulation. <i>Applied Optics</i> , 2008, 47, 611.	2.1	8
118	High-speed cross-sectional imaging of valuable documents using common-path swept-source optical coherence tomography. <i>Applied Optics</i> , 2011, 50, H165.	2.1	8
119	Effect of intensity quantization level in parallel phase-shifting digital holography. <i>Optical Review</i> , 2013, 20, 463-468.	2.0	8
120	Multimodal sound field imaging using digital holography [Invited]. <i>Applied Optics</i> , 2021, 60, B49.	1.8	8
121	High-Speed Imaging of Gas Flow by Parallel Phase-Shifting Digital Holography. , 2011, , .		8
122	2D full-field displacement and vibration measurements of specularly reflecting surfaces by two-beam common-path digital holography. <i>Optics Letters</i> , 2021, 46, 5966.	3.3	8
123	Analysis of Photo-Induced Waveguide in Lithium Niobate Crystal. <i>Optical Review</i> , 1994, 1, 73-75.	2.0	7
124	Photorefractive optics in dynamic interconnection. <i>Proceedings of the IEEE</i> , 1999, 87, 2030-2049.	21.3	7
125	262500-Frames-Per-Second Phase-Shifting Digital Holography. , 2011, , .		7
126	Review of three-dimensional imaging of dynamic objects by parallel phase-shifting digital holography. <i>Optical Engineering</i> , 2018, 57, 1.	1.0	7

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127	Learning Generalization by Validation Set. Japanese Journal of Applied Physics, 1992, 31, 2459-2462.	1.5	6
128	<title>Three-dimensional object reconstruction using phase-only information from a digital hologram</title>. , 2002, , .		6
129	Photorefractive effect in the relaxor ferroelectric material $0.91\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3$. Optics Letters, 2003, 28, 420.	3.3	6
130	Three-dimensional measurement and imaging based on multicameras randomly distributed on the circumference. Applied Optics, 2008, 47, 594.	2.1	6
131	Iterative data reconstruction in a thin photonic data storage medium using three-dimensional absorbers in a scattering volume medium. Optics Letters, 2009, 34, 998.	3.3	6
132	Detection and evaluation of security features embedded in paper using spectral-domain optical coherence tomography. Optical Review, 2011, 18, 171-175.	2.0	6
133	Parallel phase-shifting dual-illumination phase unwrapping. Optical Review, 2012, 19, 366-370.	2.0	6
134	Experimental verification of reconstructed absorbers embedded in scattering media by optical power ratio distribution. Applied Optics, 2016, 55, 6874.	2.1	6
135	Simultaneous imaging of sound propagations and spatial distribution of acoustic frequencies. Applied Optics, 2022, 61, B246.	1.8	6
136	Mutually pumped phase conjugators with picosecond pulses. Journal of the Optical Society of America B: Optical Physics, 1998, 15, 1971.	2.1	5
137	Secure Ultrafast Data Communication and Processing. Optics and Photonics News, 2002, 13, 70.	0.5	5
138	Fabrication of an integrated holographic imaging element for a three-dimensional eye-gaze detection system. Applied Optics, 2010, 49, 3780.	2.1	5
139	Removal of residual images in parallel phase-shifting digital holography. Optical Review, 2013, 20, 7-12.	2.0	5
140	Fast Computational Ghost Imaging with Laser Array Modulation. Applied Sciences (Switzerland), 2019, 9, 4807.	2.5	5
141	Multi-Physical Parameter Cross-Sectional Imaging of Quantitative Phase and Fluorescence by Integrated Multimodal Microscopy. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-9.	2.9	5
142	Improvement of a System for Prime Factorization Based on Optical Interferometer. Lecture Notes in Computer Science, 2009, , 124-129.	1.3	5
143	Improvement of Storage Capacity Using Confocal Scheme in Reflection-Type Holographic Memory System with Speckle Shift Multiplexing. Japanese Journal of Applied Physics, 2011, 50, 09ME08.	1.5	5
144	Spatiotemporal observation of light propagation in a three-dimensional scattering medium. Scientific Reports, 2021, 11, 21890.	3.3	5

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145	Holographic microscope and its biological application. <i>Neuroscience Research</i> , 2022, 179, 57-64.	1.9	5
146	Tracking system by phase conjugation for laser energy transmission. , 2007, , .		4
147	Secure data storage by three-dimensional absorbers in highly scattering volume medium. <i>Journal of Physics: Conference Series</i> , 2008, 139, 012003.	0.4	4
148	20000-frames-per-second phase-shifting digital holography. , 2010, , .		4
149	Optical-path-length-shifting color digital holography. <i>Optical Review</i> , 2011, 18, 180-183.	2.0	4
150	Available number of multiplexed holograms based on signal-to-noise ratio analysis in reflection-type holographic memory using three-dimensional speckle-shift multiplexing. <i>Applied Optics</i> , 2014, 53, 5733.	1.8	4
151	Three-dimensional/two-dimensional convertible display based on computer-generated holograms and an amplitude-modulated spatial light modulator. <i>Optical Engineering</i> , 2018, 57, 1.	1.0	4
152	<title>ODINN in LiN: optical dynamic interconnections for neural networks in lithium niobate</title>. , 1995, , .		4
153	Detection of small in-plane vibrations using the polarization self-modulation effect in GaP. <i>Journal of Optics</i> , 2003, 5, S457-S461.	1.5	3
154	Optical retrodirective tracking system approach using an array of phase conjugators for communication and power transmission. <i>Applied Optics</i> , 2007, 46, 4633.	2.1	3
155	An Optical Parallel System for Prime Factorization. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 09LA02.	1.5	3
156	Multiresolution Coding Using Amplitude and Phase Modulations for Holographic Data Storage. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 09ME04.	1.5	3
157	Influence of spatial coherence degree in fluorescence digital holography. , 2013, , .		3
158	Hamiltonian-based ray-tracing method with triangular-mesh representation for a large-scale cloaking device with an arbitrary shape. <i>Applied Optics</i> , 2016, 55, 3456.	2.1	3
159	Characteristics of Weight Function in a Steady-state Diffusion Optical Tomography. <i>IEEJ Transactions on Fundamentals and Materials</i> , 2007, 127, 397-401.	0.2	3
160	An Optical Interferometer for Parallel Modulo Operation. <i>The Review of Laser Engineering</i> , 2008, 36, 1327-1330.	0.0	3
161	Optical Learning Neural Network Using Photorefractive Waveguides. <i>Optical Review</i> , 1997, 4, 465-470.	2.0	2
162	<title>Three-dimensional imaging, compression, and reconstruction of digital holograms</title>. , 2003, , .		2

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163	Applications of Digital Holography for Information Security. Advanced Sciences and Technologies for Security Applications, 2005, , 241-269.	0.5	2
164	3D Object Reconstruction and Recognition Techniques Based on Digital Holography. , 2006, , 1-23.		2
165	Optical identification system of three-dimensional random phase object by use of speckle patterns in propagation distances. Journal of Physics: Conference Series, 2007, 77, 012009.	0.4	2
166	Study on processing performance of optical modulo operations. Journal of Physics: Conference Series, 2008, 139, 012006.	0.4	2
167	Improving image quality of parallel phase-shifting digital holography. Journal of Physics: Conference Series, 2008, 139, 012009.	0.4	2
168	High-speed parallel phase-shifting digital holography. , 2011, , .		2
169	Digital holographic measurement and phase reconstruction of 3D object based on wavefront data. 3D Research, 2011, 2, 1.	1.8	2
170	Improvement of Storage Capacity Using Confocal Scheme in Reflection-Type Holographic Memory System with Speckle Shift Multiplexing. Japanese Journal of Applied Physics, 2011, 50, 09ME08.	1.5	2
171	Digital holographic spectroscopy using spectral estimation technique. , 2013, , .		2
172	Single-Shot Digital Holography Using a Spectral Estimation Technique. Applied Spectroscopy, 2014, 68, 1296-1301.	2.2	2
173	Evaluation and design of a large-scale cloaking device by the Hamiltonian-based ray-tracing method Part I: full-mesh representation. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1041.	2.1	2
174	Wavelets Teagerâ€“Kaiser Hilbert approach for AMâ€“FM signal demodulation: application in the field of speckle metrology. Optical Engineering, 2020, 59, 1.	1.0	2
175	Multi-modal Digital Holographic Microscopy and Demonstration on Dual-excitation Fluorescence. , 2016, , .		2
176	Evaluation and design of a large-scale cloaking device by the Hamiltonian-based ray-tracing method Part II: design of the distribution of constitutive parameters. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1052.	2.1	2
177	Three-dimensional object recognition based on multiple-perspective imaging with microlens arrays. , 2001, , .		2
178	A Method for Modulo Operation by Use of Spatial Parallelism. Lecture Notes in Computer Science, 2008, , 98-103.	1.3	2
179	Development of Road Surface Condition Detection System using Near-infrared Light- Absorption and Polarization Characteristics of Water. Transactions of the Society of Instrument and Control Engineers, 2010, 46, 746-753.	0.2	2
180	Fabrication of two-dimensional array of photorefractive waveguides. , 1996, , .		2

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181	The binocular dynamic holographic floating image display. Optics Express, 2021, 29, 38615-38622.	3.4	2
182	Modularized microscope based on parallel phase-shifting digital holography for imaging of living biospecimens. Journal of Biomedical Optics, 2020, 25, .	2.6	2
183	Shift-invariant neural network for image processing: learning and generalization. , 1992, , .		1
184	<title>Encrypted holographic memory using angular multiplexing in LiNbO<math>\langle inf \rangle 3 \langle /roman \rangle \langle /inf \rangle \langle /math \rangle :Fe</title>. , 1999, 3804, 172.		1
185	<title>Three-dimensional object recognition and visualization using integral imaging</title>. , 2001, 4455, 23.		1
186	Three-dimensional object transmission scheme by use of digital holography and ultrafast optics. , 2003, 5243, 72.		1
187	Optical security in data communication and display. , 2003, 5202, 68.		1
188	Secure Display Using Encrypted Digital Holograms. , 2005, , 155-172.		1
189	An optical parallel processing for multiplier modulo using an optical interferometer. , 2006, , .		1
190	Range Technique in Scattering Medium Using a Needle-Fiber Optical Coherence Tomography System. Optical Review, 2006, 13, 201-206.	2.0	1
191	A method for factorization by means of digital optical computing and image compression. Proceedings of SPIE, 2007, , .	0.8	1
192	Two-dimensional pattern processing by means of image compression. Proceedings of SPIE, 2008, , .	0.8	1
193	Background Noise Reduction in an Integrated Volume Holographic Imaging Element for Eye-Gaze Detection. Japanese Journal of Applied Physics, 2009, 48, 09LE04.	1.5	1
194	Oil Leakage Detection System for Plant Inspection. Japanese Journal of Applied Physics, 2009, 48, 09LD05.	1.5	1
195	Numerical verification of single-shot two-step phase-shifting color digital holography. , 2009, , .		1
196	Femtosecond laser fabrication of scattering medium by randomly distributed holes in polymer. , 2009, , .		1
197	Implementation of the TSP based on pattern processing with a graphic processing unit. , 2009, , .		1
198	Three-dimensional display based on phase modulation. Proceedings of SPIE, 2012, , .	0.8	1

#	ARTICLE	IF	CITATIONS
199	Space-bandwidth extension in single-shot digital holography using spatial carrier. , 2013, , .		1
200	Assessment of fast recording in parallel phase-shifting digital holography. , 2013, , .		1
201	Observation of femtosecond light pulse propagation by using digital light-in-flight recording by holography. , 2013, , .		1
202	Parallel phase-shifting digital holography using LCOS-SLM. , 2013, , .		1
203	Assessment of reconstruction method of absorber in scattering medium using intensity ratio. , 2013, , .		1
204	Single shot ghost imaging. , 2013, , .		1
205	Single-shot 3D measurement by multi-wavelength parallel phase-shifting digital holography. , 2015, , .		1
206	Hybrid digital holographic microscope for simultaneous measurement of 3D phase and 3D fluorescence distributions and its signal processing. , 2015, , .		1
207	Live cell imaging of <i>Physcomitrella patens</i> using a multi-modal digital holographic microscope. , 2016, , .		1
208	3D image reconstruction of transparent gas flow by parallel phase-shifting digital holography. , 2016, , .		1
209	Reconstruction evaluation of intensity ratio distribution for extraction of absorber information in homogeneous scattering medium. <i>Optical Review</i> , 2016, 23, 10-16.	2.0	1
210	Multi-modal digital holographic microscopy for wide-field fluorescence and 3D phase imaging. <i>Proceedings of SPIE</i> , 2016, , .	0.8	1
211	Optical sound wave recording by digital holography with heterodyne technique. , 2017, , .		1
212	Parallel phase-shifting digital holography and its applications to high-speed 3D imaging and microscopy. , 2017, , .		1
213	Decoupling the refractive index and thickness by dual-wavelength digital holographic microscopy. , 2021, , .		1
214	Dynamic Interconnections Using Photorefractive Crystals. , 2000, , 385-429.		1
215	Digital holographic sound imaging for frequency estimation of piezoelectric vibrator. , 2018, , .		1
216	Single-shot incoherent digital holography using parallel phase-shifting radial shearing interferometry. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
217	Parallel Phase-Shifting Digital Holography Using Femtosecond Laser Pulse. , 2011, , .		1
218	Multiresolution Coding Using Amplitude and Phase Modulations for Holographic Data Storage. Japanese Journal of Applied Physics, 2011, 50, 09ME04.	1.5	1
219	Improvement on Recording Density in Reflection-type Holographic Memory with Random Phase Shift Multiplexing. , 2005, , .		1
220	An Optical System for Prime Factorization Based on Parallel Processing. Lecture Notes in Computer Science, 2011, , 10-15.	1.3	1
221	Parallel phase-shifting digital holography system using dual polarization-imaging cameras for 3D imaging of transparent dynamic object. , 2016, , .		1
222	Three-dimensional Fluorescence Imaging of Beads and Cancer Cells by Off-axis Incoherent Digital Holography. , 2018, , .		1
223	Characterization of angle-resolved measurement of diffuse reflected light. , 2018, , .		1
224	Multimodal imaging based digital holography. , 2019, , .		1
225	Multi-wavelength digital holographic microscopy for bio-imaging and applications. , 2020, , .		1
226	Riesz transform for fringes pattern analysis: advantages and limitations. , 2020, , .		1
227	<title>Improvement of the oscillation mode of the broad-area diode lasers by injection locking with photorefractive mutually pumped phase conjugators</title>. , 1998, 3554, 133.		0
228	<title>Optical interconnections using photorefractive segmented waveguides</title>. , 1999, 3804, 42.		0
229	<title>Optical techniques for three-dimensional image recognition</title>. , 2001, , .		0
230	<title>Image recognition based on optical quasi-quantum computing</title>. , 2002, 4732, 191.		0
231	<title>Embedding of feature space for pattern recognition using quantum computing</title>. , 2002, 4732, 183.		0
232	Correlation-based optical reconstruction of a three-dimensional object for secure display. , 2003, 5202, 22.		0
233	Passive and active optical sensing for three-dimensional image recognition. , 2005, 5816, 1.		0
234	Three-dimensional image encryption, transmission, and processing by using digital holography. , 2005, , .		0

#	ARTICLE	IF	CITATIONS
235	Experimental Evaluation of Three-dimensional Shift Selectivity in Reflection-type Hologram. , 2006, , .		0
236	Three-dimensional imaging system with a stereo vision capturing and wavefront reconstruction. , 2006, , .		0
237	Holographic Three-dimensional Display with Data Processing. AIP Conference Proceedings, 2006, , .	0.4	0
238	Integral Imaging Applied to the Digital Reconstruction and Recognition of 3D Scenes. , 2006, , 157-175.		0
239	Optical Switching Elements Using Controllable Defect Modes in One-Dimensional Photonic Crystals. Japanese Journal of Applied Physics, 2006, 45, 6946-6950.	1.5	0
240	Full-Field Optical Coherence Tomography System with Controllable Longitudinal Resolution. Japanese Journal of Applied Physics, 2006, 45, 8897-8903.	1.5	0
241	Recognition Property of Quantum Character Recognition Algorithm. , 2006, , .		0
242	Design and prototyping of parallel exponential modulo function based on 2-D spatial coding and digital optical computing. , 2006, , .		0
243	Phase Retrieval Method from Single Digital Hologram in Three-dimensional Object Recording. , 2006, , .		0
244	Optical Security Card by Three-dimensional Random Phase Distribution. AIP Conference Proceedings, 2007, , .	0.4	0
245	Three-dimensional interface based on digital holography. , 2007, 6778, 49.		0
246	Three-dimensional imaging using randomly-distributed cameras on the circle. , 2007, , .		0
247	Preface to the Special Issue on Natural Three-Dimensional Display Technology. The Review of Laser Engineering, 2007, 35, 5-5.	0.0	0
248	Characteristics of 3-D image reconstruction in a system based on multi vision data acquisition and holographic display. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
249	Design of Waveguide Array for Wide and Thin Coherent Illuminator. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
250	Interpage Crosstalk Noise in Reflection-type Holographic Memory System by Speckle Three-dimensional Shift Multiplexing. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
251	Power amplification of a phased array steered laser beam. Acta Astronautica, 2008, 63, 334-341.	3.2	0
252	Evaluation of storage capacity in reflection-type holographic disk memory. , 2008, , .		0

#	ARTICLE	IF	CITATIONS
253	Experimental Reconstruction of Three-Dimensional Object based on Wavefront Modulation with Coherent Amplification. , 2008, , .		0
254	Quantitative Evaluation of Reconstructed Images of Parallel Phase-Shifting Digital Holographies. , 2008, , .		0
255	Signal processing for hologram pattern generation in an image system with multi-vision capturing and wavefront reconstruction. , 2008, , .		0
256	Single-shot optical-path-length-shifting digital holography. , 2009, , .		0
257	Secure data storage using 3D scattering medium. , 2009, , .		0
258	Optimized integrated volume holographic imaging element for 3D eye-gaze detection. , 2009, , .		0
259	Optical fabrication of 3D scattering medium for secure optical memory card. , 2009, , .		0
260	Removal of non-diffraction wave in optical-path-length-shifting digital holography. , 2010, , .		0
261	Three-dimensional reconstruction of absorbed data in thin photonic data storage media. Proceedings of SPIE, 2010, , .	0.8	0
262	Guest Editorial Three-Dimensional Displays and Visualization. Journal of Display Technology, 2010, 6, 391-393.	1.2	0
263	Single-shot phase-shifting digital holographic microscopy. , 2011, , .		0
264	Artificial scattering medium by femtosecond laser processing and its characterization methods. , 2011, , .		0
265	Parallel phase-shifting digital holography. , 2011, , .		0
266	Widening of the field of view in parallel two-step phase-shifting digital holography. , 2011, , .		0
267	Volume holographic imaging element with background noise reduction function for eye-gaze detection under white light illumination. Optical Review, 2011, 18, 187-190.	2.0	0
268	Observation of femtosecond light pulse propagation by digital holography. , 2012, , .		0
269	Evaluation of parallel phase-shifting digital holography by photon-counting method. , 2012, , .		0
270	Parallel phase-shifting digital holography system using a high-speed camera. Proceedings of SPIE, 2012, , .	0.8	0

#	ARTICLE	IF	CITATIONS
271	Combination of recording wavelengths for improvement of color reproduction of color digital holography using spectral estimation. , 2012, , .		0
272	Method for extending the space bandwidth in parallel phase-shifting digital holography using a commercially available polarization-imaging camera. , 2013, , .		0
273	Single-shot 3-D sensing of micro-meter height by multi-wavelength parallel phase-shifting digital holography. , 2013, , .		0
274	Simultaneous acquisition of 3D shape and multi-spectral image based on parallel phase-shifting dual-illumination phase unwrapping. , 2013, , .		0
275	Algorithm for compensating the non-diffraction wave in the reconstructed image in polarization-based parallel phase-shifting digital holography. , 2013, , .		0
276	Experimental evaluation of depth of focus by MTF in digital holographic microscopy. , 2013, , .		0
277	3D motion picture recording by parallel phase-shifting digital holographic microscopy. , 2013, , .		0
278	Analysis of detected signal performance in multi-tracks of optical disk memory using convex-shaped recording mark. Optical Review, 2014, 21, 556-559.	2.0	0
279	Portable parallel phase-shifting digital holography systems. , 2014, , .		0
280	Multi-parameter motion-picture recording with wide space-bandwidth by parallel phase-shifting digital holography. Proceedings of SPIE, 2014, , .	0.8	0
281	Experimental demonstration of parallel phase-shifting digital holography under weak light condition. Proceedings of SPIE, 2014, , .	0.8	0
282	Electronic holography using binary phase modulation. Proceedings of SPIE, 2014, , .	0.8	0
283	Notice of Removal Position accuracy in absorber reconstruction in homogeneous scattering medium by using intensity ratio distribution. , 2015, , .		0
284	Divided Hadamard pattern illumination for fewer times measurements. , 2015, , .		0
285	A hybrid digital holographic microscope. , 2015, , .		0
286	Phase measurement using high-speed movable stage by digital holography under CW laser illumination. , 2015, , .		0
287	High-speed 3D imaging by parallel phase-shifting digital holography. Proceedings of SPIE, 2015, , .	0.8	0
288	One-mega frame-per-second phase-shifting digital holography. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
289	A hybrid digital holographic microscopy for biological applications. Proceedings of SPIE, 2015, , .	0.8	0
290	Temporal-spatial characteristics of optical power ratio distribution for extracting absorber in scattering medium. International Journal of Applied Electromagnetics and Mechanics, 2016, 52, 747-754.	0.6	0
291	Multi-modal digital holography for live cell imaging. , 2016, , .		0
292	Improvement of reconstructed phase distribution of fast moving phase object in digital holographic microscope. Proceedings of SPIE, 2016, , .	0.8	0
293	Full-color 3D display using binary phase modulation and speckle reduction. Proceedings of SPIE, 2016, , .	0.8	0
294	Experimental verification of phase retrieval of microbeads in high-speed phase imaging using digital holography. Proceedings of SPIE, 2016, , .	0.8	0
295	Parallel phase-shifting digital holography and its application to high-speed 3D imaging of dynamic object. Proceedings of SPIE, 2016, , .	0.8	0
296	One million fps phase measurement by digital holography. , 2017, , .		0
297	Analysis of common-path incoherent digital holography using dual-focusing lens with diffraction gratings. Proceedings of SPIE, 2017, , .	0.8	0
298	Analysis of off-axis incoherent digital holographic microscopy. Proceedings of SPIE, 2017, , .	0.8	0
299	Common-path incoherent digital holography. , 2017, , .		0
300	Simultaneous imaging of 3D phase and 3D fluorescence for biological application. , 2017, , .		0
301	3D tracking of micro object in liquid by parallel phase-shifting digital holographic microscope. , 2017, , .		0
302	Three-dimensional fluorescence imaging based on digital holography. , 2017, , .		0
303	Discrimination of absorption variations in two layered structure by using angular distribution of diffuse reflected light. , 2017, , .		0
304	Vertical Microscope Based on Parallel Phase-Shifting Digital Holography. , 2018, , .		0
305	Special Section Guest Editorial: Special series guest editorial: Biomedical Imaging and Sensing III. Journal of Biomedical Optics, 2021, 26, .	2.6	0
306	Highly stable digital holography for temperature measurement. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
307	Data Security in Holographic Memory using Double Random Polarization Encryption. , 2001, , .		0
308	New approaches to 3D image recognition. Proceedings of SPIE, 2001, , .	0.8	0
309	Parallel three-step-phase-shifting digital holography. , 2005, , .		0
310	Three-Dimensional Display System based on Digital Holography. The Review of Laser Engineering, 2007, 35, 372-376.	0.0	0
311	Preface to Topical Papers on State-of-the-Art in Calculation of Spatial and Temporal Dynamics of Electro-Magnetic Field. The Review of Laser Engineering, 2008, 36, 606-606.	0.0	0
312	Characteristics of Optical Interconnection for Power Transmission Based on Phase Conjugation Generation by a Ring-Resonator. The Review of Laser Engineering, 2008, 36, 1323-1326.	0.0	0
313	Three-dimensional Display with Data Manipulation based on Digital Holography. , 2009, , 345-359.		0
314	A Scheme for SIMD Processing in Two Dimensional Binary Images and Its Applications. Lecture Notes in Computer Science, 2009, , 95-98.	1.3	0
315	Vapor Leak Sensor Using Polarization Property and Stereoscopic Measurement for Plant Inspection. Transactions of the Society of Instrument and Control Engineers, 2009, 45, 291-297.	0.2	0
316	2-D Structure Reconstruction for a DOT Method based on Linear Perturbation Approach. IEEJ Transactions on Fundamentals and Materials, 2009, 129, 771-775.	0.2	0
317	Single-Shot Optical-Path-Length-Shifting Color Digital Holography. , 2010, , .		0
318	Phase-only Wavefront Reconstruction of 3D Objects with Wide Field of View. , 2011, , .		0
319	Three-Dimensional Imaging by Portable Parallel Phase-Shifting Digital Holography System. , 2011, , .		0
320	Generation of Phase-only Wavefront Data for Wide Field of View by Polygon-based CGH. , 2011, , .		0
321	Four-dimensional imaging by parallel phase-shifting digital holographic microscopy. , 2011, , .		0
322	Human Eye Detection by Volume Holographic Imaging Elements for See-through type Glasses. , 2011, , .		0
323	High-speed 4-D biological microscope based on parallel phase-shifting digital holography. , 2012, , .		0
324	High-speed 3-D motion-picture recording by parallel phase-shifting digital holography. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
325	Special Issue on 3D Display Systems for Large-Scale and Wide Viewing Zone and Their Related Technologies. The Review of Laser Engineering, 2012, 40, 4.	0.0	0
326	Phase-Modulation Three-Dimensional Display Using Computer Graphics Data and Its Wide Viewing Zone. The Review of Laser Engineering, 2012, 40, 46.	0.0	0
327	Parallel phase-shifting digital holography for recording 3-D motion pictures of dynamic phenomena. , 2012, , .		0
328	Parallel Processing for Prime Factorization with Spatial Amplitude Modulation in Optics. Lecture Notes in Computer Science, 2013, , 7-14.	1.3	0
329	Spectroscopic measurement for fruit using spectral estimation digital holography. , 2014, , .		0
330	Optical Fabrication of Three-Dimensional Waveguide Structures in Photorefractive Material. Optical Fabrication of Three-Dimensional Waveguide Structures in Photorefractive Material.. The Review of Laser Engineering, 1998, 26, 144-149.	0.0	0
331	Holographic Display Based on Binary Phase Modulation. The Review of Laser Engineering, 2016, 44, 418.	0.0	0
332	Single-shot simultaneous 3D multi-plane imaging. , 2018, , .		0
333	Multimodality of phase and fluorescence in digital holography. , 2018, , .		0
334	3D motion picture of transparent gas flow by parallel phase-shifting digital holography. , 2018, , .		0
335	Motion-picture phase imaging by an integrated optical system of a parallel phase-shifting digital holographic microscope. , 2018, , .		0
336	High temporal and spatial pattern stimulation to manipulate brain function. , 2018, , .		0
337	Parallel phase-shifting radial shearing interferometry and its numerical verification. , 2018, , .		0
338	Multimodal digital holographic microscopy for simultaneous phase and fluorescence imaging. , 2018, , .		0
339	Multi-dimensional digital holographic microscopy. , 2018, , .		0
340	Holographic sound propagation imaging. , 2018, , .		0
341	Observation of Plant Cell by Holographic 3D Illumination and Imaging Functional Optical Microscopy. , 2019, , .		0
342	Quantitative Detection Method of Two-dimensional Distribution of the Phase State of Water Using Near-infrared Light-absorption. Transactions of the Society of Instrument and Control Engineers, 2019, 55, 238-244.	0.2	0

#	ARTICLE	IF	CITATIONS
343	Special Section Guest Editorial: Biomedical Imaging and Sensing. Journal of Biomedical Optics, 2019, 24, 1.	2.6	0
344	Comparison of reconstructed image quality in 3D display using optimized binary phase modulation. , 2019, , .		0
345	Active 3D fluorescence imaging based on holography. , 2019, , .		0
346	Phase imaging of radiated sound field by parallel phase-shifting digital holography. , 2020, , .		0
347	Three-dimensional tracking of moving Volvox by parallel phase-shifting digital holographic microscope. , 2020, , .		0
348	Multimodal two-photon microscopy with electrical tunable lens. , 2020, , .		0
349	Lensless digital holographic microscope for label-free imaging. , 2021, , .		0
350	Simultaneous light-field fluorescence and TIE-based phase imaging. , 2021, , .		0
351	Simultaneous three-dimensional tracking of a mother colony and a daughter colony of a moving Volvox by parallel phase-shifting digital holographic microscope. , 2021, , .		0
352	Plant Cell Observation by TIE-based Fluorescence Imaging. , 2020, , .		0
353	Stable Multimodal Three-Dimensional Imaging. , 2020, , .		0
354	Non-interferometric 3D fluorescence imaging for bio-applications. , 2020, , .		0
355	Riesz transform-based digital four-step phase-shifting interferometer. , 2020, , .		0