

# 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	Holographic microscope and its biological application. <i>Neuroscience Research</i> , 2022, 179, 57-64.	1.9	5
2	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
3	Simultaneous imaging of sound propagations and spatial distribution of acoustic frequencies. <i>Applied Optics</i> , 2022, 61, B246.	1.8	6
4	Sound wave detection by common-path digital holography. <i>Optics and Lasers in Engineering</i> , 2021, 137, 106331.	3.8	18
5	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
6	Multimodal sound field imaging using digital holography [Invited]. <i>Applied Optics</i> , 2021, 60, B49.	1.8	8
7	Special Section Guest Editorial: Special series guest editorial: Biomedical Imaging and Sensing III. <i>Journal of Biomedical Optics</i> , 2021, 26, .	2.6	0
8	Pain induces stable, active microcircuits in the somatosensory cortex that provide a therapeutic target. <i>Science Advances</i> , 2021, 7, .	10.3	34
9	Decoupling the refractive index and thickness by dual-wavelength digital holographic microscopy. , 2021, , .		1
10	Highly stable digital holography for temperature measurement. , 2021, , .		0
11	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
12	Multi-Physical Parameter Cross-Sectional Imaging of Quantitative Phase and Fluorescence by Integrated Multimodal Microscopy. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2021, 27, 1-9.	2.9	5
13	High-speed imaging of the sound field by parallel phase-shifting digital holography. <i>Applied Optics</i> , 2021, 60, A179.	1.8	19
14	Single-shot common-path off-axis digital holography: applications in bioimaging and optical metrology [Invited]. <i>Applied Optics</i> , 2021, 60, A195.	1.8	30
15	Lensless digital holographic microscope for label-free imaging. , 2021, , .		0
16	Simultaneous light-field fluorescence and TIE-based phase imaging. , 2021, , .		0
17	The binocular dynamic holographic floating image display. <i>Optics Express</i> , 2021, 29, 38615-38622.	3.4	2
18	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

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19	Spatiotemporal observation of light propagation in a three-dimensional scattering medium. Scientific Reports, 2021, 11, 21890.	3.3	5
20	2D full-field displacement and vibration measurements of specularly reflecting surfaces by two-beam common-path digital holography. Optics Letters, 2021, 46, 5966.	3.3	8
21	Digital Holographic Multimodal Cross-Sectional Fluorescence and Quantitative Phase Imaging System. Scientific Reports, 2020, 10, 7580.	3.3	22
22	Speckle denoising techniques in imaging systems. Journal of Optics (United Kingdom), 2020, 22, 063001.	2.2	19
23	Optical multimodal biometric encryption that uses digital holography. Journal of Optics (United Kingdom), 2020, 22, 063001.	2.2	12
24	Common-path multimodal three-dimensional fluorescence and phase imaging system. Journal of Biomedical Optics, 2020, 25, 1.	2.6	52
25	Wavelets Teager-Kaiser Hilbert approach for AM-FM signal demodulation: application in the field of speckle metrology. Optical Engineering, 2020, 59, 1.	1.0	2
26	Single-shot common-path off-axis dual-wavelength digital holographic microscopy. Applied Optics, 2020, 59, 7144.	1.8	23
27	Interferenceless coded aperture correlation holography with synthetic point spread holograms. Applied Optics, 2020, 59, 7321.	1.8	10
28	Astigmatism correction and quality optimization of computer-generated holograms for holographic waveguide displays. Optics Express, 2020, 28, 5519.	3.4	14
29	Phase imaging of radiated sound field by parallel phase-shifting digital holography. , 2020, , .		0
30	Three-dimensional tracking of moving Volvox by parallel phase-shifting digital holographic microscope. , 2020, , .		0
31	Multi-wavelength digital holographic microscopy for bio-imaging and applications. , 2020, , .		1
32	Multimodal two-photon microscopy with electrical tunable lens. , 2020, , .		0
33	Modularized microscope based on parallel phase-shifting digital holography for imaging of living biospecimens. Journal of Biomedical Optics, 2020, 25, .	2.6	2
34	Plant Cell Observation by TIE-based Fluorescence Imaging. , 2020, , .		0
35	Stable Multimodal Three-Dimensional Imaging. , 2020, , .		0
36	Non-interferometric 3D fluorescence imaging for bio-applications. , 2020, , .		0

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37	Riesz transform-based digital four-step phase-shifting interferometer. , 2020, , .		0
38	Riesz transform for fringes pattern analysis: advantages and limitations. , 2020, , .		1
39	Fast Computational Ghost Imaging with Laser Array Modulation. Applied Sciences (Switzerland), 2019, 9, 4807.	2.5	5
40	Three-dimensional fluorescence imaging using the transport of intensity equation. Journal of Biomedical Optics, 2019, 25, 1.	2.6	19
41	Security-enhanced optical voice encryption in various domains and comparative analysis. Applied Optics, 2019, 58, 3013.	1.8	13
42	Speckle denoising by variant nonlocal means methods. Applied Optics, 2019, 58, 7110.	1.8	26
43	Holographic multi-parameter imaging of dynamic phenomena with visual and audio features. Optics Letters, 2019, 44, 995.	3.3	15
44	Digital four-step phase-shifting technique from a single fringe pattern using Riesz transform. Optics Letters, 2019, 44, 3434.	3.3	30
45	Observation of Plant Cell by Holographic 3D Illumination and Imaging Functional Optical Microscopy. , 2019, , .		0
46	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
47	Special Section Guest Editorial: Biomedical Imaging and Sensing. Journal of Biomedical Optics, 2019, 24, 1.	2.6	0
48	Comparison of reconstructed image quality in 3D display using optimized binary phase modulation. , 2019, , .		0
49	Active 3D fluorescence imaging based on holography. , 2019, , .		0
50	Multimodal imaging based digital holography. , 2019, , .		1
51	Vertical Microscope Based on Parallel Phase-Shifting Digital Holography. , 2018, , .		0
52	Digital holography and its multidimensional imaging applications: a review. Microscopy (Oxford,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1	1.5	142
53	Astigmatism and deformation correction for a holographic head-mounted display with a wedge-shaped holographic waveguide. Applied Optics, 2018, 57, 7094.	1.8	23
54	Review of three-dimensional imaging of dynamic objects by parallel phase-shifting digital holography. Optical Engineering, 2018, 57, 1.	1.0	7

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55	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
56	Digital holographic sound imaging for frequency estimation of piezoelectric vibrator. , 2018, , .		1
57	Single-shot incoherent digital holography using parallel phase-shifting radial shearing interferometry. , 2018, , .		1
58	Three-dimensional stimulation and imaging-based functional optical microscopy of biological cells. <i>Optics Letters</i> , 2018, 43, 5447.	3.3	42
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	Three-dimensional Fluorescence Imaging of Beads and Cancer Cells by Off-axis Incoherent Digital Holography. , 2018, , .		1
61	Single-shot simultaneous 3D multi-plane imaging. , 2018, , .		0
62	Multimodality of phase and fluorescence in digital holography. , 2018, , .		0
63	3D motion picture of transparent gas flow by parallel phase-shifting digital holography. , 2018, , .		0
64	Motion-picture phase imaging by an integrated optical system of a parallel phase-shifting digital holographic microscope. , 2018, , .		0
65	High temporal and spatial pattern stimulation to manipulate brain function. , 2018, , .		0
66	Parallel phase-shifting radial shearing interferometry and its numerical verification. , 2018, , .		0
67	Multimodal digital holographic microscopy for simultaneous phase and fluorescence imaging. , 2018, , .		0
68	Multi-dimensional digital holographic microscopy. , 2018, , .		0
69	Holographic sound propagation imaging. , 2018, , .		0
70	Characterization of angle-resolved measurement of diffuse reflected light. , 2018, , .		1
71	One million fps phase measurement by digital holography. , 2017, , .		0
72	Multimodal Imaging Based on Digital Holography. <i>Proceedings of the IEEE</i> , 2017, 105, 906-923.	21.3	34

#	ARTICLE	IF	CITATIONS
73	Analysis of common-path incoherent digital holography using dual-focusing lens with diffraction gratings. Proceedings of SPIE, 2017, , .	0.8	0
74	Analysis of off-axis incoherent digital holographic microscopy. Proceedings of SPIE, 2017, , .	0.8	0
75	Common-path incoherent digital holography. , 2017, , .		0
76	Optical sound wave recording by digital holography with heterodyne technique. , 2017, , .		1
77	Three-dimensional motion-picture imaging of dynamic object by parallel-phase-shifting digital holographic microscopy using an inverted magnification optical system. Optical Review, 2017, 24, 206-211.	2.0	9
78	Simultaneous imaging of 3D phase and 3D fluorescence for biological application. , 2017, , .		0
79	3D tracking of micro object in liquid by parallel phase-shifting digital holographic microscope. , 2017, , .		0
80	Three-dimensional fluorescence imaging based on digital holography. , 2017, , .		0
81	Discrimination of absorption variations in two layered structure by using angular distribution of diffuse reflected light. , 2017, , .		0
82	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
83	Single-shot incoherent digital holography using a dual-focusing lens with diffraction gratings. Optics Letters, 2017, 42, 383.	3.3	68
84	Image recovery from defocused 2D fluorescent images in multimodal digital holographic microscopy. Optics Letters, 2017, 42, 1796.	3.3	16
85	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
86	Optical voice encryption based on digital holography. Optics Letters, 2017, 42, 4619.	3.3	36
87	Parallel phase-shifting digital holography and its applications to high-speed 3D imaging and microscopy. , 2017, , .		1
88	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
89	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
90	Hamiltonian-based ray-tracing method with triangular-mesh representation for a large-scale cloaking device with an arbitrary shape. Applied Optics, 2016, 55, 3456.	2.1	3

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91	Multi-modal digital holography for live cell imaging. , 2016, , .		0
92	Live cell imaging of Physcomitrella patens using a multi-modal digital holographic microscope. , 2016, , .		1
93	Experimental verification of reconstructed absorbers embedded in scattering media by optical power ratio distribution. Applied Optics, 2016, 55, 6874.	2.1	6
94	Improvement of reconstructed phase distribution of fast moving phase object in digital holographic microscope. Proceedings of SPIE, 2016, , .	0.8	0
95	3D image reconstruction of transparent gas flow by parallel phase-shifting digital holography. , 2016, , .		1
96	Reconstruction evaluation of intensity ratio distribution for extraction of absorber information in homogeneous scattering medium. Optical Review, 2016, 23, 10-16.	2.0	1
97	Full-color 3D display using binary phase modulation and speckle reduction. Proceedings of SPIE, 2016, , .	0.8	0
98	Experimental verification of phase retrieval of microbeads in high-speed phase imaging using digital holography. Proceedings of SPIE, 2016, , .	0.8	0
99	Multi-modal digital holographic microscopy for wide-field fluorescence and 3D phase imaging. Proceedings of SPIE, 2016, , .	0.8	1
100	Parallel phase-shifting digital holography and its application to high-speed 3D imaging of dynamic object. Proceedings of SPIE, 2016, , .	0.8	0
101	High Dynamic Range Digital Holography and Its Demonstration by Off-Axis Configuration. IEEE Transactions on Industrial Informatics, 2016, 12, 1658-1663.	11.3	15
102	Improvement of Image Quality of 3D Display by Using Optimized Binary Phase Modulation and Intensity Accumulation. Journal of Display Technology, 2016, 12, 472-477.	1.2	18
103	Multi-modal Digital Holographic Microscopy and Demonstration on Dual-excitation Fluorescence. , 2016, , .		2
104	Holographic Display Based on Binary Phase Modulation. The Review of Laser Engineering, 2016, 44, 418.	0.0	0
105	Parallel phase-shifting digital holography system using dual polarization-imaging cameras for 3D imaging of transparent dynamic object. , 2016, , .		1
106	Notice of Removal Position accuracy in absorber reconstruction in homogeneous scattering medium by using intensity ratio distribution. , 2015, , .		0
107	Divided Hadamard pattern illumination for fewer times measurements. , 2015, , .		0
108	Single-shot 3D measurement by multi-wavelength parallel phase-shifting digital holography. , 2015, , .		1

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109	Hybrid digital holographic microscope for simultaneous measurement of 3D phase and 3D fluorescence distributions and its signal processing. , 2015, , .		1
110	A hybrid digital holographic microscope. , 2015, , .		0
111	Phase and fluorescence imaging by combination of digital holographic microscopy and fluorescence microscopy. Optical Review, 2015, 22, 349-353.	2.0	58
112	Phase measurement using high-speed movable stage by digital holography under CW laser illumination. , 2015, , .		0
113	High-speed 3D imaging by parallel phase-shifting digital holography. Proceedings of SPIE, 2015, , .	0.8	0
114	One-mega frame-per-second phase-shifting digital holography. , 2015, , .		0
115	A hybrid digital holographic microscopy for biological applications. Proceedings of SPIE, 2015, , .	0.8	0
116	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
117	Optical voice recorder by off-axis digital holography. Optics Letters, 2014, 39, 6549.	3.3	63
118	Parallel phase-shifting digital holography using spectral estimation technique. Applied Optics, 2014, 53, G123.	1.8	13
119	Portable parallel phase-shifting digital holography systems. , 2014, , .		0
120	Single-shot dual-wavelength phase unwrapping in parallel phase-shifting digital holography. Optics Letters, 2014, 39, 2374.	3.3	30
121	One million fps digital holography. Electronics Letters, 2014, 50, 1693-1695.	1.0	42
122	Superresolution of interference fringes in parallel four-step phase-shifting digital holography. Optics Letters, 2014, 39, 1673.	3.3	9
123	A4-Sized Parallel Phase-Shifting Digital Holography System. Journal of Display Technology, 2014, 10, 132-137.	1.2	13
124	Available number of multiplexed holograms based on signal-to-noise ratio analysis in reflection-type holographic memory using three-dimensional speckle-shift multiplexing. Applied Optics, 2014, 53, 5733.	1.8	4
125	Digital Holography Using Spectral Estimation Technique. Journal of Display Technology, 2014, 10, 235-242.	1.2	9
126	Multi-parameter motion-picture recording with wide space-bandwidth by parallel phase-shifting digital holography. Proceedings of SPIE, 2014, , .	0.8	0



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127	Experimental demonstration of parallel phase-shifting digital holography under weak light condition. Proceedings of SPIE, 2014, , .	0.8	0
128	Electronic holography using binary phase modulation. Proceedings of SPIE, 2014, , .	0.8	0
129	Single-Shot Digital Holography Using a Spectral Estimation Technique. Applied Spectroscopy, 2014, 68, 1296-1301.	2.2	2
130	Spectroscopic measurement for fruit using spectral estimation digital holography. , 2014, , .		0
131	Effect of intensity quantization level in parallel phase-shifting digital holography. Optical Review, 2013, 20, 463-468.	2.0	8
132	Space-bandwidth extension in single-shot digital holography using spatial carrier. , 2013, , .		1
133	Digital holographic spectroscopy using spectral estimation technique. , 2013, , .		2
134	Method for extending the space bandwidth in parallel phase-shifting digital holography using a commercially available polarization-imaging camera. , 2013, , .		0
135	Single-shot 3-D sensing of micro-meter height by multi-wavelength parallel phase-shifting digital holography. , 2013, , .		0
136	Simultaneous acquisition of 3D shape and multi-spectral image based on parallel phase-shifting dual-illumination phase unwrapping. , 2013, , .		0
137	Assessment of fast recording in parallel phase-shifting digital holography. , 2013, , .		1
138	Removal of residual images in parallel phase-shifting digital holography. Optical Review, 2013, 20, 7-12.	2.0	5
139	Performance comparison of bilinear interpolation, bicubic interpolation, and B-spline interpolation in parallel phase-shifting digital holography. Optical Review, 2013, 20, 193-197.	2.0	26
140	Image reconstruction algorithm for recovering high-frequency information in parallel phase-shifting digital holography [Invited]. Applied Optics, 2013, 52, A210.	1.8	29
141	Assessment of weak light condition in parallel four-step phase-shifting digital holography. Applied Optics, 2013, 52, A131.	1.8	15
142	Observation of femtosecond light pulse propagation by using digital light-in-flight recording by holography. , 2013, , .		1
143	Multiwavelength parallel phase-shifting digital holography using angular multiplexing. Optics Letters, 2013, 38, 2789.	3.3	25
144	Space-bandwidth extension in parallel phase-shifting digital holography using a four-channel polarization-imaging camera. Optics Letters, 2013, 38, 2463.	3.3	11

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145	Parallel phase-shifting digital holography using LCOS-SLM. , 2013, , .		1
146	Light-in-Flight Recording by Parallel Phase-Shifting Digital Holography. Applied Physics Express, 2013, 6, 092501.	2.4	19
147	Influence of spatial coherence degree in fluorescence digital holography. , 2013, , .		3
148	Assessment of reconstruction method of absorber in scattering medium using intensity ratio. , 2013, , .		1
149	Algorithm for compensating the non-diffraction wave in the reconstructed image in polarization-based parallel phase-shifting digital holography. , 2013, , .		0
150	Single shot ghost imaging. , 2013, , .		1
151	Experimental evaluation of depth of focus by MTF in digital holographic microscopy. , 2013, , .		0
152	3D motion picture recording by parallel phase-shifting digital holographic microscopy. , 2013, , .		0
153	Space-Bandwidth Capacity-Enhanced Digital Holography. Applied Physics Express, 2013, 6, 022502.	2.4	26
154	Parallel Processing for Prime Factorization with Spatial Amplitude Modulation in Optics. Lecture Notes in Computer Science, 2013, , 7-14.	1.3	0
155	Single-shot femtosecond-pulsed phase-shifting digital holography. Optics Express, 2012, 20, 20286.	3.4	56
156	Spatial-carrier phase-shifting digital holography utilizing spatial frequency analysis for the correction of the phase-shift error. Optics Letters, 2012, 37, 148.	3.3	20
157	Algorithm for reconstructing wide space-bandwidth information in parallel two-step phase-shifting digital holography. Optics Express, 2012, 20, 19806.	3.4	14
158	Parallel phase-shifting digital holography with adaptive function using phase-mode spatial light modulator. Applied Optics, 2012, 51, 2633.	1.8	63
159	Single-shot dual-illumination phase unwrapping using a single wavelength. Optics Letters, 2012, 37, 4002.	3.3	20
160	Comparative evaluation of the image-reconstruction algorithms of single-shot phase-shifting digital holography. Journal of Electronic Imaging, 2012, 21, 013021.	0.9	15
161	Three-dimensional display based on phase modulation. Proceedings of SPIE, 2012, , .	0.8	1
162	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

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163	Parallel phase-shifting dual-illumination phase unwrapping. Optical Review, 2012, 19, 366-370.	2.0	6
164	Four-Wavelength Color Digital Holography. Journal of Display Technology, 2012, 8, 570-576.	1.2	37
165	Observation of femtosecond light pulse propagation by digital holography. , 2012, , .		0
166	Evaluation of parallel phase-shifting digital holography by photon-counting method. , 2012, , .		0
167	Parallel phase-shifting digital holography system using a high-speed camera. Proceedings of SPIE, 2012, , .	0.8	0
168	Combination of recording wavelengths for improvement of color reproduction of color digital holography using spectral estimation. , 2012, , .		0
169	High-speed 4-D biological microscope based on parallel phase-shifting digital holography. , 2012, , .		0
170	High-speed 3-D motion-picture recording by parallel phase-shifting digital holography. , 2012, , .		0
171	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
172	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
173	Parallel phase-shifting digital holography for recording 3-D motion pictures of dynamic phenomena. , 2012, , .		0
174	Single-shot phase-shifting digital holographic microscopy. , 2011, , .		0
175	Artificial scattering medium by femtosecond laser processing and its characterization methods. , 2011, , .		0
176	High-speed parallel phase-shifting digital holography. , 2011, , .		2
177	Parallel phase-shifting digital holography. , 2011, , .		0
178	Compensation algorithm for the phase-shift error of polarization-based parallel two-step phase-shifting digital holography. Applied Optics, 2011, 50, B31.	2.1	12
179	Half-data-page insertion method for increasing recording density in angular multiplexing holographic memory. Applied Optics, 2011, 50, 2361.	2.1	12
180	High-speed cross-sectional imaging of valuable documents using common-path swept-source optical coherence tomography. Applied Optics, 2011, 50, H165.	2.1	8

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181	Improvement of color reproduction in color digital holography by using spectral estimation technique. <i>Applied Optics</i> , 2011, 50, H177.	2.1	52
182	Single-shot polarization-imaging digital holography based on simultaneous phase-shifting interferometry. <i>Optics Letters</i> , 2011, 36, 3254.	3.3	36
183	High-speed phase imaging by parallel phase-shifting digital holography. <i>Optics Letters</i> , 2011, 36, 4131.	3.3	157
184	Widening of the field of view in parallel two-step phase-shifting digital holography. , 2011, , .		0
185	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
186	Digital holographic measurement and phase reconstruction of 3D object based on wavefront data. <i>3D Research</i> , 2011, 2, 1.	1.8	2
187	Detection and evaluation of security features embedded in paper using spectral-domain optical coherence tomography. <i>Optical Review</i> , 2011, 18, 171-175.	2.0	6
188	Optical-path-length-shifting color digital holography. <i>Optical Review</i> , 2011, 18, 180-183.	2.0	4
189	Volume holographic imaging element with background noise reduction function for eye-gaze detection under white light illumination. <i>Optical Review</i> , 2011, 18, 187-190.	2.0	0
190	Improvement of Storage Capacity Using Confocal Scheme in Reflection-Type Holographic Memory System with Speckle Shift Multiplexing. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 09ME08.	1.5	2
191	Multiresolution Coding Using Amplitude and Phase Modulations for Holographic Data Storage. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 09ME04.	1.5	3
192	262500-Frames-Per-Second Phase-Shifting Digital Holography. , 2011, , .		7
193	Construction of a portable parallel phase-shifting digital holography system. <i>Optical Engineering</i> , 2011, 50, 091304.	1.0	15
194	Parallel Phase-Shifting Digital Holography Using Femtosecond Laser Pulse. , 2011, , .		1
195	Multiresolution Coding Using Amplitude and Phase Modulations for Holographic Data Storage. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 09ME04.	1.5	1
196	Improvement of Storage Capacity Using Confocal Scheme in Reflection-Type Holographic Memory System with Speckle Shift Multiplexing. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 09ME08.	1.5	5
197	Phase-only Waveform Reconstruction of 3D Objects with Wide Field of View. , 2011, , .		0
198	Three-Dimensional Imaging by Portable Parallel Phase-Shifting Digital Holography System. , 2011, , .		0

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199	Generation of Phase-only Wavefront Data for Wide Field of View by Polygon-based CGH. , 2011, , .		0
200	High-Speed Imaging of Gas Flow by Parallel Phase-Shifting Digital Holography. , 2011, , .		8
201	An Optical System for Prime Factorization Based on Parallel Processing. Lecture Notes in Computer Science, 2011, , 10-15.	1.3	1
202	Four-dimensional imaging by parallel phase-shifting digital holographic microscopy. , 2011, , .		0
203	Human Eye Detection by Volume Holographic Imaging Elements for See-through type Glasses. , 2011, , .		0
204	Parallel phase-shifting color digital holographic microscopy. 3D Research, 2010, 1, 1.	1.8	22
205	Parallel Phase-Shifting Digital Holography Capable of Simultaneously Capturing Visible and Invisible Three-Dimensional Information. Journal of Display Technology, 2010, 6, 472-478.	1.2	21
206	Parallel two-step phase-shifting digital holography using polarization. Optical Review, 2010, 17, 108-113.	2.0	30
207	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
208	Removal of non-diffraction wave in optical-path-length-shifting digital holography. , 2010, , .		0
209	20000-frames-per-second phase-shifting digital holography. , 2010, , .		4
210	Three-dimensional reconstruction of absorbed data in thin photonic data storage media. Proceedings of SPIE, 2010, , .	0.8	0
211	Numerical evaluation of angular multiplexing in reflection-type holographic data storage in photopolymer with shrinkage. Applied Optics, 2010, 49, 694.	2.1	17
212	Fabrication of an integrated holographic imaging element for a three-dimensional eye-gaze detection system. Applied Optics, 2010, 49, 3780.	2.1	5
213	Parallel phase-shifting digital holographic microscopy. Biomedical Optics Express, 2010, 1, 610.	2.9	94
214	Guest Editorial Three-Dimensional Displays and Visualization. Journal of Display Technology, 2010, 6, 391-393.	1.2	0
215	Wide-Angle Wavefront Reconstruction Near Display Plane in Three-Dimensional Display System. Journal of Display Technology, 2010, 6, 517-521.	1.2	11
216	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

#	ARTICLE	IF	CITATIONS
217	Experimental demonstration of parallel two-step phase-shifting digital holography. Optics Express, 2010, 18, 18975.	3.4	93
218	Single-Shot Optical-Path-Length-Shifting Color Digital Holography. , 2010, , .		0
219	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
220	Single-shot optical-path-length-shifting digital holography. , 2009, , .		0
221	Secure data storage using 3D scattering medium. , 2009, , .		0
222	Optimized integrated volume holographic imaging element for 3D eye-gaze detection. , 2009, , .		0
223	Optical fabrication of 3D scattering medium for secure optical memory card. , 2009, , .		0
224	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
225	Oil Leakage Detection System for Plant Inspection. Japanese Journal of Applied Physics, 2009, 48, 09LD05.	1.5	1
226	An Optical Parallel System for Prime Factorization. Japanese Journal of Applied Physics, 2009, 48, 09LA02.	1.5	3
227	Optical Techniques for Information Security. Proceedings of the IEEE, 2009, 97, 1128-1148.	21.3	295
228	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
229	Numerical estimation of storage capacity in reflection-type holographic disk memory with three-dimensional speckle-shift multiplexing. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 2269.	1.5	17
230	Parallel optical-path-length-shifting digital holography. Applied Optics, 2009, 48, H160.	2.1	19
231	Parallel phase-shifting color digital holography using two phase shifts. Applied Optics, 2009, 48, H244.	2.1	48
232	Fabrication of controlled volume scattering medium in poly(methyl methacrylate) by focused femtosecond laser pulses. Applied Physics Letters, 2009, 95, 221114.	3.3	14
233	Numerical verification of single-shot two-step phase-shifting color digital holography. , 2009, , .		1
234	Femtosecond laser fabrication of scattering medium by randomly distributed holes in polymer. , 2009, , .		1

#	ARTICLE	IF	CITATIONS
235	Implementation of the TSP based on pattern processing with a graphic processing unit. , 2009, , .		1
236	Improvement of a System for Prime Factorization Based on Optical Interferometer. Lecture Notes in Computer Science, 2009, , 124-129.	1.3	5
237	Three-dimensional Display with Data Manipulation based on Digital Holography. , 2009, , 345-359.		0
238	A Scheme for SIMD Processing in Two Dimensional Binary Images and Its Applications. Lecture Notes in Computer Science, 2009, , 95-98.	1.3	0
239	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
240	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
241	Power amplification of a phased array steered laser beam. Acta Astronautica, 2008, 63, 334-341.	3.2	0
242	Evaluation of storage capacity in reflection-type holographic disk memory. , 2008, , .		0
243	Three-dimensional measurement and imaging based on multicameras randomly distributed on the circumference. Applied Optics, 2008, 47, 594.	2.1	6
244	Parallel processing for multiplication modulo by means of phase modulation. Applied Optics, 2008, 47, 611.	2.1	8
245	Parallel two-step phase-shifting digital holography. Applied Optics, 2008, 47, D183.	2.1	193
246	Optical authentication method using a three-dimensional phase object with various wavelength readouts. Applied Optics, 2008, 47, 4400.	2.1	14
247	Experimental Reconstruction of Three-Dimensional Object based on Wavefront Modulation with Coherent Amplification. , 2008, , .		0
248	Quantitative Evaluation of Reconstructed Images of Parallel Phase-Shifting Digital Holographies. , 2008, , .		0
249	Advances in passive imaging elements with micromirror array. Proceedings of SPIE, 2008, , .	0.8	11
250	Secure data storage by three-dimensional absorbers in highly scattering volume medium. Journal of Physics: Conference Series, 2008, 139, 012003.	0.4	4
251	Study on processing performance of optical modulo operations. Journal of Physics: Conference Series, 2008, 139, 012006.	0.4	2
252	Improving image quality of parallel phase-shifting digital holography. Journal of Physics: Conference Series, 2008, 139, 012009.	0.4	2

#	ARTICLE	IF	CITATIONS
253	Two-dimensional pattern processing by means of image compression. Proceedings of SPIE, 2008, , .	0.8	1
254	Signal processing for hologram pattern generation in an image system with multi-vision capturing and wavefront reconstruction. , 2008, , .		0
255	An Optical Interferometer for Parallel Modulo Operation. The Review of Laser Engineering, 2008, 36, 1327-1330.	0.0	3
256	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
257	A Method for Modulo Operation by Use of Spatial Parallelism. Lecture Notes in Computer Science, 2008, , 98-103.	1.3	2
258	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
259	Optical Security Card by Three-dimensional Random Phase Distribution. AIP Conference Proceedings, 2007, , .	0.4	0
260	Speckle-Shift Multiplexing along Axial Direction in Reflection-Type Holographic Memory. Japanese Journal of Applied Physics, 2007, 46, 3832-3836.	1.5	8
261	Three-dimensional interface based on digital holography. , 2007, 6778, 49.		0
262	Three-dimensional imaging using randomly-distributed cameras on the circle. , 2007, , .		0
263	Imaging Characteristics of Transmission-Type Volume Holographic Imaging Elements. Japanese Journal of Applied Physics, 2007, 46, 605-611.	1.5	37
264	Preface to the Special Issue on Natural Three-Dimensional Display Technology. The Review of Laser Engineering, 2007, 35, 5-5.	0.0	0
265	A method for factorization by means of digital optical computing and image compression. Proceedings of SPIE, 2007, , .	0.8	1
266	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
267	Tracking system by phase conjugation for laser energy transmission. , 2007, , .		4
268	Image-based numerical evaluation techniques in volume holographic memory systems. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 792.	2.1	16
269	Three-dimensional shift selectivity in reflection-type holographic disk memory with speckle shift recording. Applied Optics, 2007, 46, 1460.	2.1	10
270	Optical retrodirective tracking system approach using an array of phase conjugators for communication and power transmission. Applied Optics, 2007, 46, 4633.	2.1	3



#	ARTICLE	IF	CITATIONS
271	Iterative algorithm of phase determination in digital holography for real-time recording of real objects. Applied Optics, 2007, 46, 6849.	2.1	14
272	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
273	Design of Waveguide Array for Wide and Thin Coherent Illuminator. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
274	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
275	Characteristics of Weight Function in a Steady-state Diffusion Optical Tomography. IEJ Transactions on Fundamentals and Materials, 2007, 127, 397-401.	0.2	3
276	Three-Dimensional Display System based on Digital Holography. The Review of Laser Engineering, 2007, 35, 372-376.	0.0	0
277	Experimental Evaluation of Three-dimensional Shift Selectivity in Reflection-type Hologram. , 2006, , .		0
278	Three-Dimensional Imaging and Processing Using Computational Holographic Imaging. Proceedings of the IEEE, 2006, 94, 636-653.	21.3	159
279	Multidimensional optical sensor and imaging system. Applied Optics, 2006, 45, 2986.	2.1	48
280	Parallel three-step phase-shifting digital holography. Applied Optics, 2006, 45, 2995.	2.1	117
281	Reflection-type holographic disk memory with random phase shift multiplexing. Applied Optics, 2006, 45, 3270.	2.1	29
282	Fast acquisition system for digital holograms and image processing for three-dimensional display with data manipulation. Applied Optics, 2006, 45, 8945.	2.1	22
283	Three-dimensional imaging system with a stereo vision capturing and wavefront reconstruction. , 2006, , .		0
284	An optical parallel processing for multiplier modulo using an optical interferometer. , 2006, , .		1
285	Holographic Three-dimensional Display with Data Processing. AIP Conference Proceedings, 2006, , .	0.4	0
286	Integral Imaging Applied to the Digital Reconstruction and Recognition of 3D Scenes. , 2006, , 157-175.		0
287	Range Technique in Scattering Medium Using a Needle-Fiber Optical Coherence Tomography System. Optical Review, 2006, 13, 201-206.	2.0	1
288	Optical Switching Elements Using Controllable Defect Modes in One-Dimensional Photonic Crystals. Japanese Journal of Applied Physics, 2006, 45, 6946-6950.	1.5	0

#	ARTICLE	IF	CITATIONS
289	Full-Field Optical Coherence Tomography System with Controllable Longitudinal Resolution. Japanese Journal of Applied Physics, 2006, 45, 8897-8903.	1.5	0
290	Transmissive optical imaging device with micromirror array. , 2006, 6392, 130.		68
291	3D Object Reconstruction and Recognition Techniques Based on Digital Holography. , 2006, , 1-23.		2
292	Recognition Property of Quantum Character Recognition Algorithm. , 2006, , .		0
293	Design and prototyping of parallel exponential modulo function based on 2-D spatial coding and digital optical computing. , 2006, , .		0
294	Phase Retrieval Method from Single Digital Hologram in Three-dimensional Object Recording. , 2006, , .		0
295	Passive and active optical sensing for three-dimensional image recognition. , 2005, 5816, 1.		0
296	Secure Display Using Encrypted Digital Holograms. , 2005, , 155-172.		1
297	Applications of Digital Holography for Information Security. Advanced Sciences and Technologies for Security Applications, 2005, , 241-269.	0.5	2
298	Three-dimensional image encryption, transmission, and processing by using digital holography. , 2005, , .		0
299	Improvement on Recording Density in Reflection-type Holographic Memory with Random Phase Shift Multiplexing. , 2005, , .		1
300	Parallel three-step-phase-shifting digital holography. , 2005, , .		0
301	Comparison of passive ranging integral imaging and active imaging digital holography for three-dimensional object recognition. Applied Optics, 2004, 43, 452.	2.1	51
302	Secure three-dimensional data transmission and display. Applied Optics, 2004, 43, 2285.	2.1	28
303	Secure holographic memory by double-random polarization encryption. Applied Optics, 2004, 43, 2915.	2.1	75
304	Three-dimensional polarimetric integral imaging. Optics Letters, 2004, 29, 2375.	3.3	50
305	Photorefractive effect in the relaxor ferroelectric material $0.91\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3$ – $0.09\text{PbTiO}_3$ . Optics Letters, 2003, 28, 420.	3.3	6
306	Detection of small in-plane vibrations using the polarization self-modulation effect in GaP. Journal of Optics, 2003, 5, S457-S461.	1.5	3

#	ARTICLE	IF	CITATIONS
307	Structural Design of Nonlinear optical Chromophores for High-Performance Photorefractive Polymers. Japanese Journal of Applied Physics, 2003, 42, 2699-2704.	1.5	13
308	<title>Three-dimensional imaging, compression, and reconstruction of digital holograms</title>. , 2003, , .		2
309	Correlation-based optical reconstruction of a three-dimensional object for secure display. , 2003, 5202, 22.		0
310	Three-dimensional object transmission scheme by use of digital holography and ultrafast optics. , 2003, 5243, 72.		1
311	Optical security in data communication and display. , 2003, 5202, 68.		1
312	<title>Three-dimensional object reconstruction using phase-only information from a digital hologram</title>. , 2002, , .		6
313	<title>Image recognition based on optical quasi-quantum computing</title>. , 2002, 4732, 191.		0
314	<title>Embedding of feature space for pattern recognition using quantum computing</title>. , 2002, 4732, 183.		0
315	Optical retrieval of encrypted digital holograms for secure real-time display. Optics Letters, 2002, 27, 321.	3.3	71
316	Secure Ultrafast Data Communication and Processing. Optics and Photonics News, 2002, 13, 70.	0.5	5
317	Real-time three-dimensional object reconstruction by use of a phase-encoded digital hologram. Applied Optics, 2002, 41, 6187.	2.1	187
318	Photorefractive and photochromic properties of Ru doped Sr <sub>0.61</sub> Ba <sub>0.39</sub> Nb <sub>2</sub> O <sub>6</sub> crystal. Optics Communications, 2002, 213, 373-378.	2.1	17
319	<title>Optical techniques for three-dimensional image recognition</title>. , 2001, , .		0
320	Secure optical memory system with polarization encryption. Applied Optics, 2001, 40, 2310.	2.1	87
321	Real-time three-dimensional object recognition with multiple perspectives imaging. Applied Optics, 2001, 40, 3318.	2.1	73
322	Shift-invariant three-dimensional object recognition by means of digital holography. Applied Optics, 2001, 40, 3877.	2.1	103
323	Improvement in holographic storage capacity by use of double-random phase encryption. Applied Optics, 2001, 40, 4721.	2.1	34
324	<title>Three-dimensional object recognition and visualization using integral imaging</title>. , 2001, 4455, 23.		1

#	ARTICLE	IF	CITATIONS
325	Data Security in Holographic Memory using Double Random Polarization Encryption. , 2001, , .		0
326	Three-dimensional object recognition based on multiple-perspective imaging with microlens arrays. , 2001, , .		2
327	New approaches to 3D image recognition. Proceedings of SPIE, 2001, , .	0.8	0
328	The keys to holographic data security. IEEE Circuits and Devices: the Magazine of Electronic and Photonic Systems, 2000, 16, 8-15.	0.4	12
329	Optoelectronic information encryption with phase-shifting interferometry. Applied Optics, 2000, 39, 2313.	2.1	199
330	Secure ultrafast communication with spatial-temporal converters. Applied Optics, 2000, 39, 2975.	2.1	20
331	Secure optical storage that uses fully phase encryption. Applied Optics, 2000, 39, 6689.	2.1	88
332	Dynamic Interconnections Using Photorefractive Crystals. , 2000, , 385-429.		1
333	Narrow bandwidth operation of high-power broad-area diode laser using cascaded phase-conjugate injection locking. Applied Physics B: Lasers and Optics, 1999, 68, 1021-1025.	2.2	24
334	Photorefractive optics in dynamic interconnection. Proceedings of the IEEE, 1999, 87, 2030-2049.	21.3	7
335	Encrypted optical storage with wavelength-key and random phase codes. Applied Optics, 1999, 38, 6785.	2.1	76
336	Encrypted optical storage with angular multiplexing. Applied Optics, 1999, 38, 7288.	2.1	111
337	Encrypted optical memory system using three-dimensional keys in the Fresnel domain. Optics Letters, 1999, 24, 762.	3.3	476
338	<title>Optical interconnections using photorefractive segmented waveguides</title>. , 1999, 3804, 42.		0
339	<title>Encrypted holographic memory using angular multiplexing in LiNbO <sub>3</sub> :Fe</title>. , 1999, 3804, 172.		1
340	Fabrication of a two-dimensional array of photorefractive waveguides in LiNbO <sub>3</sub> :Fe using non-diffracting checkered pattern. Optics Communications, 1998, 145, 150-154.	2.1	12
341	Injection locking of a broad-area diode laser through a double phase-conjugate mirror. Optics Communications, 1998, 146, 6-10.	2.1	28
342	Mutually pumped phase conjugators with picosecond pulses. Journal of the Optical Society of America B: Optical Physics, 1998, 15, 1971.	2.1	5

#	ARTICLE	IF	CITATIONS
343	Segmented photorefractive waveguides in LiNbO <sub>3</sub> :Fe. Journal of the Optical Society of America B: Optical Physics, 1998, 15, 2006.	2.1	23
344	<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
345	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
346	Optical Learning Neural Network Using Photorefractive Waveguides. Optical Review, 1997, 4, 465-470.	2.0	2
347	Array of photorefractive waveguides for massively parallel optical interconnections in lithium niobate. Optics Letters, 1996, 21, 122.	3.3	26
348	Nonuniform and off-axis structures for photorefractive waveguides in lithium niobate. Optical Engineering, 1996, 35, 2175.	1.0	8
349	Fabrication of two-dimensional array of photorefractive waveguides. , 1996, , .		2
350	Modification of Photorefractive Waveguides in Lithium Niobate by Guided Beam for Optical Dynamic Interconnection. Optical Review, 1995, 2, 438-443.	2.0	13
351	<title>ODINN in LiN: optical dynamic interconnections for neural networks in lithium niobate</title>. , 1995, , .		4
352	Analysis of Photo-Induced Waveguide in Lithium Niobate Crystal. Optical Review, 1994, 1, 73-75.	2.0	7
353	Fabrication experiment of photorefractive three-dimensional waveguides in lithium niobate. Optics Letters, 1994, 19, 652.	3.3	45
354	Learning Generalization by Validation Set. Japanese Journal of Applied Physics, 1992, 31, 2459-2462.	1.5	6
355	Shift-invariant neural network for image processing: learning and generalization. , 1992, , .		1