

# Edmund Y Lam

## List of Publications by Year in descending order

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341  
papers

5,729  
citations

101543

36  
h-index

118850

62  
g-index

345  
all docs

345  
docs citations

345  
times ranked

3879  
citing authors

#	ARTICLE	IF	CITATIONS
1	A mathematical analysis of the DCT coefficient distributions for images. IEEE Transactions on Image Processing, 2000, 9, 1661-1666.	9.8	591
2	Learning-based nonparametric autofocusing for digital holography. Optica, 2018, 5, 337.	9.3	180
3	A Total Variation Regularization Based Super-Resolution Reconstruction Algorithm for Digital Video. Eurasip Journal on Advances in Signal Processing, 2007, 2007, .	1.7	160
4	Mobile-Phone Antenna Design. IEEE Antennas and Propagation Magazine, 2012, 54, 14-34.	1.4	135
5	End-to-end deep learning framework for digital holographic reconstruction. Advanced Photonics, 2019, 1, 1.	11.8	135
6	Ultrafast laser-scanning time-stretch imaging at visible wavelengths. Light: Science and Applications, 2017, 6, e16196-e16196.	16.6	125
7	Automatic source camera identification using the intrinsic lens radial distortion. Optics Express, 2006, 14, 11551.	3.4	117
8	Source camera identification using footprints from lens aberration. , 2006, 6069, 172.		102
9	Computational photography with plenoptic camera and light field capture: tutorial. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2015, 32, 2021.	1.5	90
10	Asymmetric-detection time-stretch optical microscopy (ATOM) for ultrafast high-contrast cellular imaging in flow. Scientific Reports, 2014, 4, 3656.	3.3	83
11	Three-dimensional microscopy and sectional image reconstruction using optical scanning holography. Applied Optics, 2009, 48, H113.	2.1	81
12	Pixelated source mask optimization for process robustness in optical lithography. Optics Express, 2011, 19, 19384.	3.4	80
13	High-Dimensional Dense Residual Convolutional Neural Network for Light Field Reconstruction. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 873-886.	13.9	78
14	Reconstruction of sectional images in holography using inverse imaging. Optics Express, 2008, 16, 17215.	3.4	75
15	Machine learning for inverse lithography: using stochastic gradient descent for robust photomask synthesis. Journal of Optics (United Kingdom), 2010, 12, 045601.	2.2	74
16	Level-set-based inverse lithography for photomask synthesis. Optics Express, 2009, 17, 23690.	3.4	67
17	Robust level-set-based inverse lithography. Optics Express, 2011, 19, 5511.	3.4	66
18	Large-Scale Multi-Class Image-Based Cell Classification With Deep Learning. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 2091-2098.	6.3	66

#	ARTICLE	IF	CITATIONS
19	Interferometric time-stretch microscopy for ultrafast quantitative cellular and tissue imaging at 1Å. Journal of Biomedical Optics, 2014, 19, 076001.	2.6	65
20	Deep learning for digital holography: a review. Optics Express, 2021, 29, 40572.	3.4	63
21	Iterative statistical approach to blind image deconvolution. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 1177.	1.5	62
22	Efficient source and mask optimization with augmented Lagrangian methods in optical lithography. Optics Express, 2013, 21, 8076.	3.4	55
23	Maximum a posteriori blind image deconvolution with Huber's Markov random-field regularization. Optics Letters, 2009, 34, 1453.	3.3	53
24	Computation lithography: virtual reality and virtual virtuality. Optics Express, 2009, 17, 12259.	3.4	52
25	Edge-preserving sectional image reconstruction in optical scanning holography. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 1630.	1.5	49
26	Facial expression recognition using deep neural networks. , 2015, , .		47
27	Application of Tikhonov Regularization to Super-Resolution Reconstruction of Brain MRI Images. , 2007, , 51-56.		46
28	102-nm, 445-MHz inertial-free swept source by mode-locked fiber laser and time stretch technique for optical coherence tomography. Optics Express, 2018, 26, 4370.	3.4	46
29	Speckle reduction of retinal optical coherence tomography based on contourlet shrinkage. Optics Letters, 2013, 38, 2900.	3.3	45
30	Multiple-image encryption by compressive holography. Applied Optics, 2012, 51, 1000.	1.8	44
31	Automatic focusing for multisectional objects in digital holography using the structure tensor. Optics Letters, 2017, 42, 1720.	3.3	44
32	Fringe Pattern Improvement and Super-Resolution Using Deep Learning in Digital Holography. IEEE Transactions on Industrial Informatics, 2019, 15, 6179-6186.	11.3	43
33	Simultaneous Ultrasound and MRI System for Breast Biopsy: Compatibility Assessment and Demonstration in a Dual Modality Phantom. IEEE Transactions on Medical Imaging, 2008, 27, 247-254.	8.9	40
34	Blind sectional image reconstruction for optical scanning holography. Optics Letters, 2009, 34, 3098.	3.3	40
35	Initialization for robust inverse synthesis of phase-shifting masks in optical projection lithography. Optics Express, 2008, 16, 14746.	3.4	39
36	Zero-Configuration Identity-Based Signcryption Scheme for Smart Grid. , 2010, , .		39

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37	Extended focused imaging and depth map reconstruction in optical scanning holography. Applied Optics, 2016, 55, 1040.	2.1	39
38	Computationally Efficient Truncated Nuclear Norm Minimization for High Dynamic Range Imaging. IEEE Transactions on Image Processing, 2016, 25, 4145-4157.	9.8	38
39	Subsampled scanning holographic imaging (SuSHI) for fast, non-adaptive recording of three-dimensional objects. Optica, 2016, 3, 911.	9.3	38
40	Fast and robust misalignment correction of Fourier ptychographic microscopy for full field of view reconstruction. Optics Express, 2018, 26, 23661.	3.4	38
41	Digital holographic imaging and classification of microplastics using deep transfer learning. Applied Optics, 2021, 60, A38.	1.8	38
42	Level-set-based inverse lithography for mask synthesis using the conjugate gradient and an optimal time step. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2013, 31, .	1.2	36
43	Object reconstruction in block-based compressive imaging. Optics Express, 2012, 20, 22102.	3.4	35
44	Image reconstruction using spectroscopic and hyperspectral information for compressive terahertz imaging. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 1638.	1.5	34
45	Blind Bi-Level Image Restoration With Iterated Quadratic Programming. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2007, 54, 52-56.	2.2	33
46	High-resolution lightfield photography using two masks. Optics Express, 2012, 20, 10971.	3.4	33
47	Analysis of the DCT Coefficient Distributions for Document Coding. IEEE Signal Processing Letters, 2004, 11, 97-100.	3.6	32
48	Wireless sensor networks scheduling for full angle coverage. Multidimensional Systems and Signal Processing, 2009, 20, 101-119.	2.6	32
49	Cellular uptake and imaging studies of gadolinium-loaded single-walled carbon nanotubes as MRI contrast agents. Contrast Media and Molecular Imaging, 2011, 6, 93-99.	0.8	32
50	Robust source and mask optimization compensating for mask topography effects in computational lithography. Optics Express, 2014, 22, 9471.	3.4	32
51	Radiomics Model to Predict Early Progression of Nonmetastatic Nasopharyngeal Carcinoma after Intensity Modulation Radiation Therapy: A Multicenter Study. Radiology: Artificial Intelligence, 2019, 1, e180075.	5.8	32
52	Automatic compensation of phase aberrations in digital holographic microscopy based on sparse optimization. APL Photonics, 2019, 4, .	5.7	32
53	RedCap: residual encoder-decoder capsule network for holographic image reconstruction. Optics Express, 2020, 28, 4876.	3.4	32
54	Cervical spinal cord BOLD fMRI study: Modulation of functional activation by dexterity of dominant and non-dominant hands. NeuroImage, 2008, 39, 825-831.	4.2	31

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55	Hotspot-aware fast source and mask optimization. <i>Optics Express</i> , 2012, 20, 21792.	3.4	31
56	Computational image speckle suppression using block matching and machine learning. <i>Applied Optics</i> , 2019, 58, B39.	1.8	30
57	Microplastic pollution monitoring with holographic classification and deep learning. <i>JPhys Photonics</i> , 2021, 3, 024013.	4.6	29
58	Super-resolution reconstruction in a computational compound-eye imaging system. <i>Multidimensional Systems and Signal Processing</i> , 2007, 18, 83-101.	2.6	28
59	Magnetization transfer (MT) asymmetry around the water resonance in human cervical spinal cord. <i>Journal of Magnetic Resonance Imaging</i> , 2009, 29, 523-528.	3.4	28
60	FPGA-based High-speed True Random Number Generator for Cryptographic Applications. , 2006, , .		27
61	Enhanced depth resolution in optical scanning holography using a configurable pupil. <i>Photonics Research</i> , 2014, 2, 64.	7.0	27
62	Phase-controlled metasurface design via optimized genetic algorithm. <i>Nanophotonics</i> , 2020, 9, 3931-3939.	6.0	27
63	Efficient On-Demand Image Transmission in Visual Sensor Networks. <i>Eurasip Journal on Advances in Signal Processing</i> , 2006, 2007, 1.	1.7	25
64	A new framework of concept clustering and learning path optimization to develop the next-generation e-learning systems. <i>Journal of Computers in Education</i> , 2014, 1, 335-352.	8.3	25
65	High-Order Residual Network for Light Field Super-Resolution. <i>Proceedings of the AAAI Conference on Artificial Intelligence</i> , 2020, 34, 11757-11764.	4.9	25
66	Robust mask design with defocus variation using inverse synthesis. <i>Proceedings of SPIE</i> , 2008, , .	0.8	22
67	Depth resolution enhancement in optical scanning holography with a dual-wavelength laser source. <i>Applied Optics</i> , 2011, 50, H285.	2.1	22
68	Arbitrary two-dimensional spectrally encoded pattern generation—a new strategy for high-speed patterned illumination imaging. <i>Optica</i> , 2015, 2, 1037.	9.3	22
69	Resolution enhancement of optical scanning holography with a spiral modulated point spread function. <i>Photonics Research</i> , 2016, 4, 1.	7.0	22
70	Photographic stitching with optimized object and color matching based on image derivatives. <i>Optics Express</i> , 2007, 15, 7689.	3.4	21
71	Wavelength-swept spectral and pulse shaping utilizing hybrid Fourier domain modelocking by fiber optical parametric and erbium-doped fiber amplifiers. <i>Optics Express</i> , 2010, 18, 1909.	3.4	21
72	Depth resolution enhancement in double-detection optical scanning holography. <i>Applied Optics</i> , 2013, 52, 3079.	1.8	21

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73	Image restoration in digital photography. IEEE Transactions on Consumer Electronics, 2003, 49, 269-274.	3.6	20
74	Source localization using a sparse representation framework to achieve superresolution. Multidimensional Systems and Signal Processing, 2010, 21, 391-402.	2.6	20
75	Comparison of Kasai Autocorrelation and Maximum Likelihood Estimators for Doppler Optical Coherence Tomography. IEEE Transactions on Medical Imaging, 2013, 32, 1033-1042.	8.9	20
76	3D Imaging Based on Depth Measurement Technologies. Sensors, 2018, 18, 3711.	3.8	20
77	Multistage Dual-Attention Guided Fusion Network for Hyperspectral Pansharpening. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	20
78	Achieving 360°/2 Angle Coverage with Minimum Transmission Cost in Visual Sensor Networks. , 2007, , .		19
79	Liquid-immersion laser micromachining of GaN grown on sapphire. Applied Physics A: Materials Science and Processing, 2011, 102, 441-447.	2.3	19
80	Multiple Frequency Band and High Isolation Mobile Device Antennas Using a Capacitive Slot. IEEE Transactions on Antennas and Propagation, 2012, 60, 3576-3582.	5.1	19
81	Efficient source mask optimization with Zernike polynomial functions for source representation. Optics Express, 2014, 22, 3924.	3.4	19
82	Source Camera Identification by JPEG Compression Statistics for Image Forensics. , 2006, , .		18
83	Human arm pose modeling with learned features using joint convolutional neural network. Machine Vision and Applications, 2017, 28, 1-14.	2.7	18
84	Broadband High-Energy All-Fiber Laser at 1.6 $\mu\text{m}$ . IEEE Photonics Technology Letters, 2018, 30, 311-314.	2.5	18
85	Robust Reconstruction With Deep Learning to Handle Model Mismatch in Lensless Imaging. IEEE Transactions on Computational Imaging, 2021, 7, 1080-1092.	4.4	18
86	Cross-Domain Contrastive Learning for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	18
87	Discrete cosine transform domain restoration of defocused images. Applied Optics, 1998, 37, 6213.	2.1	17
88	Wavelet domain compounding for speckle reduction in optical coherence tomography. Journal of Biomedical Optics, 2013, 18, 096002.	2.6	17
89	Acceleration of autofocusing with improved edge extraction using structure tensor and Schatten norm. Optics Express, 2020, 28, 14712.	3.4	17
90	Full scene underwater imaging with polarization and an untrained network. Optics Express, 2021, 29, 41865.	3.4	17

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91	Effective Uses of FPGAs for Brute-Force Attack on RC4 Ciphers. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2008, 16, 1096-1100.	3.1	16
92	A high-resolution lightfield camera with dual-mask design. , 2012, , .		16
93	Toward a Complete E-learning System Framework for Semantic Analysis, Concept Clustering and Learning Path Optimization. , 2012, , .		16
94	Model Order Reduction for Neutral Systems by Moment Matching. Circuits, Systems, and Signal Processing, 2013, 32, 1039-1063.	2.0	16
95	Analysis of the noise in backprojection light field acquisition and its optimization. Applied Optics, 2017, 56, F20.	2.1	16
96	Multiplane Illumination Enabled by Fourier-Transform Metasurfaces for High-Speed Light-Sheet Microscopy. ACS Photonics, 2018, 5, 1676-1684.	6.6	16
97	Light Field View Synthesis via Aperture Disparity and Warping Confidence Map. IEEE Transactions on Image Processing, 2021, 30, 3908-3921.	9.8	16
98	Binary image restoration by positive semidefinite programming. Optics Letters, 2007, 32, 121.	3.3	15
99	High-resolution Fourier hologram synthesis from photographic images through computing the light field. Applied Optics, 2016, 55, 1751.	2.1	15
100	Standard Cell Layout With Regular Contact Placement. IEEE Transactions on Semiconductor Manufacturing, 2004, 17, 375-383.	1.7	14
101	Teaching introductory electrical engineering: Project-based learning experience. , 2012, , .		14
102	Fast compressive measurements acquisition using optimized binary sensing matrices for low-light-level imaging. Optics Express, 2016, 24, 9869.	3.4	14
103	Nonlocal Means Filtering Based Speckle Removal Utilizing the Maximum <i>a Posteriori</i> Estimation and the Total Variation Image Prior. IEEE Access, 2019, 7, 99231-99243.	4.2	14
104	Regularized multiframe phase-shifting algorithm for three-dimensional profilometry. Applied Optics, 2012, 51, 33.	1.8	13
105	Dual-Band Time-Multiplexing Swept-Source Optical Coherence Tomography Based on Optical Parametric Amplification. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 1287-1292.	2.9	13
106	Unsupervised Tracking With the Doubly Stochastic Dirichlet Process Mixture Model. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 2594-2599.	8.0	13
107	New autofocus and reconstruction method based on a connected domain. Optics Letters, 2018, 43, 2201.	3.3	13
108	LightGAN: A Deep Generative Model for Light Field Reconstruction. IEEE Access, 2020, 8, 116052-116063.	4.2	13

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109	Event-based laser speckle correlation for micro motion estimation. Optics Letters, 2021, 46, 3885.	3.3	13
110	Autofocusing in digital holography using deep learning. , 2018, , .		13
111	SignBERT: A BERT-Based Deep Learning Framework for Continuous Sign Language Recognition. IEEE Access, 2021, 9, 161669-161682.	4.2	13
112	Digital photograph stitching with optimized matching of gradient and curvature. , 2006, , .		12
113	Multi-modal Imaging: Simultaneous MRI and Ultrasound Imaging for Carotid Arteries Visualization. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 2603-6.	0.5	12
114	Aberration-aware robust mask design with level-set-based inverse lithography. , 2010, , .		12
115	A Robust Computational Algorithm for Inverse Photomask Synthesis in Optical Projection Lithography. SIAM Journal on Imaging Sciences, 2012, 5, 625-651.	2.2	12
116	Robust and efficient inverse mask synthesis with basis function representation. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, B1.	1.5	12
117	An INSPECT Measurement System for Moving Objects. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 63-74.	4.7	12
118	Teaching Internet of Things: Enhancing learning efficiency via full-semester flipped classroom. , 2017, , .		12
119	Video-rate centimeter-range optical coherence tomography based on dual optical frequency combs by electro-optic modulators. Optics Express, 2018, 26, 24928.	3.4	12
120	Learning to restore light fields under low-light imaging. Neurocomputing, 2021, 456, 76-87.	5.9	12
121	Holographic 3D particle reconstruction using a one-stage network. Applied Optics, 2022, 61, B111.	1.8	12
122	Lens-free motion analysis via neuromorphic laser speckle imaging. Optics Express, 2022, 30, 2206.	3.4	12
123	Compound document compression with model-based biased reconstruction. Journal of Electronic Imaging, 2004, 13, 191.	0.9	11
124	Three-dimensional reconstruction of wafer solder bumps using binary pattern projection. , 2005, , .		11
125	Metallic nanoparticle array on GaN by microsphere lithography. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S654-S657.	0.8	11
126	Nebulous hotspot and algorithm variability in computation lithography. Journal of Micro/Nanolithography, MEMS, and MOEMS, 2010, 9, 033002.	0.9	11



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127	Precision laser micromachining of trenches in GaN on sapphire. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, 380-385.	1.2	11
128	Image reconstruction from nonuniformly spaced samples in spectral-domain optical coherence tomography. <i>Biomedical Optics Express</i> , 2012, 3, 741.	2.9	11
129	Defocus noise suppression with combined frame difference and connected component methods in optical scanning holography. <i>Optics Letters</i> , 2015, 40, 4146.	3.3	11
130	All-passive pixel super-resolution of time-stretch imaging. <i>Scientific Reports</i> , 2017, 7, 44608.	3.3	11
131	Dynamic laser speckle analysis using the event sensor. <i>Applied Optics</i> , 2021, 60, 172.	1.8	11
132	Microplastic pollution assessment with digital holography and zero-shot learning. <i>APL Photonics</i> , 2022, 7, .	5.7	11
133	Blind separation of electron paramagnetic resonance signals using diversity minimization. <i>Journal of Magnetic Resonance</i> , 2010, 204, 26-36.	2.1	10
134	Enhancing Learning Paths with Concept Clustering and Rule-Based Optimization. , 2011, , .		10
135	Speckle reduction of endovascular optical coherence tomography using a generalized divergence measure. <i>Optics Letters</i> , 2012, 37, 2871.	3.3	10
136	Cascadic multigrid algorithm for robust inverse mask synthesis in optical lithography. <i>Journal of Micro/ Nanolithography, MEMS, and MOEMS</i> , 2014, 13, 023003.	0.9	10
137	Illumination source optimization in optical lithography via derivative-free optimization. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2014, 31, B19.	1.5	10
138	Spatial and Angular Reconstruction of Light Field Based on Deep Generative Networks. , 2019, , .		10
139	Fast and robust phase retrieval for masked coherent diffractive imaging. <i>Photonics Research</i> , 2022, 10, 758.	7.0	10
140	Noise in superresolution reconstruction. <i>Optics Letters</i> , 2003, 28, 2234.	3.3	9
141	Performance optimization for gridded-layout standard cells. , 2004, , .		9
142	Structured-Light Based Sensing Using a Single Fixed Fringe Grating: Fringe Boundary Detection and 3-D Reconstruction. <i>IEEE Transactions on Electronics Packaging Manufacturing</i> , 2008, 31, 19-31.	1.4	9
143	Maximum Likelihood Doppler Frequency Estimation Under Decorrelation Noise for Quantifying Flow in Optical Coherence Tomography. <i>IEEE Transactions on Medical Imaging</i> , 2014, 33, 1313-1323.	8.9	9
144	Automatic Detection of Microplastics by Deep Learning Enabled Digital Holography. , 2020, , .		9

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145	Near-infrared temporal compressive imaging for video. <i>Optics Letters</i> , 2019, 44, 1702.	3.3	9
146	A Signomial Programming Approach for Binary Image Restoration by Penalized Least Squares. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2008, 55, 41-45.	3.0	8
147	Regularization of inverse photomask synthesis to enhance manufacturability. <i>Proceedings of SPIE</i> , 2009, , .	0.8	8
148	corRna: a web server for predicting multiple-point deleterious mutations in structural RNAs. <i>Nucleic Acids Research</i> , 2011, 39, W160-W166.	14.5	8
149	Computational Light Field Generation Using Deep Nonparametric Bayesian Learning. <i>IEEE Access</i> , 2019, 7, 24990-25000.	4.2	8
150	Autofocusing of Optical Scanning Holography Based on Entropy Minimization. , 2015, , .		8
151	Sparse Reconstruction of Complex Signals in Compressed Sensing Terahertz Imaging. , 2009, , .		8
152	A Portable Sign Language Collection and Translation Platform with Smart Watches Using a BLSTM-Based Multi-Feature Framework. <i>Micromachines</i> , 2022, 13, 333.	2.9	8
153	Dual Alternating Direction Method of Multipliers for Inverse Imaging. <i>IEEE Transactions on Image Processing</i> , 2022, 31, 3295-3308.	9.8	8
154	Digital restoration of defocused images in the wavelet domain. <i>Applied Optics</i> , 2002, 41, 4806.	2.1	7
155	Non-negative matrix factorization for images with Laplacian noise. , 2008, , .		7
156	Simultaneous dual-band optical coherence tomography for endoscopic applications. <i>Journal of Biomedical Optics</i> , 2014, 19, 126007.	2.6	7
157	Imaging systems and signal recovery: introduction to feature issue. <i>Applied Optics</i> , 2015, 54, IS1.	2.1	7
158	Sectional hologram reconstruction through complex deconvolution. <i>Optics and Lasers in Engineering</i> , 2020, 127, 105945.	3.8	7
159	AutoSegNet: An Automated Neural Network for Image Segmentation. <i>IEEE Access</i> , 2020, , 1-1.	4.2	7
160	Applying (3+2+1)D Residual Neural Network with Frame Selection for Hong Kong Sign Language Recognition. , 2021, , .		7
161	An effective decomposition-enhancement method to restore light field images captured in the dark. <i>Signal Processing</i> , 2021, 189, 108279.	3.7	7
162	Standard cell design with regularly placed contacts and gates. , 2004, 5379, 55.		6

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163	Superresolution imaging: Theory, Algorithms and Applications. Multidimensional Systems and Signal Processing, 2007, 18, 57-58.	2.6	6
164	Enhancing educational data mining techniques on online educational resources with a semi-supervised learning approach. , 2015, , .		6
165	Computational single-cell classification using deep learning on bright-field and phase images. , 2017, , .		6
166	Real-Time Target Detection in Visual Sensing Environments Using Deep Transfer Learning and Improved Anchor Box Generation. IEEE Access, 2020, 8, 193512-193522.	4.2	6
167	Broad dual-band temporal compressive imaging with optical calibration. Optics Express, 2021, 29, 5710.	3.4	6
168	Inverse image problem of designing phase shifting masks in optical lithography. , 2008, , .		5
169	Sectional image reconstruction in optical scanning holography using compressed sensing. , 2010, , .		5
170	Speed-dependent resolution analysis of ultrafast laser-scanning fluorescence microscopy. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 755.	2.1	5
171	Joint optimization of source, mask, and pupil in optical lithography. Proceedings of SPIE, 2014, , .	0.8	5
172	Unsupervised learning on scientific ocean drilling datasets from the South China Sea. Frontiers of Earth Science, 2019, 13, 180-190.	2.1	5
173	From Local to Global: Efficient Dual Attention Mechanism for Single Image Super-Resolution. IEEE Access, 2021, 9, 114957-114964.	4.2	5
174	Extended focused imaging in microscopy using structure tensor and guided filtering. Optics and Lasers in Engineering, 2021, 140, 106549.	3.8	5
175	Computational imaging and reconstruction in digital holographic microscopy. , 2018, , .		5
176	Pixel super-resolution in optical time-stretch microscopy using acousto-optic deflector. , 2015, , .		5
177	Digital holographic imaging via deep learning. , 2019, , .		5
178	Light Field Superresolution Reconstruction in Computational Photography. , 2011, , .		5
179	End-to-end learning for digital hologram reconstruction. , 2018, , .		5
180	A Portable Hong Kong Sign Language Translation Platform with Deep Learning and Jetson Nano. , 2020, , .		5

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181	Model-based network architecture for image reconstruction in lensless imaging. , 2020, , .		5
182	Temporal compressive imaging reconstruction based on a 3D-CNN network. Optics Express, 2022, 30, 3577.	3.4	5
183	Fast Classification and Action Recognition With Event-Based Imaging. IEEE Access, 2022, 10, 55638-55649.	4.2	5
184	Iterative phase retrieval with a sensor mask. Optics Express, 2022, 30, 25788.	3.4	5
185	OPTIMIZATION OF BIT-PAIRING CODIFICATION WITH LEARNING FOR 3D RECONSTRUCTION. International Journal of Image and Graphics, 2007, 07, 445-462.	1.5	4
186	Compact and thin multi-lens system for machine vision applications. , 2008, , .		4
187	Superresolution reconstruction using nonlinear gradient-based regularization. Multidimensional Systems and Signal Processing, 2009, 20, 375-384.	2.6	4
188	Developing an Innovative and Pen-Based Simulator to Enhance Education and Research in Computer Systems. , 2009, , .		4
189	The nebulous hotspot and algorithm variability. Proceedings of SPIE, 2009, , .	0.8	4
190	Edge detection of three-dimensional objects by manipulating pupil functions in an optical scanning holography system. , 2010, , .		4
191	Height Inspection of Wafer Bumps Without Explicit 3-D Reconstruction. IEEE Transactions on Electronics Packaging Manufacturing, 2010, 33, 112-121.	1.4	4
192	Hyperspectral reconstruction in biomedical imaging using terahertz systems. , 2010, , .		4
193	Interconnected alternating-current light-emitting diode arrays isolated by laser micromachining. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 011025.	1.2	4
194	A three-dimensional imaging system for surface profilometry of moving objects. , 2013, , .		4
195	Iterative solution to linear matrix inequality arising from time delay descriptor systems. Applied Mathematics and Computation, 2013, 219, 4176-4184.	2.2	4
196	Using Cloud Computing and Mobile Devices to Facilitate Students' Learning through E-Learning Games. , 2013, , .		4
197	Sparse nonlinear inverse imaging for shot count reduction in inverse lithography. Optics Express, 2015, 23, 26919.	3.4	4
198	High dynamic range imaging via truncated nuclear norm minimization of low-rank matrix. , 2016, , .		4

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199	Axial localization using time reversal multiple signal classification in optical scanning holography. Optics Express, 2018, 26, 3756.	3.4	4
200	Ghost-Free HDR Imaging Via Unrolling Low-Rank Matrix Completion. , 2021, , .		4
201	Digital holography with deep learning and generative adversarial networks for automatic microplastics classification. , 2020, , .		4
202	Speckle suppression using the convolutional neural network with an exponential linear unit. , 2018, , .		4
203	Reducing the acquisition time of optical scanning holography by compressed sensing. , 2014, , .		4
204	Lensless sensing using the event sensor. , 2021, , .		4
205	<title>Iterative blind image deconvolution in space and frequency domains</title>. , 1999, , .		3
206	Robust minimization of lighting variation for real-time defect detection. Real Time Imaging, 2004, 10, 365-370.	1.6	3
207	Height inspection of wafer bumps without explicit 3D reconstruction. , 2006, 6070, 27.		3
208	Curvature Domain Image Stitching. , 2006, , .		3
209	Feature Selection in Source Camera Identification. , 2006, , .		3
210	DIRECT RECONSTRUCTION OF SPIRAL MRI USING LEAST SQUARES QUANTIZATION TABLE. , 2007, , .		3
211	A least squares quantization table method for direct reconstruction of MR images with non-Cartesian trajectory. Journal of Magnetic Resonance, 2007, 188, 141-150.	2.1	3
212	REFERENCE-FREE MACHINE VISION INSPECTION OF SEMICONDUCTOR DIE IMAGES. International Journal of Image and Graphics, 2009, 09, 133-152.	1.5	3
213	Image and video processing in wireless sensor networks. Multidimensional Systems and Signal Processing, 2009, 20, 99-100.	2.6	3
214	Plasmonically enhanced quantum-dot white-light InGaN light-emitting diode. Journal Physics D: Applied Physics, 2011, 44, 224016.	2.8	3
215	Computational photography: advances and challenges. , 2011, , .		3
216	A novel antenna isolation method for mobile phone antennas. , 2011, , .		3

#	ARTICLE	IF	CITATIONS
217	Illumination-invariant phase-shifting algorithm for three-dimensional profilometry of a moving object. <i>Optical Engineering</i> , 2012, 51, 097001-1.	1.0	3
218	Building an Interactive Simulator on a Cloud Computing Platform to Enhance Students' Understanding of Computer Systems. , 2013, , .		3
219	Fast single frame super-resolution using scale-invariant self-similarity. , 2013, , .		3
220	Sparse Hierarchical Nonparametric Bayesian learning for light field representation and denoising. , 2016, , .		3
221	Data-driven light field depth estimation using deep Convolutional Neural Networks. , 2016, , .		3
222	Super-resolution imaging in optical scanning holography using structured illumination. , 2016, , .		3
223	Computationally Efficient Hyperspectral Data Learning Based on the Doubly Stochastic Dirichlet Process. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2017, 55, 363-374.	6.3	3
224	Computationally efficient brightness compensation and contrast enhancement for transmissive liquid crystal displays. <i>Journal of Real-Time Image Processing</i> , 2018, 14, 733-741.	3.5	3
225	Image Refocus in Geometrical Optical Phase Space. , 2010, , .		3
226	Perceptual loss for light field reconstruction in high-dimensional convolutional neural networks. , 2019, , .		3
227	Computational Optical Sensing and Imaging: feature issue introduction. <i>Optics Express</i> , 2020, 28, 18131.	3.4	3
228	Digital holographic microplastics detection and characterization in heterogeneous samples via deep learning. , 2021, , .		3
229	Phase retrieval with data-driven dual alternating direction method of multipliers for coherent diffraction imaging. , 2021, , .		3
230	Reference-free detection of semiconductor assembly defect. , 2005, , .		2
231	Restoration of Binary Images Using Positive Semidefinite Programming. , 2006, , .		2
232	High-resolution reconstruction of human brain MRI image based on local polynomial regression. , 2009, , .		2
233	Stochastic gradient descent for robust inverse photomask synthesis in optical lithography. , 2010, , .		2
234	Three-dimensional surface recovery with a regularized multi-frame phase shift algorithm. , 2011, , .		2

#	ARTICLE	IF	CITATIONS
235	Finite difference schemes for heat conduction analysis in integrated circuit design and manufacturing. International Journal of Circuit Theory and Applications, 2011, 39, 905-921.	2.0	2
236	Hotspot-Aware Robust Mask Design with Inverse Lithography. ECS Transactions, 2012, 44, 197-202.	0.5	2
237	An illumination-invariant phase-shifting algorithm for three-dimensional profilometry. , 2012, , .		2
238	Optimal doppler frequency estimators for ultrasound and optical coherence tomography. , 2012, , .		2
239	Block-based compressive low-light-level imaging. , 2013, , .		2
240	Guest Editorial Computational and Smart Cameras. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2013, 3, 121-124.	3.6	2
241	A polynomial phase-shift algorithm for high precision three-dimensional profilometry. , 2013, , .		2
242	Facilitating a personalized learning environment through learning analytics on mobile devices. , 2014, , .		2
243	An unsupervised learning approach to study synchronicity of past events in the South China Sea. Frontiers of Earth Science, 2019, 13, 628-640.	2.1	2
244	A Real-Time Coprime Line Scan Super-Resolution System for Ultra-Fast Microscopy. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 781-792.	4.0	2
245	MBD-GAN: Model-based image deblurring with a generative adversarial network. , 2021, , .		2
246	Axially resolved volumetric two-photon microscopy with an extended field of view using depth localization under mirrored Airy beams. Optics Express, 2020, 28, 39563.	3.4	2
247	Binary Image Restoration by Signomial Programming. , 2007, , .		2
248	Inverse Synthesis of Phase-Shifting Mask for Optical Lithography. , 2007, , .		2
249	Fast iterative sectional image reconstruction in optical scanning holography. , 2009, , .		2
250	A Spatial Projection Analysis of Light Field Capture. , 2010, , .		2
251	Alternating phase-shifting mask design for low aberration sensitivity. , 2004, 5377, 591.		1
252	Restoration of images with optical aberrations and quantization in a transform domain. , 2004, 5299, 93.		1

#	ARTICLE	IF	CITATIONS
253	Optimization of Photomask Design for Reducing Aberration-Induced Placement Error. IEEE Transactions on Semiconductor Manufacturing, 2006, 19, 277-285.	1.7	1
254	Image Mosaicking with Optimized Matching of Global and Local Contents. , 2006, , .		1
255	Blind deconvolution of bi-level images with successive filtering. , 2006, 6027, 1228.		1
256	A novel design of grating projecting system for 3D reconstruction of wafer bumps. , 2006, 6056, 605601.		1
257	Interconnect thermal simulation with higher order spatial accuracy. , 2008, , .		1
258	Deep etch of GaN by laser micromachining. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2151-2153.	0.8	1
259	Performance analysis of pixelated source-mask optimization for optical microlithography. , 2010, , .		1
260	Robustness Enhancement in Optical Lithography: From Pixelated Mask Optimization to Pixelated Source-Mask Optimization. ECS Transactions, 2011, 34, 203-208.	0.5	1
261	Image reconstruction from nonuniformly spaced samples in Fourier domain optical coherence tomography. , 2012, , .		1
262	Applying an Evolutionary Approach for Learning Path Optimization in the Next-Generation E-Learning Systems. , 2013, , .		1
263	Doppler frequency estimators under additive and multiplicative noise. Proceedings of SPIE, 2013, , .	0.8	1
264	Interferometric time-stretch microscopy for ultrafast quantitative cellular imaging at 1 $\hat{\mu}$ m. , 2013, , .		1
265	(Invited) Efficient Mask Synthesis with Augmented Lagrangian Methods in Computational Lithography. ECS Transactions, 2013, 52, 163-168.	0.5	1
266	Maximum likelihood estimation of blood velocity using Doppler optical coherence tomography. Proceedings of SPIE, 2014, , .	0.8	1
267	Signal reduction in fluorescence imaging using radio frequency-multiplexed excitation by compressed sensing. Proceedings of SPIE, 2014, , .	0.8	1
268	Impact of photomask shape uncertainties on computational lithography. , 2016, , .		1
269	Incorporating photomask shape uncertainty in computational lithography. , 2016, , .		1
270	Learning-based cell detection in digital pathology. , 2021, , .		1



#	ARTICLE	IF	CITATIONS
271	Ultrafast and broadband inertia-free swept source for optical coherence tomography. , 2017, , .		1
272	Dual-Band FDML laser for Swept Source Spectroscopic OCT. , 2012, , .		1
273	Computational Sectioning and Resolution Enhancement in Optical Scanning Holography. , 2014, , .		1
274	Active, large-scale tuning of optical dispersion by free-space angular-chirp-enhanced delay (FACED). , 2016, , .		1
275	Phase aberration compensation in digital holographic microscopy using regression analysis. , 2018, , .		1
276	Temporal Super-resolution Full Waveform LiDAR. , 2018, , .		1
277	Light field image restoration in low-light environment. , 2020, , .		1
278	Digital holography with polarization multiplexing for underwater imaging and descattering. , 2021, , .		1
279	<title>Blind image deconvolution for symmetric blurs by polynomial factorization</title>. , 1999, , .		0
280	Simultaneous photometric correction and defect detection in semiconductor manufacturing. , 2006, 6070, 133.		0
281	Surface orientation recovery of specular micro-surface via binary pattern projection. , 2006, , .		0
282	Boundary detection of projected fringes on surface with inhomogeneous reflectance function. , 2006, 6070, 17.		0
283	Image Indexing Using Weighted Color Co-occurrence Matrix and Feature Selection. , 2006, , .		0
284	Efficient Selective Image Transmission in Visual Sensor Networks. IEEE Vehicular Technology Conference, 2007, , .	0.4	0
285	Regularization in super-resolution reconstruction of biomedical images using gradient vector field. , 2008, , .		0
286	Handling of multi-reflections in wafer bump 3D reconstruction. Conference Proceedings IEEE International Conference on Systems, Man, and Cybernetics, 2008, , .	0.0	0
287	An improved direction-of-arrival estimation via phase information of sparse solution. , 2009, , .		0
288	Computation Lithography: Virtual Reality and Virtual Virtuality. ECS Transactions, 2009, 18, 351-356.	0.5	0

#	ARTICLE	IF	CITATIONS
289	Hybrid Fourier domain modelocked laser utilizing a fiber optical parametric amplifier and an erbium doped fiber amplifier. Proceedings of SPIE, 2010, , .	0.8	0
290	Regularization in Inverse Lithography: Enhancing Manufacturability and Robustness to Process Variations. ECS Transactions, 2010, 27, 427-432.	0.5	0
291	Improving an interactive simulator for computer systems with learning objects. , 2010, , .		0
292	Zero-configuration identity-based IP network encryptor. IEEE Transactions on Consumer Electronics, 2010, 56, 540-546.	3.6	0
293	Liquid-immersion laser micromachining of GaN trenches and its application in device fabrication. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2229-2231.	0.8	0
294	Nonlinear image reconstruction in block-based compressive imaging. , 2012, , .		0
295	Band-stop filter effect of multiple slots in mobile phone antennas. , 2012, , .		0
296	High-speed spectroscopic OCT around 1550 nm based on dual-band swept laser source. , 2012, , .		0
297	Tuning the band-stop filter effect in mobile phone antennas. , 2012, , .		0
298	An elliptic phase-shift algorithm for high speed three-dimensional profilometry. Proceedings of SPIE, 2013, , .	0.8	0
299	Revisit laser scanning fluorescence microscopy performance under fluorescence-lifetime-limited regime. Proceedings of SPIE, 2014, , .	0.8	0
300	Binary Sensing Matrix Design for Compressive Imaging Measurements. , 2014, , .		0
301	High-resolution Section Recovery Using a Configurable Pupil in a Scanning Holographic Microscopy. , 2014, , .		0
302	Optical time-stretch microscopy using Bessel spectral shower illumination. , 2014, , .		0
303	Two-dimensional spectral-encoding for high speed arbitrary patterned illumination. , 2014, , .		0
304	Depth Enhancement of Optical Scanning Holography with a Spiral Phase Plate. , 2015, , .		0
305	Computational techniques to incorporate shot count reduction into inverse lithography. , 2015, , .		0
306	An edge-from-focus approach to 3D inspection and metrology. Proceedings of SPIE, 2015, , .	0.8	0

#	ARTICLE	IF	CITATIONS
307	Geological applications of machine learning on hyperspectral remote sensing data. , 2015, , .		0
308	Extended focused imaging in a holographic microscopy imaging system. , 2015, , .		0
309	Chromaticâ€dispersionâ€free transmission using timeâ€reversal optical parametric amplifier. Electronics Letters, 2015, 51, 347-349.	1.0	0
310	Developing the PETAL e-Learning Platform for Personalized Teaching and Learning. Lecture Notes in Educational Technology, 2015, , 119-122.	0.8	0
311	Human arm pose modeling with learned features using joint convolutional neural network. , 2015, , .		0
312	Unsupervised tracking with a low computational cost using the doubly stochastic Dirichlet process mixture model. IS&T International Symposium on Electronic Imaging, 2016, 28, 1-8.	0.4	0
313	Quantitative asymmetric-detection time-stretch optical microscopy (Q-ATOM) for ultrafast quantitative phase imaging flow cytometry (Conference Presentation). , 2016, , .		0
314	High-throughput time-stretch imaging cellular assay based on a high-speed spinning platform. , 2016, , .		0
315	An Effective Cloud-Based Simulator Facilitating Learning Analytics on Mobile Devices. Lecture Notes in Educational Technology, 2016, , 175-188.	0.8	0
316	Pixel super-resolution of time-stretch imaging by an equivalent-time sampling concept. , 2016, , .		0
317	Computational Imaging in Digital Holographic Reconstruction with Machine Learning. , 2020, , .		0
318	Event-based laser speckle correlation for micro motion estimation: erratum. Optics Letters, 2021, 46, 5083.	3.3	0
319	Artificial intelligence in biophotonics and imaging: Advancing computational reconstruction and inference. , 2021, , .		0
320	Hyperspectral THz Image Reconstruction. , 2010, , .		0
321	Bayesian Reconstruction in Optical Scanning Holography. , 2010, , .		0
322	Power enhanced and fast swept source for phase conjugate optical coherence tomography. , 2010, , .		0
323	Image Reconstruction from Nonuniform Samples in Spectral Domain Optical Coherence Tomography. , 2011, , .		0
324	Using a Dual-wavelength Source for Depth Resolution Enhancement in Optical Scanning Holography. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
325	Computational Imaging Technology for Nanolithography. , 2013, , .		0
326	Efficient source mask optimization with Zernike polynomial function-based source representation. , 2013, , .		0
327	Ultrafast high-contrast microfluidic cellular imaging by asymmetric-detection time-stretch optical microscopy (ATOM). , 2013, , .		0
328	Efficient Autofocusing in Optical Scanning Holography. , 2014, , .		0
329	Edge Extraction Based on Aperture Synthesis in Optical Scanning Holography. , 2015, , .		0
330	Edge-Preserving Autofocusing in Digital Holography. , 2016, , .		0
331	Enhanced edge extraction using spiral phase plate in optical scanning holography based on Gaussian beam apodization. , 2016, , .		0
332	Level-set-based inverse lithography under random field shape uncertainty in a vector Hopkins imaging model. , 2017, , .		0
333	Three-photon fluorescence microscopic imaging by a compact Er-doped fiber laser at 1.6 $\mu\text{m}$ . , 2018, , .		0
334	Temporal super-resolution in full waveform lidar. , 2018, , .		0
335	Dual-waveband Temporal Compressive Imaging. , 2019, , .		0
336	Golden anniversary of Fourier optics: guest editorial. Applied Optics, 2019, 58, ED1.	1.8	0
337	Designing instructional videos and classwork activities: teaching internet of things via flipped classroom. International Journal of Mobile Learning and Organisation, 2019, 13, 392.	0.3	0
338	Temporal Compressed Measurements for Block-wise Compressive Imaging. , 2019, , .		0
339	Computational optical sensing and imaging: introduction. Applied Optics, 2019, 58, COS1.	1.8	0
340	A Deep Learning Approach for Reconstruction in Temporal Compressed Imaging. , 2020, , .		0
341	Underwater holographic descattering with synthetic polarization. , 2021, , .		0