David J Brady

List of Publications by Year
in descending order

87	5,862	126708	98622
papers	citations	33 h-index	67 g-index

88	88	88	2376
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Snapshot ptychography on array cameras. Optics Express, 2022, 30, 2585.	1.7	12
2	Editorial: Introduction to the Special Issue on Deep Learning for High-Dimensional Sensing. IEEE Journal on Selected Topics in Signal Processing, 2022, 16, 603-607.	7.3	2
3	Compressive Sampling for Array Cameras. SIAM Journal on Imaging Sciences, 2021, 14, 156-177.	1.3	1
4	A modular hierarchical array camera. Light: Science and Applications, 2021, 10, 37.	7.7	19
5	Snapshot Compressive Imaging: Theory, Algorithms, and Applications. IEEE Signal Processing Magazine, 2021, 38, 65-88.	4.6	159
6	Photon-limited bounds for phase retrieval. Optics Express, 2021, 29, 16736.	1.7	1
7	Deep Learning for Camera Autofocus. IEEE Transactions on Computational Imaging, 2021, 7, 258-271.	2.6	19
8	Optical Processing for Artificial Neural Vision. , 2021, , .		0
9	CrossNet++: Cross-Scale Large-Parallax Warping for Reference-Based Super-Resolution. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 4291-4305.	9.7	16
10	PANDA: A Gigapixel-Level Human-Centric Video Dataset. , 2020, , .		42
11	Deep learning for camera data acquisition, control, and image estimation. Advances in Optics and Photonics, 2020, 12, 787.	12.1	19
12	Noise suppression for ballistic-photons based on compressive in-line holographic imaging through an inhomogeneous medium. Optics Express, 2020, 28, 10337.	1.7	12
13	Distributed focus and digital zoom. Engineering Research Express, 2020, 2, 035019.	0.8	1
14	Signal decoupling in digital holography via compressive sensing. , 2019, , .		0
15	Rank Minimization for Snapshot Compressive Imaging. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 41, 2990-3006.	9.7	207
16	Resolution and sampling analysis in digital in-line holography with spherical wave illumination. Optical Engineering, 2019, 59, 1.	0.5	8
17	Twin-Image-Free Holography: A Compressive Sensing Approach. Physical Review Letters, 2018, 121, 093902.	2.9	104
18	Full field-of-view digital lens-free holography for weak-scattering objects based on grating modulation. Applied Optics, 2018, 57, A164.	0.9	22

#	ARTICLE	IF	CITATIONS
19	Parallel cameras. Optica, 2018, 5, 127.	4.8	36
20	Field of view in monocentric multiscale cameras. Applied Optics, 2018, 57, 6999.	0.9	9
21	Configurable cameras with MMS architecture. , 2018, , .		0
22	Coded Apertures in Mass Spectrometry. Annual Review of Analytical Chemistry, 2017, 10, 141-156.	2.8	8
23	High-resolution spectral video acquisition. Frontiers of Information Technology and Electronic Engineering, 2017, 18, 1250-1260.	1.5	5
24	Multiscale gigapixel video: A cross resolution image matching and warping approach. , 2017, , .		26
25	Model-Based Multiscale Gigapixel Image Formation Pipeline on GPU. IEEE Transactions on Computational Imaging, 2017, 3, 493-502.	2.6	3
26	Galilean monocentric multiscale optical systems. Optics Express, 2017, 25, 20332.	1.7	14
27	Efficient block-wise algorithm for compressive holography. Optics Express, 2017, 25, 24991.	1.7	11
28	Heterogeneous camera array for multispectral light field imaging. Optics Express, 2017, 25, 14008.	1.7	14
29	Snapshot fan beam coded aperture coherent scatter tomography. Optics Express, 2016, 24, 18277.	1.7	23
30	Computational Snapshot Multispectral Cameras: Toward dynamic capture of the spectral world. IEEE Signal Processing Magazine, 2016, 33, 95-108.	4.6	178
31	Efficient patch-based approach for compressive depth imaging. Applied Optics, 2016, 55, 7556.	2.1	20
32	Spectrally grouped total variation reconstruction for scatter imaging using ADMM. , 2015, , .		3
33	Compressive tomography. Advances in Optics and Photonics, 2015, 7, 756.	12.1	53
34	Compressive Sensing by Learning a Gaussian Mixture Model From Measurements. IEEE Transactions on Image Processing, 2015, 24, 106-119.	6.0	136
35	Compressive Hyperspectral Imaging With Side Information. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 964-976.	7.3	152
36	Signal Recovery and System Calibration from Multiple Compressive Poisson Measurements. SIAM Journal on Imaging Sciences, 2015, 8, 1923-1954.	1.3	12

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37	Spatial light modulator based color polarization imaging. Optics Express, 2015, 23, 11912.	1.7	50
38	Image translation for single-shot focal tomography. Optica, 2015, 2, 822.	4.8	39
39	Single-sensor multispeaker listening with acoustic metamaterials. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10595-10598.	3.3	66
40	Spectral-temporal compressive imaging. Optics Letters, 2015, 40, 4054.	1.7	82
41	Low-Cost Compressive Sensing for Color Video and Depth. , 2014, , .		62
42	Complementary coded apertures for 4-dimensional x-ray coherent scatter imaging. Optics Express, 2014, 22, 22925.	1.7	11
43	Compressive Coded Aperture Spectral Imaging: An Introduction. IEEE Signal Processing Magazine, 2014, 31, 105-115.	4.6	471
44	Video Compressive Sensing Using Gaussian Mixture Models. IEEE Transactions on Image Processing, 2014, 23, 4863-4878.	6.0	158
45	Millimeter wave surface and reflectivity estimation based on sparse time of flight measurements. , 2014, , .		1
46	Compressive extended depth of field using image space coding. , 2014, , .		8
47	Gaussian mixture model for video compressive sensing. , 2013, , .		12
48	Adaptive temporal compressive sensing for video. , 2013, , .		36
49	Coded Hyperspectral Imaging and Blind Compressive Sensing. SIAM Journal on Imaging Sciences, 2013, 6, 782-812.	1.3	59
50	Snapshot 2D tomography via coded aperture x-ray scatter imaging. Applied Optics, 2013, 52, 4582.	0.9	44
51	Coded aperture snapshot spectral polarization imaging. Applied Optics, 2013, 52, 2153.	0.9	64
52	Snapshot molecular imaging using coded energy-sensitive detection. Optics Express, 2013, 21, 25480.	1.7	51
53	Autofocus for a multiscale gigapixel camera. Applied Optics, 2013, 52, 8146.	0.9	5
54	Coded apertures for x-ray scatter imaging. Applied Optics, 2013, 52, 7745.	0.9	29

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55	Coded aperture compressive temporal imaging. Optics Express, 2013, 21, 10526.	1.7	320
56	Big snapshot stitching with scarce overlap. , 2013, , .		0
57	A testbed for wide-field, high-resolution, gigapixel-class cameras. Review of Scientific Instruments, 2013, 84, 053107.	0.6	9
58	Design and scaling of monocentric multiscale imagers. Applied Optics, 2012, 51, 4691.	0.9	61
59	Distributed binary geometric sensor arrays for low-data-throughput human gait biometrics. , 2012, , .		5
60	Reconstructing and segmenting hyperspectral images from compressed measurements. , 2011, , .		4
61	Coding for compressive focal tomography. Applied Optics, 2011, 50, 4436.	2.1	12
62	Microcamera aperture scale in monocentric gigapixel cameras. Applied Optics, 2011, 50, 5824.	2.1	30
63	Design of a spherical focal surface using close-packed relay optics. Optics Express, 2011, 19, 16132.	1.7	27
64	Gigapixel holography. , 2011, , .		1
65	LIGHT PROPAGATING IN METAL SUB-WAVELENGTH-HOLE ARRAYS. Nano, 2010, 05, 295-300.	0.5	1
66	Compressive video sensors using multichannel imagers. Applied Optics, 2010, 49, B9.	2.1	28
67	Compressive holography of diffuse objects. Applied Optics, 2010, 49, H1.	2.1	62
68	Multiframe image estimation for coded aperture snapshot spectral imagers. Applied Optics, 2010, 49, 6824.	2.1	230
69	Generalized sampling using a compound-eye imaging system for multi-dimensional object acquisition. Optics Express, 2010, 18, 19367.	1.7	36
70	Computational photography and compressive holography. , 2010, , .		0
71	Video rate spectral imaging using a coded aperture snapshot spectral imager. Optics Express, 2009, 17, 6368.	1.7	267
72	Multiscale lens design. Optics Express, 2009, 17, 10659.	1.7	129

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73	Compressive Holography. Optics Express, 2009, 17, 13040.	1.7	468
74	Compression at the Physical Interface. IEEE Signal Processing Magazine, 2008, 25, 67-71.	4.6	32
75	Thin infrared imaging systems through multichannel sampling. Applied Optics, 2008, 47, B1.	2.1	77
76	Single disperser design for coded aperture snapshot spectral imaging. Applied Optics, 2008, 47, B44.	2.1	694
77	Computational optical sensing and imaging: introduction to the feature issue. Applied Optics, 2008, 47, COSI1.	2.1	6
78	Fast disambiguation of superimposed images for increased field of view. , 2008, , .		3
79	An Ultra-High Resolution Spectrometer with Successive Combination of a Fabry-Perot Etalon and a Cylindrical Beam Volume Hologram. , 2007, , .		0
80	Human Tracking With Wireless Distributed Pyroelectric Sensors. IEEE Sensors Journal, 2006, 6, 1683-1696.	2.4	136
81	A Tandem Fabry-Perot Volume Hologram Spectrometer with High Resolution. , 2006, , .		0
82	Reference structure tomography. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2004, 21, 1140.	0.8	62
83	<title>Three dimensional imaging with the argus sensor array</title>. , 2002, , .		3
84	Multiplex sensors and the constant radiance theorem. Optics Letters, 2002, 27, 16.	1.7	50
85	Integrated analysis and design of analog and digital processing in imaging systems: introduction to the feature issue. Applied Optics, 2002, 41, 6049.	2.1	6
86	Visible Cone-Beam Tomography With a Lensless Interferometric Camera. Science, 1999, 284, 2164-2166.	6.0	78
87	Holography in artificial neural networks. Nature, 1990, 343, 325-330.	13.7	221