Ashok Narayanan Veeraraghavan

List of Publications by Year
in descending order

85	4,503	172457	138484
papers	citations	29	58
		h-index	g-index

88	88	88	3525
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	FaceEngage: Robust Estimation of Gameplay Engagement from User-Contributed (YouTube) Videos. IEEE Transactions on Affective Computing, 2022, 13, 651-665.	8.3	12
2	Near-Infrared Imaging Photoplethysmography During Driving. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 3589-3600.	8.0	26
3	Recent advances in lensless imaging. Optica, 2022, 9, 1.	9.3	67
4	An Objective System for Quantitative Assessment of Television Viewing Among Children (Family Level) Tj ETQq0 0 0 rgBT /Overlock 10 T Parenting, 2022, 5, e33569.	1.6	6
5	In vivo lensless microscopy via a phase mask generating diffraction patterns with high-contrast contours. Nature Biomedical Engineering, 2022, 6, 617-628.	22.5	35
6	PPGMotion: Model-based detection of motion artifacts in photoplethysmography signals. Biomedical Signal Processing and Control, 2022, 75, 103632.	5.7	6
7	Deep-3D microscope: 3D volumetric microscopy of thick scattering samples using a wide-field microscope and machine learning. Biomedical Optics Express, 2022, 13, 284.	2.9	5
8	Measuring physiological parameters under the skin using visible/NIR light. , 2022, , .		0
9	19.2 A Mechanically Flexible Implantable Neural Interface for Computational Imaging and Optogenetic Stimulation over 5.4Ã—5.4 mm 2 FoV. , 2021, , .		4
10	HRVCam: robust camera-based measurement of heart rate variability. Journal of Biomedical Optics, 2021, 26, .	2.6	19
11	3D Imaging Using Extreme Dispersion in Optical Metasurfaces. ACS Photonics, 2021, 8, 1421-1429.	6.6	31
12	Combining Magnification and Measurement for Non-Contact Cardiac Monitoring. , 2021, , .		3
13	High Resolution, Deep Imaging Using Confocal Time-of-Flight Diffuse Optical Tomography. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 2206-2219.	13.9	21
14	SASSI â€" Super-Pixelated Adaptive Spatio-Spectral Imaging. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 2233-2244.	13.9	11
15	Ultrafast and Ultrahigh-Resolution Diffuse Optical Tomography for Brain Imaging with Sensitivity Equation based Noniterative Sparse Optical Reconstruction (SENSOR). Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 276, 107939.	2.3	7
16	Systematic analysis of video-based pulse measurement from compressed videos. Biomedical Optics Express, 2021, 12, 494.	2.9	8
17	EDoF-ToF: extended depth of field time-of-flight imaging. Optics Express, 2021, 29, 38540-38556.	3.4	1
18	Bio-FlatScope: a flat, lensless microscope for fluorescence imaging. , 2021, , .		0

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19	CodedStereo: Learned Phase Masks for Large Depth-of-field Stereo. , 2021, , .		7
20	A Mechanically Flexible, Implantable Neural Interface for Computational Imaging and Optogenetic Stimulation Over 5.4Ã—5.4mm² FoV. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 1295-1305.	4.0	7
21	SACoD: Sensor Algorithm Co-Design Towards Efficient CNN-powered Intelligent PhlatCam. , 2021, , .		2
22	Inverse Scattering via Transmission Matrices: Broadband Illumination and Fast Phase Retrieval Algorithms. IEEE Transactions on Computational Imaging, 2020, 6, 95-108.	4.4	14
23	Fast Retinomorphic Event-Driven Representations for Video Gameplay and Action Recognition. IEEE Transactions on Computational Imaging, 2020, 6, 276-290.	4.4	2
24	Vision and Deep Learning-Based Algorithms to Detect and Quantify Cracks on Concrete Surfaces from UAV Videos. Sensors, 2020, 20, 6299.	3.8	58
25	Deep learning extended depth-of-field microscope for fast and slide-free histology. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 33051-33060.	7.1	42
26	PhlatCam: Designed Phase-Mask Based Thin Lensless Camera. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 1618-1629.	13.9	72
27	PulseCam: a camera-based, motion-robust and highly sensitive blood perfusion imaging modality. Scientific Reports, 2020, 10, 4825.	3.3	19
28	FlatNet: Towards Photorealistic Scene Reconstruction from Lensless Measurements. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, PP, 1-1.	13.9	33
29	Deep-inverse correlography: towards real-time high-resolution non-line-of-sight imaging. Optica, 2020, 7, 63.	9.3	82
30	Wavefront sensing based depth sensor for macroscopic objects. , 2020, , .		0
31	FreeCam3D: Snapshot Structured Light 3D with Freely-Moving Cameras. Lecture Notes in Computer Science, 2020, , 309-325.	1.3	6
32	Deep optics. , 2020, , .		3
33	High coupling efficiency, passive alignment setup for visible-range fiber-to-waveguide edge coupling. Journal of Nanophotonics, 2020, 14, .	1.0	4
34	3PointTM: Faster Measurement of High-Dimensional Transmission Matrices. Lecture Notes in Computer Science, 2020, , 310-326.	1.3	2
35	On-Chip Optical and Analog Processing in 180nm CMOS for Holography. , 2020, , .		0
36	Bioluminescent flashes drive nighttime schooling behavior and synchronized swimming dynamics in flashlight fish. PLoS ONE, 2019, 14, e0219852.	2.5	20

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37	SNLOS: Non-line-of-sight Scanning through Temporal Focusing. , 2019, , .		21
38	PhaseCam3D â€" Learning Phase Masks for Passive Single View Depth Estimation. , 2019, , .		72
39	WISH: wavefront imaging sensor with high resolution. Light: Science and Applications, 2019, 8, 44.	16.6	61
40	Convolutional Approximations to the General Non-Line-of-Sight Imaging Operator. , 2019, , .		34
41	Face Detection and Verification Using Lensless Cameras. IEEE Transactions on Computational Imaging, 2019, 5, 180-194.	4.4	40
42	Computational photography. , 2018, , 213-235.		0
43	SparsePPG: Towards Driver Monitoring Using Camera-Based Vital Signs Estimation in Near-Infrared. , 2018, , .		85
44	Learning from Noisy Web Data with Category-Level Supervision. , 2018, , .		16
45	A Survey on Smart Homes for Aging in Place: Toward Solutions to the Specific Needs of the Elderly. IEEE Signal Processing Magazine, 2018, 35, 111-119.	5.6	24
46	Integrated light-sheet illumination using metallic slit microlenses. Optics Express, 2018, 26, 27326.	3.4	5
47	Compressive Video Sensing: Algorithms, architectures, and applications. IEEE Signal Processing Magazine, 2017, 34, 52-66.	5.6	122
48	SAVI: Synthetic apertures for long-range, subdiffraction-limited visible imaging using Fourier ptychography. Science Advances, 2017, 3, e1602564.	10.3	77
49	TabletGaze: dataset and analysis for unconstrained appearance-based gaze estimation in mobile tablets. Machine Vision and Applications, 2017, 28, 445-461.	2.7	118
50	Single-frame 3D fluorescence microscopy with ultraminiature lensless FlatScope. Science Advances, 2017, 3, e1701548.	10.3	149
51	Coherent inverse scattering via transmission matrices: Efficient phase retrieval algorithms and a public dataset. , 2017, , .		36
52	PPGSecure: Biometric Presentation Attack Detection Using Photopletysmograms. , 2017, , .		46
53	FlatCam: Thin, Lensless Cameras Using Coded Aperture and Computation. IEEE Transactions on Computational Imaging, 2017, 3, 384-397.	4.4	160
54	CS-ToF: High-resolution compressive time-of-flight imaging. Optics Express, 2017, 25, 31096.	3.4	40

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55	Deep imaging in scattering media with selective plane illumination microscopy. Journal of Biomedical Optics, 2016, 21, 126009.	2.6	13
56	Toward Long-Distance Subdiffraction Imaging Using Coherent Camera Arrays. IEEE Transactions on Computational Imaging, 2016, 2, 251-265.	4.4	70
57	Imaging through plasmonic nanoparticles. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5558-5563.	7.1	27
58	Absorption-Induced Image Resolution Enhancement in Scattering Media. ACS Photonics, 2016, 3, 1787-1793.	6.6	24
59	Lensless Imaging: A computational renaissance. IEEE Signal Processing Magazine, 2016, 33, 23-35.	5.6	102
60	What does a single light-ray reveal about a transparent object?. , 2015, , .		8
61	Evaluation of tumor–derived MRI–texture features for discrimination of molecular subtypes and prediction of 12–month survival status in glioblastoma. Medical Physics, 2015, 42, 6725-6735.	3.0	123
62	Depth Fields: Extending Light Field Techniques to Time-of-Flight Imaging. , 2015, , .		12
63	DistancePPG: Robust non-contact vital signs monitoring using a camera. Biomedical Optics Express, 2015, 6, 1565.	2.9	334
64	mobileVision. , 2014, , .		5
65	Compressive Sensing for Video Applications. Academic Press Library in Signal Processing, 2014, 4, 583-607.	0.8	0
66	A Framework for Analysis of Computational Imaging Systems: Role of Signal Prior, Sensor Noise and Multiplexing. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 1909-1921.	13.9	26
67	A Practical Approach to 3D Scanning in the Presence of Interreflections, Subsurface Scattering and Defocus. International Journal of Computer Vision, 2013, 102, 33-55.	15.6	96
68	Towards Motion Aware Light Field Video for Dynamic Scenes. , 2013, , .		25
69	Fast object localization and pose estimation in heavy clutter for robotic bin picking. International Journal of Robotics Research, 2012, 31, 951-973.	8.5	154
70	Reconstruction of hidden 3D shapes using diffuse reflections. Optics Express, 2012, 20, 19096.	3.4	111
71	Variable focus video: Reconstructing depth and video for dynamic scenes. , 2012, , .		13
72	Light field denoising, light field superresolution and stereo camera based refocussing using a GMM light field patch prior. , 2012, , .		126

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73	Recovering three-dimensional shape around a corner using ultrafast time-of-flight imaging. Nature Communications, 2012, 3, 745.	12.8	510
74	P2C2: Programmable pixel compressive camera for high speed imaging. , 2011, , .		159
75	Axial-cones. ACM Transactions on Graphics, 2010, 29, 1-8.	7.2	37
76	Reinterpretable Imager: Towards Variable Postâ€Capture Space, Angle and Time Resolution in Photography. Computer Graphics Forum, 2010, 29, 763-772.	3.0	16
77	Advances in Video-Based Human Activity Analysis. Advances in Computers, 2010, 80, 237-290.	1.6	26
78	Axial light field for curved mirrors: Reflect your perspective, widen your view. , 2010, , .		21
79	Flexible Voxels for Motion-Aware Videography. Lecture Notes in Computer Science, 2010, , 100-114.	1.3	37
80	Unsupervised view and rate invariant clustering of video sequences. Computer Vision and Image Understanding, 2009, 113, 353-371.	4.7	39
81	Rate-Invariant Recognition of Humans and Their Activities. IEEE Transactions on Image Processing, 2009, 18, 1326-1339.	9.8	89
82	Shape-and-Behavior Encoded Tracking of Bee Dances. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 463-476.	13.9	84
83	Glare aware photography. ACM Transactions on Graphics, 2008, 27, 1-10.	7.2	51
84	Non-refractive modulators for encoding and capturing scene appearance and depth. , 2008, , .		10
85	Dappled photography. ACM Transactions on Graphics, 2007, 26, 69.	7.2	410