Vivek Boominathan

List of Publications by Year
in descending order

25 papers	780 citations	1040056 9 h-index	1199594 12 g-index
27 all docs	27 docs citations	27 times ranked	569 citing authors

#	Article	IF	Citations
1	Single-frame 3D fluorescence microscopy with ultraminiature lensless FlatScope. Science Advances, 2017, 3, e1701548.	10.3	149
2	Lensless Imaging: A computational renaissance. IEEE Signal Processing Magazine, 2016, 33, 23-35.	5.6	102
3	Improving resolution and depth-of-field of light field cameras using a hybrid imaging system. , 2014, , .		85
4	PhaseCam3D â€" Learning Phase Masks for Passive Single View Depth Estimation. , 2019, , .		72
5	PhlatCam: Designed Phase-Mask Based Thin Lensless Camera. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 1618-1629.	13.9	72
6	Recent advances in lensless imaging. Optica, 2022, 9, 1.	9.3	67
7	Face Detection and Verification Using Lensless Cameras. IEEE Transactions on Computational Imaging, 2019, 5, 180-194.	4.4	40
8	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
9	FlatNet: Towards Photorealistic Scene Reconstruction from Lensless Measurements. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, PP, 1-1.	13.9	33
10	3D Imaging Using Extreme Dispersion in Optical Metasurfaces. ACS Photonics, 2021, 8, 1421-1429.	6.6	31
11	Bioluminescent flashes drive nighttime schooling behavior and synchronized swimming dynamics in flashlight fish. PLoS ONE, 2019, 14, e0219852.	2.5	20
12	Towards Photorealistic Reconstruction of Highly Multiplexed Lensless Images. , 2019, , .		20
13	Speaker recognition via sparse representations using orthogonal matching pursuit. , 2012, , .		10
14	A Mechanically Flexible, Implantable Neural Interface for Computational Imaging and Optogenetic Stimulation Over 5.4Ã—5.4mm^2 FoV. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 1295-1305.	4.0	7
15	Allpass modeling of LP residual for speaker recognition. , 2012, , .		6
16	FreeCam3D: Snapshot Structured Light 3D with Freely-Moving Cameras. Lecture Notes in Computer Science, 2020, , 309-325.	1.3	6
17	mobileVision. , 2014, , .		5
18	Flat focus: depth of field analysis for the FlatCam lensless imaging system. , 2017, , .		4

#	Article	IF	Citations
19	CANOPIC: Pre-Digital Privacy-Enhancing Encodings for Computer Vision. , 2020, , .		4
20	19.2 A Mechanically Flexible Implantable Neural Interface for Computational Imaging and Optogenetic Stimulation over 5.4Ã—5.4 mm 2 FoV. , 2021, , .		4
21	SACoD: Sensor Algorithm Co-Design Towards Efficient CNN-powered Intelligent PhlatCam. , 2021, , .		2
22	mobileVision: A Face-mounted, Voice-activated, Non-mydriatic â€œLuckyâ€•Ophthalmoscope. , 2014, , .		1
23	EDoF-ToF: extended depth of field time-of-flight imaging. Optics Express, 2021, 29, 38540-38556.	3.4	1
24	Bio-FlatScope: a flat, lensless microscope for fluorescence imaging. , 2021, , .		0
25	On-Chip Optical and Analog Processing in 180nm CMOS for Holography. , 2020, , .		0