Ayush Bhandari

List of Publications by Year
in descending order

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54	1,136	687363 13	794594 19
papers	citations	h-index	g-index

54	54	54	481
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Coded time of flight cameras. ACM Transactions on Graphics, 2013, 32, 1-10.	7.2	169
2	Resolving multipath interference in time-of-flight imaging via modulation frequency diversity and sparse regularization. Optics Letters, 2014, 39, 1705.	3.3	118
3	On unlimited sampling. , 2017, , .		66
4	Signal Processing for Time-of-Flight Imaging Sensors: An introduction to inverse problems in computational 3-D imaging. IEEE Signal Processing Magazine, 2016, 33, 45-58.	5.6	64
5	Shift-Invariant and Sampling Spaces Associated With the Fractional Fourier Transform Domain. IEEE Transactions on Signal Processing, 2012, 60, 1627-1637.	5.3	59
6	Sampling and Reconstruction of Sparse Signals in Fractional Fourier Domain. IEEE Signal Processing Letters, 2010, 17, 221-224.	3.6	47
7	On Unlimited Sampling and Reconstruction. IEEE Transactions on Signal Processing, 2021, 69, 3827-3839.	5.3	47
8	3D Depth Cameras in Vision: Benefits and Limitations of the Hardware. Advances in Computer Vision and Pattern Recognition, 2014, , 3-26.	1.3	42
9	Shift-invariant and sampling spaces associated with the special affine Fourier transform. Applied and Computational Harmonic Analysis, 2019, 47, 30-52.	2.2	39
10	Unlimited Sampling of Sparse Signals. , 2018, , .		37
11	Unlimited Sampling of Sparse Sinusoidal Mixtures. , 2018, , .		30
12	Resolving multipath interference in Kinect: An inverse problem approach. , 2014, , .		29
13	Unlimited Sampling From Theory to Practice: Fourier-Prony Recovery and Prototype ADC. IEEE Transactions on Signal Processing, 2022, 70, 1131-1141.	5.3	27
14	Blind and reference-free fluorescence lifetime estimation via consumer time-of-flight sensors. Optica, 2015, 2, 965.	9.3	25
15	Resolving Multipath Interference in Kinect: An Inverse Problem Approach. IEEE Sensors Journal, 2016, 16, 3419-3427.	4.7	25
16	HDR Imaging From Quantization Noise. , 2020, , .		24
17	One-Bit Time-Resolved Imaging. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 1630-1641.	13.9	22
18	One-bit Unlimited Sampling. , 2019, , .		20

#	Article	IF	Citations
19	Super-resolved time-of-flight sensing via FRI sampling theory. , 2016, , .		18
20	The Surprising Benefits of Hysteresis in Unlimited Sampling: Theory, Algorithms and Experiments. IEEE Transactions on Signal Processing, 2022, 70, 616-630.	5.3	18
21	On Identifiability in Unlimited Sampling. , 2019, , .		13
22	Computational Array Signal Processing via Modulo Non-Linearities. IEEE Transactions on Signal Processing, 2022, 70, 2168-2179.	5.3	13
23	Sparse Linear Operator identification without sparse regularization? Applications to mixed pixel problem in Time-of-Flight/Range imaging. , 2014, , .		12
24	Event-Driven Modulo Sampling. , 2021, , .		12
25	Demultiplexing illumination via low cost sensing and nanosecond coding. , 2014, , .		10
26	Modeling â€œwigglingâ€•as a multi-path interference problem in AMCW ToF imaging. Optics Express, 2015, 23, 19213.	3.4	10
27	Convolution and Product Theorems for the Special Affine Fourier Transform. , 2018, , 119-137.		10
28	Sampling and Super Resolution of Sparse Signals Beyond the Fourier Domain. IEEE Transactions on Signal Processing, 2019, 67, 1508-1521.	5.3	10
29	Back in the US-SR: Unlimited Sampling and Sparse Super-Resolution With Its Hardware Validation. IEEE Signal Processing Letters, 2022, 29, 1047-1051.	3.6	10
30	Unlimited Sampling with Sparse Outliers: Experiments with Impulsive and Jump or Reset Noise. , 2022, , .		10
31	The Modulo Radon Transform and its Inversion. , 2021, , .		9
32	Unlimited Sampling with Local Averages. , 2022, , .		8
33	DoA Estimation via Unlimited Sensing. , 2021, , .		7
34	The Modulo Radon Transform: Theory, Algorithms, and Applications. SIAM Journal on Imaging Sciences, 2022, 15, 455-490.	2.2	7
35	Modulo Event-Driven Sampling: System Identification and Hardware Experiments. , 2022, , .		7
36	Fractional Delay Filters Based on Generalized Cardinal Exponential Splines. IEEE Signal Processing Letters, 2010, 17, 225-228.	3.6	6

#	Article	IF	Citations
37	HDR Tomography VIA Modulo Radon Transform. , 2020, , .		6
38	Unlimited Sampling for FMCW Radars: A Proof of Concept. , 2022, , .		6
39	Multifrequency time of flight in the context of transient renderings. , 2013, , .		5
40	Coded Time-of-Flight Imaging for Calibration Free Fluorescence Lifetime Estimation. , 2014, , .		5
41	Rethinking Super-resolution: the Bandwidth Selection Problem. , 2019, , .		5
42	Nonuniform Sampling of Echoes of Light. , 2019, , .		5
43	Super-resolution in Phase Space. , 2015, , .		4
44	A swiss army knife for finite rate of innovation sampling theory. , 2016, , .		4
45	Time-resolved image demixing. , 2016, , .		3
46	Multidimensional Unlimited Sampling: A Geometrical Perspective. , 2021, , .		3
47	Unlimited Sampling with Hysteresis. , 2021, , .		3
48	Time Frequency Duality of Time-of-Flight Range Cameras for Resolving Multi-path Interference. , 2014, , .		2
49	Live Demonstration: Multiple-Path Depth Imaging with Time-of-Flight Sensors. , 2019, , .		2
50	Sampling without time: Recovering echoes of light via temporal phase retrieval. , 2017, , .		1
51	Photoacoustic ToF tomography of blood cells: From mathematical approximation to super-resolution. , 2017, , .		1
52	One-Bit Sampling in Fractional Fourier Domain. , 2020, , .		1
53	VallÃ©e Poussin kernels, shift-invariant subspaces and the spline connection. , 2017, , .		0
54	Blind Transmitted and Reflected Image Separation Using Depth Diversity and Timeâ€“ofâ€“Flight Sensors. , 2015, , .		0