Raja Giryes

List of Publications by Year in descending order

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80 papers	2,092 citations	23 h-index	276875 41 g-index
80	80	80	1882
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	DeepISP: Toward Learning an End-to-End Image Processing Pipeline. IEEE Transactions on Image Processing, 2019, 28, 912-923.	9.8	144
2	Image Restoration by Iterative Denoising and Backward Projections. IEEE Transactions on Image Processing, 2019, 28, 1220-1234.	9.8	129
3	Robust Large Margin Deep Neural Networks. IEEE Transactions on Signal Processing, 2017, 65, 4265-4280.	5.3	98
4	Poisson inverse problems by the Plug-and-Play scheme. Journal of Visual Communication and Image Representation, 2016, 41, 96-108.	2.8	97
5	The projected GSURE for automatic parameter tuning in iterative shrinkage methods. Applied and Computational Harmonic Analysis, 2011, 30, 407-422.	2.2	94
6	TOP-GAN: Stain-free cancer cell classification using deep learning with a small training set. Medical Image Analysis, 2019, 57, 176-185.	11.6	90
7	Sparsity-Based Poisson Denoising With Dictionary Learning. IEEE Transactions on Image Processing, 2014, 23, 5057-5069.	9.8	87
8	Depth Estimation From a Single Image Using Deep Learned Phase Coded Mask. IEEE Transactions on Computational Imaging, 2018, 4, 298-310.	4.4	82
9	Deep Neural Networks with Random Gaussian Weights: A Universal Classification Strategy?. IEEE Transactions on Signal Processing, 2016, 64, 3444-3457.	5.3	74
10	Greedy-like algorithms for the cosparse analysis model. Linear Algebra and Its Applications, 2014, 441, 22-60.	0.9	73
11	Improving DNN Robustness to Adversarial Attacks Using Jacobian Regularization. Lecture Notes in Computer Science, 2018, , 525-541.	1.3	73
12	Learned phase coded aperture for the benefit of depth of field extension. Optics Express, 2018, 26, 15316.	3.4	65
13	Learned Convolutional Sparse Coding. , 2018, , .		61
14	Class-Aware Fully Convolutional Gaussian and Poisson Denoising. IEEE Transactions on Image Processing, 2018, 27, 5707-5722.	9.8	60
15	Deep Radar Detector. , 2019, , .		58
16	Shallow Transitsâ€"Deep Learning. I. Feasibility Study of Deep Learning to Detect Periodic Transits of Exoplanets. Astronomical Journal, 2018, 155, 147.	4.7	57
17	Detecting Adversarial Samples Using Influence Functions and Nearest Neighbors. , 2020, , .		57
18	Postprocessing of Compressed Images via Sequential Denoising. IEEE Transactions on Image Processing, 2016, 25, 3044-3058.	9.8	55

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19	Efficient Processing of Distributed Acoustic Sensing Data Using a Deep Learning Approach. Journal of Lightwave Technology, 2019, 37, 4755-4762.	4. 6	49
20	RIP-Based Near-Oracle Performance Guarantees for SP, CoSaMP, and IHT. IEEE Transactions on Signal Processing, 2012, 60, 1465-1468.	5. 3	46
21	Super-Resolution via Image-Adapted Denoising CNNs: Incorporating External and Internal Learning. IEEE Signal Processing Letters, 2019, 26, 1080-1084.	3.6	44
22	Generalization Error in Deep Learning. Applied and Numerical Harmonic Analysis, 2019, , 153-193.	0.3	44
23	Tradeoffs Between Convergence Speed and Reconstruction Accuracy in Inverse Problems. IEEE Transactions on Signal Processing, 2018, 66, 1676-1690.	5. 3	42
24	Correction Filter for Single Image Super-Resolution: Robustifying Off-the-Shelf Deep Super-Resolvers. , 2020, , .		42
25	Back-Projection Based Fidelity Term for Ill-Posed Linear Inverse Problems. IEEE Transactions on Image Processing, 2020, 29, 6164-6179.	9.8	32
26	Image-Adaptive GAN Based Reconstruction. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 3121-3129.	4.9	28
27	Deep Learning Approach for Processing Fiber-Optic DAS Seismic Data. , 2018, , .		27
28	Sparsity Based Methods for Overparameterized Variational Problems. SIAM Journal on Imaging Sciences, 2015, 8, 2133-2159.	2.2	23
29	Simple and Robust Binary Self-Location Patterns. IEEE Transactions on Information Theory, 2012, 58, 4884-4889.	2.4	19
30	Greedy signal space methods for incoherence and beyond. Applied and Computational Harmonic Analysis, 2015, 39, 1-20.	2.2	19
31	Fast and accurate reconstruction of compressed color light field. , 2018, , .		19
32	Deep class-aware image denoising. , 2017, , .		18
33	Supervised and Unsupervised Learning of Parameterized Color Enhancement. , 2020, , .		14
34	A greedy algorithm for the analysis transform domain. Neurocomputing, 2016, 173, 278-289.	5.9	10
35	Fiber-optic distributed seismic sensing data generator and its application for training classification nets. Optics Letters, 2020, 45, 1834.	3.3	10
36	Motion deblurring using spatiotemporal phase aperture coding. Optica, 2020, 7, 1332.	9.3	10

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37	Sparsity based Poisson denoising. , 2012, , .		9
38	Can we allow linear dependencies in the dictionary in the sparse synthesis framework?., 2013,,.		8
39	Near oracle performance and block analysis of signal space greedy methods. Journal of Approximation Theory, 2015, 194, 157-174.	0.8	8
40	On the Effective Measure of Dimension in the Analysis Cosparse Model. IEEE Transactions on Information Theory, 2015, 61, 5745-5753.	2.4	8
41	MetAdapt: Meta-learned task-adaptive architecture for few-shot classification. Pattern Recognition Letters, 2021, 149, 130-136.	4.2	8
42	Automatic parameter setting for iterative shrinkage methods. , 2008, , .		7
43	Generalizing CoSaMP to signals from a union of low dimensional linear subspaces. Applied and Computational Harmonic Analysis, 2020, 49, 99-122.	2.2	7
44	NICE: Noise Injection and Clamping Estimation for Neural Network Quantization. Mathematics, 2021, 9, 2144.	2.2	7
45	An Iterative Denoising and Backwards Projections Method and its Advantages for Blind Deblurring. , 2018, , .		6
46	DEGAS: differentiable efficient generator search. Neural Computing and Applications, 2021, 33, 17173-17184.	5.6	6
47	Matching Pursuit Based Convolutional Sparse Coding. , 2018, , .		5
48	The Learned Inexact Project Gradient Descent Algorithm. , 2018, , .		5
49	Online Training of Stereo Self-Calibration Using Monocular Depth Estimation. IEEE Transactions on Computational Imaging, 2021, 7, 812-823.	4.4	5
50	BP-DIP: A Backprojection based Deep Image Prior. , 2021, , .		5
51	A Self Supervised StyleGAN for Image Annotation and Classification With Extremely Limited Labels. IEEE Transactions on Medical Imaging, 2022, 41, 3509-3519.	8.9	5
52	Sparsity based poisson inpainting. , 2014, , .		4
53	Sampling in the analysis transform domain. Applied and Computational Harmonic Analysis, 2016, 40, 172-185.	2.2	4
54	Lautum Regularization for Semi-Supervised Transfer Learning. , 2019, , .		4

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55	Efficient Least Residual Greedy Algorithms for Sparse Recovery. IEEE Transactions on Signal Processing, 2020, 68, 3707-3722.	5.3	4
56	A Greedy Approach to \$ell_{0,infty}\$-Based Convolutional Sparse Coding. SIAM Journal on Imaging Sciences, 2019, 12, 186-210.	2.2	3
57	Taco-VC: A Single Speaker Tacotron based Voice Conversion with Limited Data. , 2021, , .		3
58	White Matter Fiber Representation Using Continuous Dictionary Learning. Lecture Notes in Computer Science, 2017, , 566-574.	1.3	3
59	Image Restoration by Deep Projected GSURE. , 2022, , .		3
60	On Divergence Approximations for Unsupervised Training of Deep Denoisers Based on Stein's Unbiased Risk Estimator. , 2020, , .		2
61	On the Convergence Rate of Projected Gradient Descent for a Back-Projection Based Objective. SIAM Journal on Imaging Sciences, 2021, 14, 1504-1531.	2.2	2
62	Near-Oracle Performance Guarantees for Greedy-Like Methods. , 2010, , .		1
63	Online performance guarantees for sparse recovery. , 2011, , .		1
64	On the effective measure of dimension in total variation minimization. , 2015, , .		1
65	Reducing artifacts of intra-frame video coding via sequential denoising. , 2016, , .		1
66	Generalization error of deep neural networks: Role of classification margin and data structure. , $2017, \dots$		1
67	Fast least squares pursuits for sparse recovery. , 2017, , .		1
68	Deep class-aware image denoising. , 2017, , .		1
69	Face Authentication From Grayscale Coded Light Field. , 2020, , .		1
70	Separable Joint Blind Deconvolution and Demixing. IEEE Journal on Selected Topics in Signal Processing, 2021, 15, 657-671.	10.8	1
71	Utilizing the sparsity of quasi-distributed sensing systems for sub-Nyquist signal reconstruction. , 2019, , .		1
72	Spatio-Temporal Coded Imaging for Motion Deblurring. , 2019, , .		1

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73	Iterative signal recovery from incomplete samples. Communications of the ACM, 2010, 53, 92-92.	4.5	O
74	Task-Driven Dictionary Learning based on Convolutional Neural Network Features. , 2018, , .		O
75	Corrections to "Deep Neural Networks With Random Gaussian Weights: A Universal Classification Strategy?―[Jul 1, 2016 3444-3457]. IEEE Transactions on Signal Processing, 2020, 68, 529-531.	5.3	O
76	Separable Optimization for Joint Blind Deconvolution and Demixing. , 2020, , .		0
77	Sparse recovery methodologies for quasi-distributed dynamic strain sensing. JPhys Photonics, 2020, 2, 024002.	4.6	O
78	An Interpretation Of Regularization By Denoising And Its Application With The Back-Projected Fidelity Term., 2021,,.		0
79	Learning Camera Control in Dynamic Scenes from Limited Demonstrations. Computer Graphics Forum, 2022, 41, 427-437.	3.0	O
80	Shallow Transitsâ€"Deep Learning. II. Identify Individual Exoplanetary Transits in Red Noise using Deep Learning. Astronomical Journal, 2022, 163, 237.	4.7	O