Peter Jung

List of Publications by Year
in descending order

80 papers	2,542 citations	566801 15 h-index	288905 40 g-index
83 all docs	83 docs citations	83 times ranked	2284 citing authors

#	ARTICLE	IF	CITATIONS
1	Robust instance-optimal recovery of sparse signals at unknown noise levels. Information and Inference, 2022, 11, 845-887.	0.9	3
2	Pilot-Based Unsourced Random Access With a Massive MIMO Receiver, Interference Cancellation, and Power Control. IEEE Journal on Selected Areas in Communications, 2022, 40, 1522-1534.	9.7	26
3	Leakage Suppression in Pulse-Shaped OTFS Delay-Doppler-Pilot Channel Estimation. IEEE Wireless Communications Letters, 2022, 11, 1181-1185.	3.2	6
4	Photothermal-SR-Net: A Customized Deep Unfolding Neural Network for Photothermal Super Resolution Imaging. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	2.4	7
5	Deep Unfolding of Iteratively Reweighted ADMM for Wireless RF Sensing. Sensors, 2022, 22, 3065.	2.1	2
6	Short-Term Prediction of Doubly-Dispersive Channels for Pulse-Shaped OTFS using 2D-ConvLSTM. , 2022, , .		1
7	Classification of Spot-Welded Joints in Laser Thermography Data Using Convolutional Neural Networks. IEEE Access, 2021, 9, 48303-48312.	2.6	13
8	Non-Bayesian Activity Detection, Large-Scale Fading Coefficient Estimation, and Unsourced Random Access With a Massive MIMO Receiver. IEEE Transactions on Information Theory, 2021, 67, 2925-2951.	1.5	109
9	Efficient Tuning-Free $l1$-Regression of Nonnegative Compressible Signals. Frontiers in Applied Mathematics and Statistics, 2021, 7, .	0.7	2
10	Pulse-Shaped OTFS over Doubly-Dispersive Channels: One-Tap vs. Full LMMSE Equalizers. , 2021, , .		3
11	Plug-And-Play Learned Gaussian-mixture Approximate Message Passing. , 2021, , .		5
12	SPARCs for Unsourced Random Access. IEEE Transactions on Information Theory, 2021, 67, 6894-6915.	1.5	56
13	Multidimensional Reconstruction of Internal Defects in Additively Manufactured Steel Using Photothermal Super Resolution Combined With Virtual Wave-Based Image Processing. IEEE Transactions on Industrial Informatics, 2021, 17, 7368-7378.	7.2	11
14	Super-resolution for doubly-dispersive channel estimation. Sampling Theory, Signal Processing, and Data Analysis, 2021, 19, 1.	0.8	3
15	Clutter Suppression for Indoor Self-Localization Systems by Iteratively Reweighted Low-Rank Plus Sparse Recovery. Sensors, 2021, 21, 6842.	2.1	2
16	Pilot-Based Unsourced Random Access with a Massive MIMO Receiver in the Quasi-Static Fading Regime. , 2021, , .		16
17	Recovering Structured Data From Superimposed Non-Linear Measurements. IEEE Transactions on Information Theory, 2020, 66, 453-477.	1.5	7
18	MOCZ for Blind Short-Packet Communication: Practical Aspects. IEEE Transactions on Wireless Communications, 2020, 19, 6675-6692.	6.1	11

#	Article	IF	Citations
19	Predictive Quality of Service: Adaptation of Platoon Inter-Vehicle Distance to Packet Inter-Reception Time. , 2020, , .		2
20	Unsourced Multiuser Sparse Regression Codes achieve the Symmetric MAC Capacity. , 2020, , .		7
21	Super resolution laser line scanning thermography. Optics and Lasers in Engineering, 2020, 134, 106279.	2.0	15
22	Photothermal super resolution imaging: A comparison of different thermographic reconstruction techniques. NDT and E International, 2020, 111, 102228.	1.7	13
23	Mobility Modes for Pulse-Shaped OTFS with Linear Equalizer. , 2020, , .		6
24	Laser excited super resolution thermal imaging for nondestructive inspection of internal defects. Scientific Reports, 2020, 10, 22357.	1.6	12
25	Terahertz Dynamic Aperture Imaging at Standoff Distances Using a Compressed Sensing Protocol. IEEE Transactions on Terahertz Science and Technology, 2019, 9, 364-372.	2.0	11
26	SPARCs and AMP for Unsourced Random Access. , 2019, , .		67
27	MOCZ for Blind Short-Packet Communication: Basic Principles. IEEE Transactions on Wireless Communications, 2019, 18, 5080-5097.	6.1	8
28	Sparse Non-Negative Recovery from Shifted Symmetric Subgaussian Measurements using NNLS. , 2019, , .		4
29	Simultaneous Structures in Convex Signal Recovery—Revisiting the Convex Combination of Norms. Frontiers in Applied Mathematics and Statistics, 2019, 5, .	0.7	5
30	Derandomizing Compressed Sensing With Combinatorial Design. Frontiers in Applied Mathematics and Statistics, 2019, 5, .	0.7	6
31	Grant-Free Massive Random Access With a Massive MIMO Receiver. , 2019, , .		33
32	Reconstruction Methods in THz Single-Pixel Imaging. Applied and Numerical Harmonic Analysis, 2019, , 263-290.	0.1	4
33	Mask Responses for Single-Pixel Terahertz Imaging. Scientific Reports, 2018, 8, 4886.	1.6	21
34	Blind Demixing and Deconvolution at Near-Optimal Rate. IEEE Transactions on Information Theory, 2018, 64, 704-727.	1.5	28
35	Robust Nonnegative Sparse Recovery and the Nullspace Property of 0/1 Measurements. IEEE Transactions on Information Theory, 2018, 64, 689-703.	1.5	37
36	Blind Sparse Recovery Using Imperfect Sensor Networks. , 2018, , .		0

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37	C-RAN-Assisted Non-Coherent Grant-Free Random Access Based on Compute-and-Forward. , 2018, , .		0
38	Improved Scaling Law for Activity Detection in Massive MIMO Systems. , 2018, , .		87
39	Generalized Approximate Message Passing for Unlimited Sampling of Sparse Signals. , 2018, , .		30
40	Extrapolated Projection Methods for PAPR Reduction. , 2018, , .		0
41	Towards Massive Connectivity Support for Scalable mMTC Communications in 5G Networks. IEEE Access, 2018, 6, 28969-28992.	2.6	188
42	Compressive Rate Estimation With Applications to Device-to-Device Communications. IEEE Transactions on Wireless Communications, 2018, 17, 7001-7012.	6.1	3
43	On the stability of sparse convolutions. Applied and Computational Harmonic Analysis, 2017, 42, 117-134.	1.1	3
44	Effect of anti-sparse prior on PAPR performance analysis. , 2017, , .		0
45	A new outlier detection method based on anti-sparse representations. , 2017, , .		3
46	Short-message communication and FIR system identification using Huffman sequences. , 2017, , .		5
47	An optically controllable 0.35 THz single-pixel camera for millimeter resolution imaging. , 2017, , .		3
48	Constrained blind deconvolution using Wirtinger flow methods. , 2017, , .		2
49	Blind sparse recovery from superimposed non-linear sensor measurements. , 2017, , .		3
50	Blind demixing and deconvolution with noisy data at near optimal rate. , 2017, , .		3
51	Data aggregation and recovery in wireless sensor networks using compressed sensing. International Journal of Sensor Networks, 2016, 22, 209.	0.2	10
52	Ambiguities on convolutions with applications to phase retrieval. , 2016, , .		4
53	Capacity and degree-of-freedom of OFDM channels with amplitude constraint. , 2016, , .		5
54	Blind deconvolution and compressed sensing. , 2016, , .		10

#	Article	IF	Citations
55	Cognitive Radios Exploiting Gray Spaces via Compressed Sensing. Frequenz, 2016, 70, .	0.6	2
56	Harnessing channel collisions for efficient massive access in 5G networks: A step forward to practical implementation. , 2016, , .		10
57	Robust nonnegative sparse recovery and 0/1-Bernoulli measurements. , 2016, , .		3
58	Identifying non-adjacent multiuser allocations by joint ℓ_1-minimization. , 2016, , .		0
59	Robust message recovery for non-cooperative compute-and-forward relaying. , 2016, , .		3
60	Block compressed sensing based distributed resource allocation for M2M communications. , 2016, , .		8
61	Determining user specific spectrum usage via sparse channel characteristics. , 2015, , .		1
62	Phaseless pilots for OFDM. , 2015, , .		2
63	OFDM channel estimation via phase retrieval. , 2015, , .		10
64	Compressive Random Access Using a Common Overloaded Control Channel. , 2015, , .		43
65	Sparse Signal Processing Concepts for Efficient 5G System Design. IEEE Access, 2015, 3, 195-208.	2.6	193
66	Compressed Sensing in a Fully Non-Mechanical 350 GHz Imaging Setting. Journal of Infrared, Millimeter, and Terahertz Waves, 2015, 36, 496-512.	1.2	27
67	Robust Iterative Interference Alignment for Cellular Networks With Limited Feedback. IEEE Transactions on Wireless Communications, 2015, 14, 882-894.	6.1	23
68	Sparse Model Uncertainties in Compressed Sensing with Application to Convolutions and Sporadic Communication. Applied and Numerical Harmonic Analysis, 2015, , 283-313.	0.1	12
69	Stable recovery from the magnitude of symmetrized fourier measurements. , 2014, , .		8
70	5GNOW: non-orthogonal, asynchronous waveforms for future mobile applications. IEEE Communications Magazine, 2014, 52, 97-105.	4.9	1,043
71	Compressive random access for post-LTE systems. , 2014, , .		68
72	On a reverse ℓ_2-inequality for sparse circular convolutions. , 2013, , .		1

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73	Nearly Doubling the Throughput of Multiuser MIMO Systems Using Codebook Tailored Limited Feedback Protocol. IEEE Transactions on Wireless Communications, 2012, 11, 3921-3931.	6.1	15
74	Multiuser MIMO systems using codebook tailored limited feedback protocol. , 2012, , .		0
75	Approximation of LÃ¶wdin orthogonalization to a spectrally efficient orthogonal overlapping PPM design for UWB impulse radio. Signal Processing, 2012, 92, 649-666.	2.1	6
76	Lowdin Transform on FCC Optimized UWB Pulses. , 2010, , .		3
77	Löwdin's approach for orthogonal pulses for UWB impulse radio. , 2010, , .		2
78	WSSUS Pulse Design Problem in Multicarrier Transmission. IEEE Transactions on Communications, 2007, 55, 1822-1822.	4.9	34
79	The WSSUS Pulse Design Problem in Multicarrier Transmission. IEEE Transactions on Communications, 2007, 55, 1918-1928.	4.9	59
80	On time-variant distortions in multicarrier transmission with application to frequency offsets and phase noise. IEEE Transactions on Communications, 2005, 53, 1561-1570.	4.9	19