Yonina C Eldar

List of Publications by Year in Descending Order

432 papers	14,980 citations	60 h-index	111 g-index
508 ext. papers	20,208 ext. citations	4.8 avg, IF	7.57 L-index

#	Paper	IF	Citations
432	Two-Timescale End-to-End Learning for Channel Acquisition and Hybrid Precoding. *IEEE Journal on Selected Areas in Communications*, **2022**, 40, 163-181	14.2	2
431	Learned Factor Graphs for Inference From Stationary Time Sequences. *IEEE Transactions on Signal Processing*, **2022**, 70, 366-380	4.8	4
430	Integrated Sensing and Communications: Towards Dual-functional Wireless Networks for 6G and Beyond. *IEEE Journal on Selected Areas in Communications*, **2022**, 1-1	14.2	49
429	KalmanNet: Neural Network Aided Kalman Filtering for Partially Known Dynamics. *IEEE Transactions on Signal Processing*, **2022**, 70, 1532-1547	4.8	5
428	Bayesian Estimation of Graph Signals. *IEEE Transactions on Signal Processing*, **2022**, 1-1	4.8	0
427	Mathematical Foundations of AIM **2022**, 37-54		
426	Community Inference from Partially Observed Graph Signals: Algorithms and Analysis. *IEEE Transactions on Signal Processing*, **2022**, 1-1	4.8	
425	Deep Unrolled Recovery in Sparse Biological Imaging: Achieving fast, accurate results. *IEEE Signal Processing Magazine*, **2022**, 39, 45-57	9.4	3
424	FRI-TEM: Time Encoding Sampling of Finite-Rate-of-Innovation Signals. *IEEE Transactions on Signal Processing*, **2022**, 1-1	4.8	0
423	Multimodal Unrolled Robust PCA for Background Foreground Separation.. *IEEE Transactions on Image Processing*, **2022**, 31, 3553-3564	8.7	1
422	Federated Learning: A signal processing perspective. *IEEE Signal Processing Magazine*, **2022**, 39, 14-41	9.4	11
421	Transmit Beamforming with Fixed Covariance for Integrated MIMO Radar and Multiuser Communications **2022**,		1
420	Guest Editorial Special Issue on Integrated Sensing and Communication—Part I. *IEEE Journal on Selected Areas in Communications*, **2022**, 40, 1723-1727	14.2	
419	Deep Unfolding with Normalizing Flow Priors for Inverse Problems. *IEEE Transactions on Signal Processing*, **2022**, 1-1	4.8	
418	Channel Estimation with Simultaneous Reflecting and Sensing Reconfigurable Intelligent Metasurfaces **2021**,		5
417	MIMO Networks with One-Bit ADCs: Receiver Design and Communication Strategies. *IEEE Transactions on Communications*, **2021**, 1-1	6.9	1
416	Cramér-Rao Bound Optimization for Joint Radar-Communication Beamforming. *IEEE Transactions on Signal Processing*, **2021**, 1-1	4.8	15

415	Integrating Domain Knowledge into Deep Networks for Lung Ultrasound with Applications to COVID-19. *IEEE Transactions on Medical Imaging*, **2021**, PP,	11.7	2
414	Mathematical Foundations of AIM **2021**, 1-18		
413	LoRD-Net: Unfolded Deep Detection Network With Low-Resolution Receivers. *IEEE Transactions on Signal Processing*, **2021**, 69, 5651-5664	4.8	8
412	FRaC: FMCW-Based Joint Radar-Communications System Via Index Modulation. *IEEE Journal on Selected Topics in Signal Processing*, **2021**, 15, 1348-1364	7.5	7
411	Deep Tomographic Image Reconstruction: Yesterday, Today, and Tomorrow Editorial for the 2nd Special Issue Machine Learning for Image Reconstruction *IEEE Transactions on Medical Imaging*, **2021**, 40, 2956-2964	11.7	3
410	Algorithm Unrolling: Interpretable, Efficient Deep Learning for Signal and Image Processing. *IEEE Signal Processing Magazine*, **2021**, 38, 18-44	9.4	138
409	Artificial Intelligence and Early Detection of Pancreatic Cancer: 2020 Summative Review. *Pancreas*, **2021**, 50, 251-279	2.6	12
408	Dynamic Metasurface Antennas for 6G Extreme Massive MIMO Communications. *IEEE Wireless Communications*, **2021**, 28, 106-113	13.4	56
407	Communication-efficient federated learning. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	35
406	cSPARCOM: Multi-detector reconstruction by confocal super-resolution correlation microscopy. *Optics Express*, **2021**, 29, 12772-12786	3.3	2
405	Dynamic Metasurface Antennas for MIMO-OFDM Receivers With Bit-Limited ADCs. *IEEE Transactions on Communications*, **2021**, 69, 2643-2659	6.9	11
404	Extended Cantor Arrays with Hole-Free Fourth-Order Difference Co-Arrays **2021**,		3
403	COVID-19 classification of X-ray images using deep neural networks. *European Radiology*, **2021**, 31, 96549663		14
402	Beam Focusing for Multi-User MIMO Communications with Dynamic Metasurface Antennas **2021**,		4
401	**2021**,		4
400	Kalmannet: Data-Driven Kalman Filtering **2021**,		4
399	Bit Constrained Communication Receivers In Joint Radar Communications Systems **2021**,		3
398	Point of Care Image Analysis for COVID-19 **2021**,		4

397	Collaborative Inference via Ensembles on the Edge **2021**,		2
396	Data-Driven Symbol Detection Via Model-Based Machine Learning **2021**,		5
395	Super-Resolution Ultrasound Localization Microscopy Through Deep Learning. *IEEE Transactions on Medical Imaging*, **2021**, 40, 829-839	11.7	19
394	Phase retrieval of low-rank matrices by anchored regression. *Information and Inference*, **2021**, 10, 285-332	2.4	
393	UVeQFed: Universal Vector Quantization for Federated Learning. *IEEE Transactions on Signal Processing*, **2021**, 69, 500-514	4.8	35
392	Phase-Space Function Recovery for Moving Target Imaging in SAR by Convex Optimization. *IEEE Transactions on Computational Imaging*, **2021**, 1-1	4.5	0
391	BiLiMO: Bit-Limited MIMO Radar via Task-Based Quantization. *IEEE Transactions on Signal Processing*, **2021**, 1-1	4.8	1
390	Phase Transitions in Frequency Agile Radar Using Compressed Sensing. *IEEE Transactions on Signal Processing*, **2021**, 69, 4801-4818	4.8	8
389	Sparse Convolutional Beamforming for 3-D Ultrafast Ultrasound Imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 2444-2459	3.2	0
388	Over-the-Air Federated Learning From Heterogeneous Data. *IEEE Transactions on Signal Processing*, **2021**, 69, 3796-3811	4.8	24
387	Massive MIMO as an Extreme Learning Machine. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 1046-1050	6.8	6
386	Ensemble Wrapper Subsampling for Deep Modulation Classification. *IEEE Transactions on Cognitive Communications and Networking*, **2021**, 1-1	6.6	1
385	Introduction to Information Theory and Data Science. **2021**, 1-43		
384	Graph Unrolling Networks: Interpretable Neural Networks for Graph Signal Denoising. *IEEE Transactions on Signal Processing*, **2021**, 69, 3699-3713	4.8	2
383	Deep Learning for Ultrasound Image Formation: CUBDL Evaluation Framework and Open Datasets. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 3466-3483	3.2	10
382	Serial Quantization for Sparse Time Sequences. *IEEE Transactions on Signal Processing*, **2021**, 69, 3299-3314	4.8	
381	Deep Task-Based Quantization. *Entropy*, **2021**, 23,	2.8	16
380	Compressed Ultrasound Imaging: from Sub-Nyquist Rates to Super-Resolution. *IEEE BITS the Information Theory Magazine*, **2021**, 1-1		

379	**2021**,		1
378	Structured LISTA for Multidimensional Harmonic Retrieval. *IEEE Transactions on Signal Processing*, **2021**, 69, 3459-3472	4.8	5
377	Unitary Approximate Message Passing for Sparse Bayesian Learning. *IEEE Transactions on Signal Processing*, **2021**, 1-1	4.8	5
376	Learned Super Resolution Ultrasound for Improved Breast Lesion Characterization. *Lecture Notes in Computer Science*, **2021**, 109-118	0.9	3
375	DeepSIC: Deep Soft Interference Cancellation for Multiuser MIMO Detection. *IEEE Transactions on Wireless Communications*, **2021**, 20, 1349-1362	9.6	17
374	Spatial Modulation for Joint Radar-Communications Systems: Design, Analysis, and Hardware Prototype. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 2283-2298	6.8	18
373	Deep Networks for Direction-of-Arrival Estimation in Low SNR. *IEEE Transactions on Signal Processing*, **2021**, 69, 3714-3729	4.8	9
372	Task-Based Analog-to-Digital Converters. *IEEE Transactions on Signal Processing*, **2021**, 1-1	4.8	4
371	An Information-Theoretic Approach to Analog-to-Digital Compression **2021**, 44-71		
370	Deep Unfolded Recovery of Sub-Nyquist Sampled Ultrasound Images. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 3484-3496	3.2	3
369	Unambiguous Delay-Doppler Recovery From Random Phase Coded Pulses. *IEEE Transactions on Signal Processing*, **2021**, 69, 4991-5004	4.8	1
368	Jointly Learned Symbol Detection and Signal Reflection in RIS-Aided Multi-user MIMO Systems **2021**,		3
367	Deep Soft Interference Cancellation for MIMO Detection **2020**,		7
366	Federated Learning with Quantization Constraints **2020**,		21
365	RF Chain Reduction for MIMO Systems: A Hardware Prototype. *IEEE Systems Journal*, **2020**, 14, 5296-5307	4.3	15
364	Automotive Dual-Function Radar Communications Systems: An Overview **2020**,		1
363	Dynamic Metasurface Antennas for Bit-Constrained MIMO-OFDM Receivers **2020**,		1
362	MAJoRCom: A Dual-Function Radar Communication System Using Index Modulation. *IEEE Transactions on Signal Processing*, **2020**, 68, 3423-3438	4.8	41

361	Super-resolution photoacoustic and ultrasound imaging with sparse arrays. *Scientific Reports*, **2020**, 10, 4637	4.9	11
360	Pilot Sequence Design for Mitigating Pilot Contamination With Reduced RF Chains. *IEEE Transactions on Communications*, **2020**, 68, 3536-3549	6.9	10
359	Blind Phaseless Short-Time Fourier Transform Recovery. *IEEE Transactions on Information Theory*, **2020**, 66, 3232-3241	2.8	9
358	Joint Radar-Communication Strategies for Autonomous Vehicles: Combining Two Key Automotive Technologies. *IEEE Signal Processing Magazine*, **2020**, 37, 85-97	9.4	73
357	Joint Transmit Beamforming for Multiuser MIMO Communications and MIMO Radar. *IEEE Transactions on Signal Processing*, **2020**, 68, 3929-3944	4.8	73
356	ViterbiNet: A Deep Learning Based Viterbi Algorithm for Symbol Detection. *IEEE Transactions on Wireless Communications*, **2020**, 19, 3319-3331	9.6	47
355	Super-resolution Ultrasound Imaging. *Ultrasound in Medicine and Biology*, **2020**, 46, 865-891	3.5	83
354	Efficient and Interpretable Deep Blind Image Deblurring Via Algorithm Unrolling. *IEEE Transactions on Computational Imaging*, **2020**, 6, 666-681	4.5	38
353	Sparse Convolutional Beamforming for Wireless Ultrasound **2020**,		2
352	Complex Trainable Ista for Linear and Nonlinear Inverse Problems **2020**,		3
351	Generalized Sampling on Graphs With Subspace and Smoothness Priors. *IEEE Transactions on Signal Processing*, **2020**, 68, 2272-2286	4.8	10
350	Functional Nonlinear Sparse Models. *IEEE Transactions on Signal Processing*, **2020**, 68, 2449-2463	4.8	2
349	**2020**,		6
348	Learned SPARCOM: unfolded deep super-resolution microscopy. *Optics Express*, **2020**, 28, 27736-27763	3.3	12
347	Enhancing the Kramers-Kronig receiver via dispersion-based spatial diversity. *Optics Letters*, **2020**, 45, 3494-3497	3	3
346	Data-driven symbol detection via model-based machine learning. *Communications in Information and Systems*, **2020**, 20, 283-317	0.8	7
345	Task-based quantization with application to MIMO receivers. *Communications in Information and Systems*, **2020**, 20, 131-162	0.8	7
344	Hardware prototype demonstration of a cognitive radar with sparse array antennas. *Electronics Letters*, **2020**, 56, 1210-1212	1.1	1

343	Convolutional Phase Retrieval via Gradient Descent. *IEEE Transactions on Information Theory*, **2020**, 66, 1785-1821	2.8	8
342	A Block Sparsity Based Estimator for mmWave Massive MIMO Channels With Beam Squint. *IEEE Transactions on Signal Processing*, **2020**, 68, 49-64	4.8	25
341	. *IEEE Transactions on Aerospace and Electronic Systems*, **2020**, 56, 2806-2822	3.7	8
340	Adaptive Ultrasound Beamforming Using Deep Learning. *IEEE Transactions on Medical Imaging*, **2020**, 39, 3967-3978	11.7	39
339	A DFRC System Based on Multi-Carrier Agile FMCW MIMO Radar for Vehicular Applications **2020**,		6
338	Enhanced Channel Estimation in Massive MIMO via Coordinated Pilot Design. *IEEE Transactions on Communications*, **2020**, 68, 6872-6885	6.9	2
337	Multi-Carrier Agile Phased Array Radar. *IEEE Transactions on Signal Processing*, **2020**, 68, 5706-5721	4.8	11
336	The Communication-Aware Clustered Federated Learning Problem **2020**,		11
335	Identifiability Conditions for Compressive Multichannel Blind Deconvolution. *IEEE Transactions on Signal Processing*, **2020**, 68, 4627-4642	4.8	3
334	Data-Driven Factor Graphs for Deep Symbol Detection **2020**,		14
333	On Throughput of Millimeter Wave MIMO Systems with Low Resolution ADCs **2020**,		3
332	Sparse Array Design via Fractal Geometries. *IEEE Transactions on Signal Processing*, **2020**, 68, 4797-4812	4.8	15
331	. *IEEE Signal Processing Magazine*, **2020**, 37, 14-30	9.4	26
330	Deep Learning in Medical Ultrasound: From Image Formation to Image Analysis. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 2477-2480	3.2	4
329	On signal reconstruction from FROG measurements. *Applied and Computational Harmonic Analysis*, **2020**, 48, 1030-1044	3.1	8
328	Sensor calibration for off-the-grid spectral estimation. *Applied and Computational Harmonic Analysis* , **2020**, 48, 570-598	3.1	5
327	Deep Unfolded Robust PCA With Application to Clutter Suppression in Ultrasound. *IEEE Transactions on Medical Imaging*, **2020**, 39, 1051-1063	11.7	61
326	The Capacity of Memoryless Channels With Sampled Cyclostationary Gaussian Noise. *IEEE Transactions on Communications*, **2020**, 68, 106-121	6.9	1

325	The Global Optimization Geometry of Shallow Linear Neural Networks. *Journal of Mathematical Imaging and Vision*, **2020**, 62, 279-292	1.6	3
324	. *IEEE Transactions on Aerospace and Electronic Systems*, **2020**, 56, 937-955	3.7	11
323	Coupled Dictionary Learning for Multi-Contrast MRI Reconstruction. *IEEE Transactions on Medical Imaging*, **2020**, 39, 621-633	11.7	19
322	Deep Learning in Ultrasound Imaging. *Proceedings of the IEEE*, **2020**, 108, 11-29	14.3	78
321	Learning Task-Based Analog-to-Digital Conversion for MIMO Receivers **2020**,		6
320	Coordinated Pilot Design for Massive MIMO **2019**,		3
319	Deep Quantization for MIMO Channel Estimation **2019**,		7
318	iMAP Beamforming for High-Quality High Frame Rate Imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2019**, 66, 1830-1844	3.2	6
317	Dynamic Metasurface Antennas Based Downlink Massive MIMO Systems **2019**,		6
316	Dictionary Learning for Adaptive GPR Landmine Classification. *IEEE Transactions on Geoscience and Remote Sensing*, **2019**, 57, 10036-10055	8.1	14
315	A Dual-Function Radar Communication System Using Index Modulation **2019**,		5
314	Hardware-Limited Task-Based Quantization. *IEEE Transactions on Signal Processing*, **2019**, 67, 5223-5238	4.8	30
313	Radar and Communication Coexistence: An Overview: A Review of Recent Methods. *IEEE Signal Processing Magazine*, **2019**, 36, 85-99	9.4	135
312	Task-Based Quantization for Recovering Quadratic Functions Using Principal Inertia Components **2019**,		16
311	Joint Sampling and Recovery of Correlated Sources **2019**,		4
310	Sub-Nyquist Radar: Principles and Prototypes **2019**, 1-48		
309	Robust Simultaneous Wireless Information and Power Transfer in Beamspace Massive MIMO. *IEEE Transactions on Wireless Communications*, **2019**, 18, 4199-4212	9.6	8
308	Cognitive radar antenna selection via deep learning. *IET Radar, Sonar and Navigation*, **2019**, 13, 871-880	1.4	38

307	Parallel Coordinate Descent Algorithms for Sparse Phase Retrieval **2019**,		5
306	Optimal Number of Measurements in a Linear System With Quadratically Decreasing SNR. *IEEE Transactions on Signal Processing*, **2019**, 67, 2947-2959	4.8	1
305	Deep Learning for Super-resolution Vascular Ultrasound Imaging **2019**,		19
304	Sparse Fractal Array Design with Increased Degrees of Freedom **2019**,		12
303	**2019**,		4
302	Deep Learning for Fast Adaptive Beamforming **2019**,		20
301	Magnetic Resonance Fingerprinting Using a Residual Convolutional Neural Network **2019**,		3
300	A Family of Hybrid Analog□Digital Beamforming Methods for Massive MIMO Systems. *IEEE Transactions on Signal Processing*, **2019**, 67, 3243-3257	4.8	42
299	Deep Convolutional Robust PCA with Application to Ultrasound Imaging **2019**,		5
298	An Algorithm Unrolling Approach to Deep Image Deblurring **2019**,		12
297	Spectral Efficiency of Noncooperative Uplink Massive MIMO Systems with Joint Decoding **2019**,		1
296	Deep Signal Recovery with One-bit Quantization **2019**,		25
295	Exploiting Flow Dynamics for Superresolution in Contrast-Enhanced Ultrasound. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2019**, 66, 1573-1586	3.2	13
294	Asymptotic Task-Based Quantization With Application to Massive MIMO. *IEEE Transactions on Signal Processing*, **2019**, 67, 3995-4012	4.8	20
293	HYDRA: Hybrid deep magnetic resonance fingerprinting. *Medical Physics*, **2019**, 46, 4951-4969	4.4	14
292	Dynamic Metasurface Antennas for Uplink Massive MIMO Systems. *IEEE Transactions on Communications*, **2019**, 67, 6829-6843	6.9	44
291	Frequency Agile Radar Using Atomic Norm Soft Thresholding with Modulations **2019**,		2
290	CNN-Based Cognitive Radar Array Selection **2019**,		2

289	Compressed LISTA Exploiting Toeplitz Structure **2019**,		2
288	Tradeoff Between Delay and High SNR Capacity in Quantized MIMO Systems **2019**,		6
287	Rapid quantum image scanning microscopy by joint sparse reconstruction. *Optica*, **2019**, 6, 1290	8.6	10
286	. *IEEE Signal Processing Magazine*, **2019**, 36, 125-131	9.4	1
285	SPARCOM: Sparsity Based Super-resolution Correlation Microscopy. *SIAM Journal on Imaging Sciences*, **2019**, 12, 392-419	1.9	14
284	Multi-Carrier Agile Phased Array Radar **2019**,		2
283	Deep Neural Network Symbol Detection for Millimeter Wave Communications **2019**,		9
282	Serial Quantization for Representing Sparse Signals **2019**,		2
281	Deep-Sparse Array Cognitive Radar **2019**,		5
280	Modeling and Recovery of Graph Signals and Difference-Based Signals **2019**,		6
279	Beam Alignment and Tracking for Autonomous Vehicular Communication using IEEE 802.11ad-based Radar **2019**,		15
278	On Multiterminal Communication over MIMO Channels with One-bit ADCs at the Receivers **2019**,		5
277	Frequency-Resolved Optical Gating Recovery via Smoothing Gradient. *IEEE Transactions on Signal Processing*, **2019**, 67, 6121-6132	4.8	1
276	Hardware-Limited Task-Based Quantization **2019**,		2
275	Semi-Supervised Learning in Network-Structured Data via Total Variation Minimization. *IEEE Transactions on Signal Processing*, **2019**, 67, 6256-6269	4.8	7
274	Deep Learning for Interference Identification: Band, Training SNR, and Sample Selection **2019**,		13
273	On the Sample Complexity of Multichannel Frequency Estimation via Convex Optimization. *IEEE Transactions on Information Theory*, **2019**, 65, 2302-2315	2.8	12
272	The Distortion-Rate Function of Sampled Wiener Processes. *IEEE Transactions on Information Theory*, **2019**, 65, 482-499	2.8	8

271	Sampling and Super Resolution of Sparse Signals Beyond the Fourier Domain. *IEEE Transactions on Signal Processing*, **2019**, 67, 1508-1521	4.8	7
270	TenDSuR: Tensor-Based 4D Sub-Nyquist Radar. *IEEE Signal Processing Letters*, **2019**, 26, 237-241	3.2	11
269	On the Spectral Efficiency of Noncooperative Uplink Massive MIMO Systems. *IEEE Transactions on Communications*, **2019**, 67, 1956-1971	6.9	10
268	Guest Editorial Special Issue on Sparsity Driven Methods in Medical Ultrasound. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 297-299	3.2	
267	On Fienup Methods for Sparse Phase Retrieval. *IEEE Transactions on Signal Processing*, **2018**, 66, 982-991	4.8	24
266	Sparse Estimation of Faults by Compressed Sensing With Structural Constraints. *IEEE Transactions on Power Systems*, **2018**, 33, 5935-5944	7	5
265	Analog-to-Digital Cognitive Radio: Sampling, Detection, and Hardware. *IEEE Signal Processing Magazine*, **2018**, 35, 137-166	9.4	40
264	Tradeoffs Between Convergence Speed and Reconstruction Accuracy in Inverse Problems. *IEEE Transactions on Signal Processing*, **2018**, 66, 1676-1690	4.8	27
263	The Distortion Rate Function of Cyclostationary Gaussian Processes. *IEEE Transactions on Information Theory*, **2018**, 64, 3810-3824	2.8	11
262	Analog-to-Digital Compression: A New Paradigm for Converting Signals to Bits. *IEEE Signal Processing Magazine*, **2018**, 35, 16-39	9.4	26
261	. *IEEE Transactions on Aerospace and Electronic Systems*, **2018**, 54, 1279-1296	3.7	54
260	Centralized Identification of Imbalances in Power Networks With Synchrophasor Data. *IEEE Transactions on Power Systems*, **2018**, 33, 1981-1992	7	9
259	13-fold resolution gain through turbid layer via translated unknown speckle illumination. *Biomedical Optics Express*, **2018**, 9, 260-275	3.5	20
258	Sparsity-based super-resolution microscopy from correlation information. *Optics Express*, **2018**, 26, 18238-18269	3.5	23
257	Fourier-Domain Beamforming and Structure-Based Reconstruction for Plane-Wave Imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 1810-1821	3.2	12
256	. *IEEE Transactions on Information Theory*, **2018**, 64, 6013-6033	2.8	15
255	SUMMeR: Sub-Nyquist MIMO Radar. *IEEE Transactions on Signal Processing*, **2018**, 66, 4315-4330	4.8	31
254	Non-Convex Phase Retrieval From STFT Measurements. *IEEE Transactions on Information Theory*, **2018**, 64, 467-484	2.8	46

253	Measurement Matrix Design for Phase Retrieval Based on Mutual Information. *IEEE Transactions on Signal Processing*, **2018**, 66, 324-339	4.8	3
252	Blind Detection for Ambient Backscatter Communication System with Multiple-Antenna tags **2018**,		4
251	Coupled Dictionary Learning for Multi-Contrast MRI Reconstruction **2018**,		5
250	The Nystrom Extension for Signals Defined on a Graph **2018**,		2
249	CramÉRao Lower Bound on AoA Estimation Using an RF Lens-Embedded Antenna Array. *IEEE Antennas and Wireless Propagation Letters*, **2018**, 17, 2359-2363	3.8	3
248	**2018**,		13
247	Subspace Estimation From Incomplete Observations: A High-Dimensional Analysis. *IEEE Journal on Selected Topics in Signal Processing*, **2018**, 12, 1240-1252	7.5	4
246	SUSHI: Sparsity-Based Ultrasound Super-Resolution Hemodynamic Imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 2365-2380	3.2	40
245	. *IEEE Signal Processing Magazine*, **2018**, 35, 35-58	9.4	27
244	Analysis of Frequency Agile Radar via Compressed Sensing. *IEEE Transactions on Signal Processing*, **2018**, 66, 6228-6240	4.8	29
243	Graph Sampling with and Without Input Priors **2018**,		7
242	Optimized Sparse Array Design Based on the Sum Coarray **2018**,		6
241	Sparse Doppler Sensing Based on Nested Arrays. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 2349-2364	3.2	10
240	Sparse Convolutional Beamforming for Ultrasound Imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 2390-2406	3.2	35
239	The Learned Inexact Project Gradient Descent Algorithm **2018**,		4
238	Single Letter Formulas for Quantized Compressed Sensing with Gaussian Codebooks **2018**,		12
237	Solving Systems of Random Quadratic Equations via Truncated Amplitude Flow. *IEEE Transactions on Information Theory*, **2018**, 64, 773-794	2.8	119
236	Low-rank magnetic resonance fingerprinting. *Medical Physics*, **2018**, 45, 4066	4.4	22

235	CaSCADE: Compressed Carrier and DOA Estimation. *IEEE Transactions on Signal Processing*, **2017**, 65, 2645-2658	4.8	63
234	A Mixer Front End for a Four-Channel Modulated Wideband Converter With 62-dB Blocker Rejection. *IEEE Journal of Solid-State Circuits*, **2017**, 52, 1286-1294	5.5	18
233	On the Minimax Capacity Loss Under Sub-Nyquist Universal Sampling. *IEEE Transactions on Information Theory*, **2017**, 63, 3348-3367	2.8	5
232	Sub-Nyquist MIMO radar prototype with Doppler processing **2017**,		3
231	High spatial resolution radar using thinned arrays **2017**,		12
230	Performance of time delay estimation in a cognitive radar **2017**,		11
229	Sub-Nyquist Cyclostationary Detection for Cognitive Radio. *IEEE Transactions on Signal Processing*, **2017**, 65, 3004-3019	4.8	49
228	On the 2D Phase Retrieval Problem. *IEEE Transactions on Signal Processing*, **2017**, 65, 1058-1067	4.8	10
227	Sparsity-driven super-localization in clinical contrast-enhanced ultrasound **2017**,		5
226	Sub-Nyquist SAR via Fourier Domain Range-Doppler Processing. *IEEE Transactions on Geoscience and Remote Sensing*, **2017**, 55, 6228-6244	8.1	28
225	Sparsity-Based Super Resolution for SEM Images. *Nano Letters*, **2017**, 17, 5437-5445	11.5	5
224	PEAR: PEriodic And fixed Rank separation for fast fMRI. *Medical Physics*, **2017**, 44, 6166-6182	4.4	7
223	**2017**,		6
222	Estimation in autoregressive processes with partial observations **2017**,		5
221	On the Uniqueness of FROG Methods. *IEEE Signal Processing Letters*, **2017**, 24, 722-726	3.2	24
220	Low-Rank Phase Retrieval. *IEEE Transactions on Signal Processing*, **2017**, 65, 4059-4074	4.8	26
219	Sparsity based super-resolution optical imaging using correlation information **2017**,		3
218	Sparse emission pattern in spectral blood Doppler **2017**,		3

217	Fast Vascular Ultrasound Imaging With Enhanced Spatial Resolution and Background Rejection. *IEEE Transactions on Medical Imaging*, **2017**, 36, 169-180	11.7	67
216	Xampling-enabled coexistence in spectrally crowded environments **2017**,		1
215	Spectrum Sharing Solution for Automotive Radar **2017**,		16
214	The network nullspace property for compressed sensing over networks **2017**,		4
213	Pilot contamination mitigation with reduced RF chains **2017**,		7
212	Revealing true coupling strengths in two-dimensional spectroscopy with sparsity-based signal recovery. *Light: Science and Applications*, **2017**, 6, e17115	16.7	5
211	Sub-Nyquist channel estimation over IEEE 802.11ad link **2017**,		14
210	Phase retrieval from STFT measurements via non-convex optimization **2017**,		4
209	Fundamental estimation limits in autoregressive processes with compressive measurements **2017**,		3
208	A unified view of diffusion maps and signal processing on graphs **2017**,		8
207	Sparsity-driven super-resolution in clinical contrast-enhanced ultrasound **2017**,		17
206	Compressed sensing under optimal quantization **2017**,		19
205	A general framework for MIMO receivers with low-resolution quantization **2017**,		13
204	Online dictionary learning aided target recognition in cognitive GPR **2017**,		2
203	Photoacoustic imaging beyond the acoustic diffraction-limit with dynamic speckle illumination and sparse joint support recovery. *Optics Express*, **2017**, 25, 4875-4886	3.3	28
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