

# Yonina C Eldar

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/9268353/yonina-c-eldar-publications-by-citations.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Block-Sparse Signals: Uncertainty Relations and Efficient Recovery. <i>IEEE Transactions on Signal Processing</i> , <b>2010</b> , 58, 3042-3054	4.8	741
431	. <i>IEEE Transactions on Signal Processing</i> , <b>2011</b> , 59, 4053-4085	4.8	693
430	From Theory to Practice: Sub-Nyquist Sampling of Sparse Wideband Analog Signals. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2010</b> , 4, 375-391	7.5	612
429	Robust Recovery of Signals From a Structured Union of Subspaces. <i>IEEE Transactions on Information Theory</i> , <b>2009</b> , 55, 5302-5316	2.8	571
428	Compressed sensing with coherent and redundant dictionaries. <i>Applied and Computational Harmonic Analysis</i> , <b>2011</b> , 31, 59-73	3.1	501
427	. <i>IEEE Signal Processing Magazine</i> , <b>2015</b> , 32, 87-109	9.4	496
426	Blind Multiband Signal Reconstruction: Compressed Sensing for Analog Signals. <i>IEEE Transactions on Signal Processing</i> , <b>2009</b> , 57, 993-1009	4.8	451
425	Zero-Forcing Precoding and Generalized Inverses. <i>IEEE Transactions on Signal Processing</i> , <b>2008</b> , 56, 4409-4418	4.8	339
424	Average Case Analysis of Multichannel Sparse Recovery Using Convex Relaxation. <i>IEEE Transactions on Information Theory</i> , <b>2010</b> , 56, 505-519	2.8	258
423	Shrinkage Algorithms for MMSE Covariance Estimation. <i>IEEE Transactions on Signal Processing</i> , <b>2010</b> , 58, 5016-5029	4.8	224
422	Rank Awareness in Joint Sparse Recovery. <i>IEEE Transactions on Information Theory</i> , <b>2012</b> , 58, 1135-1146	2.8	209
421	Phase Retrieval via Matrix Completion. <i>SIAM Review</i> , <b>2015</b> , 57, 225-251	7.4	200
420	Reduce and Boost: Recovering Arbitrary Sets of Jointly Sparse Vectors. <i>IEEE Transactions on Signal Processing</i> , <b>2008</b> , 56, 4692-4702	4.8	197
419	Direction of Arrival Estimation Using Co-Prime Arrays: A Super Resolution Viewpoint. <i>IEEE Transactions on Signal Processing</i> , <b>2014</b> , 62, 5565-5576	4.8	185
418	GESPAR: Efficient Phase Retrieval of Sparse Signals. <i>IEEE Transactions on Signal Processing</i> , <b>2014</b> , 62, 928-938	4.8	182
417	Innovation Rate Sampling of Pulse Streams With Application to Ultrasound Imaging. <i>IEEE Transactions on Signal Processing</i> , <b>2011</b> , 59, 1827-1842	4.8	176
416	Strong Duality in Nonconvex Quadratic Optimization with Two Quadratic Constraints. <i>SIAM Journal on Optimization</i> , <b>2006</b> , 17, 844-860	2	171

415	Xampling: Signal Acquisition and Processing in Union of Subspaces. <i>IEEE Transactions on Signal Processing</i> , <b>2011</b> , 59, 4719-4734	4.8	160
414	Spatial Compressive Sensing for MIMO Radar. <i>IEEE Transactions on Signal Processing</i> , <b>2014</b> , 62, 419-430	4.8	159
413	Blind Compressed Sensing. <i>IEEE Transactions on Information Theory</i> , <b>2011</b> , 57, 6958-6975	2.8	146
412	Coherence-Based Performance Guarantees for Estimating a Sparse Vector Under Random Noise. <i>IEEE Transactions on Signal Processing</i> , <b>2010</b> , 58, 5030-5043	4.8	141
411	Algorithm Unrolling: Interpretable, Efficient Deep Learning for Signal and Image Processing. <i>IEEE Signal Processing Magazine</i> , <b>2021</b> , 38, 18-44	9.4	138
410	Radar and Communication Coexistence: An Overview: A Review of Recent Methods. <i>IEEE Signal Processing Magazine</i> , <b>2019</b> , 36, 85-99	9.4	135
409	Sparsity Constrained Nonlinear Optimization: Optimality Conditions and Algorithms. <i>SIAM Journal on Optimization</i> , <b>2013</b> , 23, 1480-1509	2	135
408	Generalized SURE for Exponential Families: Applications to Regularization. <i>IEEE Transactions on Signal Processing</i> , <b>2009</b> , 57, 471-481	4.8	133
407	Compressed Beamforming in Ultrasound Imaging. <i>IEEE Transactions on Signal Processing</i> , <b>2012</b> , 60, 4643-4657	4.8	132
406	Super-resolution and reconstruction of sparse sub-wavelength images. <i>Optics Express</i> , <b>2009</b> , 17, 23920-23933	5.3	127
405	Sampling with Arbitrary Sampling and Reconstruction Spaces and Oblique Dual Frame Vectors. <i>Journal of Fourier Analysis and Applications</i> , <b>2003</b> , 9, 77-96	1.1	121
404	Solving Systems of Random Quadratic Equations via Truncated Amplitude Flow. <i>IEEE Transactions on Information Theory</i> , <b>2018</b> , 64, 773-794	2.8	119
403	Time-Delay Estimation From Low-Rate Samples: A Union of Subspaces Approach. <i>IEEE Transactions on Signal Processing</i> , <b>2010</b> , 58, 3017-3031	4.8	116
402	. <i>IEEE Signal Processing Magazine</i> , <b>2011</b> , 28, 98-124	9.4	113
401	Sensing Matrix Optimization for Block-Sparse Decoding. <i>IEEE Transactions on Signal Processing</i> , <b>2011</b> , 59, 4300-4312	4.8	108
400	The Cram�r-Rao Bound for Estimating a Sparse Parameter Vector. <i>IEEE Transactions on Signal Processing</i> , <b>2010</b> , 58, 3384-3389	4.8	108
399	Noise Folding in Compressed Sensing. <i>IEEE Signal Processing Letters</i> , <b>2011</b> , 18, 478-481	3.2	108
398	eQED: an efficient method for interpreting eQTL associations using protein networks. <i>Molecular Systems Biology</i> , <b>2008</b> , 4, 162	12.2	108

397	C-HiLasso: A Collaborative Hierarchical Sparse Modeling Framework. <i>IEEE Transactions on Signal Processing</i> , <b>2011</b> , 59, 4183-4198	4.8	107
396	Sparsity based sub-wavelength imaging with partially incoherent light via quadratic compressed sensing. <i>Optics Express</i> , <b>2011</b> , 19, 14807-22	3.3	103
395	Simultaneously Structured Models With Application to Sparse and Low-Rank Matrices. <i>IEEE Transactions on Information Theory</i> , <b>2015</b> , 61, 2886-2908	2.8	101
394	Sub-Nyquist Radar via Doppler Focusing. <i>IEEE Transactions on Signal Processing</i> , <b>2014</b> , 62, 1796-1811	4.8	98
393	Compressed Sensing of Analog Signals in Shift-Invariant Spaces. <i>IEEE Transactions on Signal Processing</i> , <b>2009</b> , 57, 2986-2997	4.8	97
392	Multichannel Sampling of Pulse Streams at the Rate of Innovation. <i>IEEE Transactions on Signal Processing</i> , <b>2011</b> , 59, 1491-1504	4.8	91
391	Exploiting Statistical Dependencies in Sparse Representations for Signal Recovery. <i>IEEE Transactions on Signal Processing</i> , <b>2012</b> , 60, 2286-2303	4.8	88
390	Fourier-domain beamforming: the path to compressed ultrasound imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2014</b> , 61, 1252-67	3.2	85
389	Phase retrieval: Stability and recovery guarantees. <i>Applied and Computational Harmonic Analysis</i> , <b>2014</b> , 36, 473-494	3.1	85
388	Super-resolution Ultrasound Imaging. <i>Ultrasound in Medicine and Biology</i> , <b>2020</b> , 46, 865-891	3.5	83
387	Deep Learning in Ultrasound Imaging. <i>Proceedings of the IEEE</i> , <b>2020</b> , 108, 11-29	14.3	78
386	Beyond bandlimited sampling. <i>IEEE Signal Processing Magazine</i> , <b>2009</b> , 26, 48-68	9.4	77
385	PETRELS: Parallel Subspace Estimation and Tracking by Recursive Least Squares From Partial Observations. <i>IEEE Transactions on Signal Processing</i> , <b>2013</b> , 61, 5947-5959	4.8	74
384	Joint Radar-Communication Strategies for Autonomous Vehicles: Combining Two Key Automotive Technologies. <i>IEEE Signal Processing Magazine</i> , <b>2020</b> , 37, 85-97	9.4	73
383	Joint Transmit Beamforming for Multiuser MIMO Communications and MIMO Radar. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 3929-3944	4.8	73
382	Sub-Nyquist Sampling for Power Spectrum Sensing in Cognitive Radios: A Unified Approach. <i>IEEE Transactions on Signal Processing</i> , <b>2014</b> , 62, 3897-3910	4.8	73
381	Wideband Spectrum Sensing at Sub-Nyquist Rates [Applications Corner]. <i>IEEE Signal Processing Magazine</i> , <b>2011</b> , 28, 102-135	9.4	70
380	Identification of Parametric Underspread Linear Systems and Super-Resolution Radar. <i>IEEE Transactions on Signal Processing</i> , <b>2011</b> , 59, 2548-2561	4.8	70

379	Dictionary Optimization for Block-Sparse Representations. <i>IEEE Transactions on Signal Processing</i> , <b>2012</b> , 60, 2386-2395	4.8	69
378	Fast Vascular Ultrasound Imaging With Enhanced Spatial Resolution and Background Rejection. <i>IEEE Transactions on Medical Imaging</i> , <b>2017</b> , 36, 169-180	11.7	67
377	. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , <b>2014</b> , 50, 809-822	3.7	65
376	Acceleration of randomized Kaczmarz method via the Johnson–Lindenstrauss Lemma. <i>Numerical Algorithms</i> , <b>2011</b> , 58, 163-177	2.1	64
375	CaSCADE: Compressed Carrier and DOA Estimation. <i>IEEE Transactions on Signal Processing</i> , <b>2017</b> , 65, 2645-2658	4.8	63
374	Sparse Phase Retrieval from Short-Time Fourier Measurements. <i>IEEE Signal Processing Letters</i> , <b>2015</b> , 22, 638-642	3.2	63
373	Deep Unfolded Robust PCA With Application to Clutter Suppression in Ultrasound. <i>IEEE Transactions on Medical Imaging</i> , <b>2020</b> , 39, 1051-1063	11.7	61
372	Compressed sensing for longitudinal MRI: An adaptive-weighted approach. <i>Medical Physics</i> , <b>2015</b> , 42, 5195-208	4.4	59
371	Rethinking biased estimation [Lecture Notes]. <i>IEEE Signal Processing Magazine</i> , <b>2008</b> , 25, 133-136	9.4	59
370	Dynamic Metasurface Antennas for 6G Extreme Massive MIMO Communications. <i>IEEE Wireless Communications</i> , <b>2021</b> , 28, 106-113	13.4	56
369	. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , <b>2018</b> , 54, 1279-1296	3.7	54
368	Super-resolution and reconstruction of sparse images carried by incoherent light. <i>Optics Letters</i> , <b>2010</b> , 35, 1148-50	3	53
367	Smoothing and Decomposition for Analysis Sparse Recovery. <i>IEEE Transactions on Signal Processing</i> , <b>2014</b> , 62, 1762-1774	4.8	51
366	Sub-Nyquist Cyclostationary Detection for Cognitive Radio. <i>IEEE Transactions on Signal Processing</i> , <b>2017</b> , 65, 3004-3019	4.8	49
365	Integrated Sensing and Communications: Towards Dual-functional Wireless Networks for 6G and Beyond. <i>IEEE Journal on Selected Areas in Communications</i> , <b>2022</b> , 1-1	14.2	49
364	ViterbiNet: A Deep Learning Based Viterbi Algorithm for Symbol Detection. <i>IEEE Transactions on Wireless Communications</i> , <b>2020</b> , 19, 3319-3331	9.6	47
363	Distributed Compressed Sensing for Static and Time-Varying Networks. <i>IEEE Transactions on Signal Processing</i> , <b>2014</b> , 62, 4931-4946	4.8	46
362	Non-Convex Phase Retrieval From STFT Measurements. <i>IEEE Transactions on Information Theory</i> , <b>2018</b> , 64, 467-484	2.8	46

361	Dynamic Metasurface Antennas for Uplink Massive MIMO Systems. <i>IEEE Transactions on Communications</i> , <b>2019</b> , 67, 6829-6843	6.9	44
360	STFT Phase Retrieval: Uniqueness Guarantees and Recovery Algorithms. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2016</b> , 10, 770-781	7.5	44
359	GENERAL FRAMEWORK FOR CONSISTENT SAMPLING IN HILBERT SPACES. <i>International Journal of Wavelets, Multiresolution and Information Processing</i> , <b>2005</b> , 03, 347-359	0.9	43
358	A Family of Hybrid Analog/Digital Beamforming Methods for Massive MIMO Systems. <i>IEEE Transactions on Signal Processing</i> , <b>2019</b> , 67, 3243-3257	4.8	42
357	Single-beam spectrally controlled two-dimensional Raman spectroscopy. <i>Nature Photonics</i> , <b>2015</b> , 9, 339-343	3.9	41
356	MAJoRCom: A Dual-Function Radar Communication System Using Index Modulation. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 3423-3438	4.8	41
355	Analog-to-Digital Cognitive Radio: Sampling, Detection, and Hardware. <i>IEEE Signal Processing Magazine</i> , <b>2018</b> , 35, 137-166	9.4	40
354	SUSHI: Sparsity-Based Ultrasound Super-Resolution Hemodynamic Imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2018</b> , 65, 2365-2380	3.2	40
353	On the Constrained Cram�er-Rao Bound With a Singular Fisher Information Matrix. <i>IEEE Signal Processing Letters</i> , <b>2009</b> , 16, 453-456	3.2	39
352	Nonuniform Sampling of Periodic Bandlimited Signals. <i>IEEE Transactions on Signal Processing</i> , <b>2008</b> , 56, 2728-2745	4.8	39
351	Doubly Constrained Robust Capon Beamformer With Ellipsoidal Uncertainty Sets. <i>IEEE Transactions on Signal Processing</i> , <b>2007</b> , 55, 753-758	4.8	39
350	Adaptive Ultrasound Beamforming Using Deep Learning. <i>IEEE Transactions on Medical Imaging</i> , <b>2020</b> , 39, 3967-3978	11.7	39
349	Cognitive radar antenna selection via deep learning. <i>IET Radar, Sonar and Navigation</i> , <b>2019</b> , 13, 871-880	1.4	38
348	Efficient and Interpretable Deep Blind Image Deblurring Via Algorithm Unrolling. <i>IEEE Transactions on Computational Imaging</i> , <b>2020</b> , 6, 666-681	4.5	38
347	Phase Retrieval from 1D Fourier Measurements: Convexity, Uniqueness, and Algorithms. <i>IEEE Transactions on Signal Processing</i> , <b>2016</b> , 64, 6105-6117	4.8	38
346	Near-Oracle Performance of Greedy Block-Sparse Estimation Techniques From Noisy Measurements. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2011</b> , 5, 1032-1047	7.5	36
345	Distortion Rate Function of Sub-Nyquist Sampled Gaussian Sources. <i>IEEE Transactions on Information Theory</i> , <b>2016</b> , 62, 401-429	2.8	35
344	Communication-efficient federated learning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	35

343	UVeQFed: Universal Vector Quantization for Federated Learning. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 69, 500-514	4.8	35
342	Sparse Convolutional Beamforming for Ultrasound Imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2018</b> , 65, 2390-2406	3.2	35
341	Generalized Shift-Invariant Systems and Frames for Subspaces. <i>Journal of Fourier Analysis and Applications</i> , <b>2005</b> , 11, 299-313	1.1	33
340	SUMMeR: Sub-Nyquist MIMO Radar. <i>IEEE Transactions on Signal Processing</i> , <b>2018</b> , 66, 4315-4330	4.8	31
339	Robust Downlink Beamforming With Partial Channel State Information for Conventional and Cognitive Radio Networks. <i>IEEE Transactions on Signal Processing</i> , <b>2013</b> , 61, 3656-3670	4.8	31
338	Hardware-Limited Task-Based Quantization. <i>IEEE Transactions on Signal Processing</i> , <b>2019</b> , 67, 5223-5238	4.8	30
337	. <i>IEEE Transactions on Signal Processing</i> , <b>2016</b> , 64, 6485-6500	4.8	30
336	Xampling at the Rate of Innovation. <i>IEEE Transactions on Signal Processing</i> , <b>2012</b> , 60, 1121-1133	4.8	30
335	A Competitive Mean-Squared Error Approach to Beamforming. <i>IEEE Transactions on Signal Processing</i> , <b>2007</b> , 55, 5143-5154	4.8	30
334	Analysis of Frequency Agile Radar via Compressed Sensing. <i>IEEE Transactions on Signal Processing</i> , <b>2018</b> , 66, 6228-6240	4.8	29
333	Sub-Nyquist SAR via Fourier Domain Range-Doppler Processing. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2017</b> , 55, 6228-6244	8.1	28
332	Photoacoustic imaging beyond the acoustic diffraction-limit with dynamic speckle illumination and sparse joint support recovery. <i>Optics Express</i> , <b>2017</b> , 25, 4875-4886	3.3	28
331	Single-frame rapid autofocusing for brightfield and fluorescence whole slide imaging. <i>Biomedical Optics Express</i> , <b>2016</b> , 7, 4763-4768	3.5	28
330	Tradeoffs Between Convergence Speed and Reconstruction Accuracy in Inverse Problems. <i>IEEE Transactions on Signal Processing</i> , <b>2018</b> , 66, 1676-1690	4.8	27
329	Sub-Nyquist Sampling of Short Pulses. <i>IEEE Transactions on Signal Processing</i> , <b>2012</b> , 60, 1134-1148	4.8	27
328	. <i>IEEE Signal Processing Magazine</i> , <b>2018</b> , 35, 35-58	9.4	27
327	Analog-to-Digital Compression: A New Paradigm for Converting Signals to Bits. <i>IEEE Signal Processing Magazine</i> , <b>2018</b> , 35, 16-39	9.4	26
326	Low-Rank Phase Retrieval. <i>IEEE Transactions on Signal Processing</i> , <b>2017</b> , 65, 4059-4074	4.8	26

325	. <i>IEEE Signal Processing Magazine</i> , <b>2020</b> , 37, 14-30	9.4	26
324	Deep Signal Recovery with One-bit Quantization <b>2019</b> ,		25
323	. <i>IEEE Transactions on Signal Processing</i> , <b>2008</b> , 56, 1388-1397	4.8	25
322	Optimization of the MIMO Compound Capacity. <i>IEEE Transactions on Wireless Communications</i> , <b>2007</b> , 6, 1094-1101	9.6	25
321	An $\mathcal{L}_1$ -Method for the Design of Linear-Phase FIR Digital Filters. <i>IEEE Transactions on Signal Processing</i> , <b>2007</b> , 55, 5253-5266	4.8	25
320	Blind Minimax Estimation. <i>IEEE Transactions on Information Theory</i> , <b>2007</b> , 53, 3145-3157	2.8	25
319	Fourier Phase Retrieval: Uniqueness and Algorithms. <i>Applied and Numerical Harmonic Analysis</i> , <b>2017</b> , 55-91	0.6	25
318	A Block Sparsity Based Estimator for mmWave Massive MIMO Channels With Beam Squint. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 49-64	4.8	25
317	On Fienup Methods for Sparse Phase Retrieval. <i>IEEE Transactions on Signal Processing</i> , <b>2018</b> , 66, 982-991	4.8	24
316	Shannon Meets Nyquist: Capacity of Sampled Gaussian Channels. <i>IEEE Transactions on Information Theory</i> , <b>2013</b> , 59, 4889-4914	2.8	24
315	On the Uniqueness of FROG Methods. <i>IEEE Signal Processing Letters</i> , <b>2017</b> , 24, 722-726	3.2	24
314	Over-the-Air Federated Learning From Heterogeneous Data. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 69, 3796-3811	4.8	24
313	Sub-Nyquist Sampling and Fourier Domain Beamforming in Volumetric Ultrasound Imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2016</b> , 63, 703-16	3.2	23
312	Sparsity-based super-resolution microscopy from correlation information. <i>Optics Express</i> , <b>2018</b> , 26, 18233-18269	3.3	23
311	A Lower Bound on the Bayesian MSE Based on the Optimal Bias Function. <i>IEEE Transactions on Information Theory</i> , <b>2009</b> , 55, 5179-5196	2.8	23
310	Bayesian filtering in spiking neural networks: noise, adaptation, and multisensory integration. <i>Neural Computation</i> , <b>2009</b> , 21, 1277-320	2.9	23
309	Sparsity-based super-resolved coherent diffraction imaging of one-dimensional objects. <i>Nature Communications</i> , <b>2015</b> , 6, 8209	17.4	22
308	Expected RIP: Conditioning of The modulated wideband converter <b>2009</b> ,		22



307	Regularization in Regression with Bounded Noise: A Chebyshev Center Approach. <i>SIAM Journal on Matrix Analysis and Applications</i> , <b>2007</b> , 29, 606-625	1.5	22
306	Low-rank magnetic resonance fingerprinting. <i>Medical Physics</i> , <b>2018</b> , 45, 4066	4.4	22
305	Federated Learning with Quantization Constraints <b>2020</b> ,		21
304	Deep Learning for Fast Adaptive Beamforming <b>2019</b> ,		20
303	13-fold resolution gain through turbid layer via translated unknown speckle illumination. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 260-275	3.5	20
302	Asymptotic Task-Based Quantization With Application to Massive MIMO. <i>IEEE Transactions on Signal Processing</i> , <b>2019</b> , 67, 3995-4012	4.8	20
301	Hypoxia causes connexin 43 internalization in neonatal rat ventricular myocytes. <i>General Physiology and Biophysics</i> , <b>2010</b> , 29, 222-33	2.1	20
300	GENERAL FRAMEWORK FOR CONSISTENT SAMPLING IN HILBERT SPACES. <i>International Journal of Wavelets, Multiresolution and Information Processing</i> , <b>2005</b> , 03, 497-509	0.9	20
299	Reference-based MRI. <i>Medical Physics</i> , <b>2016</b> , 43, 5357	4.4	20
298	Deep Learning for Super-resolution Vascular Ultrasound Imaging <b>2019</b> ,		19
297	GPS signal acquisition via compressive multichannel sampling. <i>Physical Communication</i> , <b>2012</b> , 5, 173-184	2.2	19
296	Compressed sensing under optimal quantization <b>2017</b> ,		19
295	Modulated wideband converter with non-ideal lowpass filters <b>2010</b> ,		19
294	PETRELS: Subspace estimation and tracking from partial observations <b>2012</b> ,		19
293	Coupled Dictionary Learning for Multi-Contrast MRI Reconstruction. <i>IEEE Transactions on Medical Imaging</i> , <b>2020</b> , 39, 621-633	11.7	19
292	Super-Resolution Ultrasound Localization Microscopy Through Deep Learning. <i>IEEE Transactions on Medical Imaging</i> , <b>2021</b> , 40, 829-839	11.7	19
291	A Mixer Front End for a Four-Channel Modulated Wideband Converter With 62-dB Blocker Rejection. <i>IEEE Journal of Solid-State Circuits</i> , <b>2017</b> , 52, 1286-1294	5.5	18
290	Spatial Modulation for Joint Radar-Communications Systems: Design, Analysis, and Hardware Prototype. <i>IEEE Transactions on Vehicular Technology</i> , <b>2021</b> , 70, 2283-2298	6.8	18

289	Cognitive sub-Nyquist hardware prototype of a collocated MIMO radar <b>2016</b> ,		17
288	Sparsity-driven super-resolution in clinical contrast-enhanced ultrasound <b>2017</b> ,		17
287	On conditions for uniqueness in sparse phase retrieval <b>2014</b> ,		17
286	Reduced-Dimension Multiuser Detection. <i>IEEE Transactions on Information Theory</i> , <b>2013</b> , 59, 3858-3874	2.8	17
285	Uncertainty Relations for Shift-Invariant Analog Signals. <i>IEEE Transactions on Information Theory</i> , <b>2009</b> , 55, 5742-5757	2.8	17
284	Robust and Consistent Sampling. <i>IEEE Signal Processing Letters</i> , <b>2009</b> , 16, 739-742	3.2	17
283	Least-squares inner product shaping. <i>Linear Algebra and Its Applications</i> , <b>2002</b> , 348, 153-174	0.9	17
282	DeepSIC: Deep Soft Interference Cancellation for Multiuser MIMO Detection. <i>IEEE Transactions on Wireless Communications</i> , <b>2021</b> , 20, 1349-1362	9.6	17
281	Task-Based Quantization for Recovering Quadratic Functions Using Principal Inertia Components <b>2019</b> ,		16
280	On the Minimax Risk of Dictionary Learning. <i>IEEE Transactions on Information Theory</i> , <b>2016</b> , 62, 1501-1515	5.8	16
279	Spectrum Sharing Solution for Automotive Radar <b>2017</b> ,		16
278	Channel estimation in UWB channels using compressed sensing <b>2014</b> ,		16
277	Efficient sampling of sparse wideband analog signals <b>2008</b> ,		16
276	Robust Mean-Squared Error Estimation of Multiple Signals in Linear Systems Affected by Model and Noise Uncertainties. <i>Mathematical Programming</i> , <b>2006</b> , 107, 155-187	2.1	16
275	Deep Task-Based Quantization. <i>Entropy</i> , <b>2021</b> , 23,	2.8	16
274	RF Chain Reduction for MIMO Systems: A Hardware Prototype. <i>IEEE Systems Journal</i> , <b>2020</b> , 14, 5296-5307	7.3	15
273	Recent Advances in Phase Retrieval [Lecture Notes]. <i>IEEE Signal Processing Magazine</i> , <b>2016</b> , 33, 158-162	9.4	15
272	. <i>IEEE Transactions on Information Theory</i> , <b>2018</b> , 64, 6013-6033	2.8	15

271	Performance Bounds and Design Criteria for Estimating Finite Rate of Innovation Signals. <i>IEEE Transactions on Information Theory</i> , <b>2012</b> , 58, 4993-5015	2.8	15
270	Xampling: Analog Data Compression <b>2010</b> ,		15
269	Nonlinear and Nonideal Sampling: Theory and Methods. <i>IEEE Transactions on Signal Processing</i> , <b>2008</b> , 56, 5874-5890	4.8	15
268	MSE Bounds With Affine Bias Dominating the Cram�r-Rao Bound. <i>IEEE Transactions on Signal Processing</i> , <b>2008</b> , 56, 3824-3836	4.8	15
267	Cram�r-Rao Bound Optimization for Joint Radar-Communication Beamforming. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 1-1	4.8	15
266	Sparse Array Design via Fractal Geometries. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 4797-4812	4.8	15
265	Beam Alignment and Tracking for Autonomous Vehicular Communication using IEEE 802.11ad-based Radar <b>2019</b> ,		15
264	Dictionary Learning for Adaptive GPR Landmine Classification. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2019</b> , 57, 10036-10055	8.1	14
263	HYDRA: Hybrid deep magnetic resonance fingerprinting. <i>Medical Physics</i> , <b>2019</b> , 46, 4951-4969	4.4	14
262	Sub-Nyquist channel estimation over IEEE 802.11ad link <b>2017</b> ,		14
261	Quantum state tomography with a single measurement setup. <i>Optica</i> , <b>2017</b> , 4, 993	8.6	14
260	Data-Driven Factor Graphs for Deep Symbol Detection <b>2020</b> ,		14
259	COVID-19 classification of X-ray images using deep neural networks. <i>European Radiology</i> , <b>2021</b> , 31, 9654-9663	4.8	14
258	Low rank magnetic resonance fingerprinting. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2016</b> , 2016, 439-442	0.9	14
257	SPARCOM: Sparsity Based Super-resolution Correlation Microscopy. <i>SIAM Journal on Imaging Sciences</i> , <b>2019</b> , 12, 392-419	1.9	14
256	Exploiting Flow Dynamics for Superresolution in Contrast-Enhanced Ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2019</b> , 66, 1573-1586	3.2	13
255	A general framework for MIMO receivers with low-resolution quantization <b>2017</b> ,		13
254	Undersampled Phase Retrieval with Outliers. <i>IEEE Transactions on Computational Imaging</i> , <b>2015</b> , 1, 247-258	4.5	13

253	U-Invariant Sampling: Extrapolation and Causal Interpolation From Generalized Samples. <i>IEEE Transactions on Signal Processing</i> , <b>2011</b> , 59, 2085-2100	4.8	13
252	Sampling at the rate of innovation: theory and applications		13
251	Deep Learning for Interference Identification: Band, Training SNR, and Sample Selection		13
250	<b>2018</b> ,		13
249	High spatial resolution radar using thinned arrays		12
248	Sparse Fractal Array Design with Increased Degrees of Freedom		12
247	Fourier-Domain Beamforming and Structure-Based Reconstruction for Plane-Wave Imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2018</b> , 65, 1810-1821	3.2	12
246	An Algorithm Unrolling Approach to Deep Image Deblurring		12
245	Channel Capacity Under Sub-Nyquist Nonuniform Sampling. <i>IEEE Transactions on Information Theory</i> , <b>2014</b> , 60, 4739-4756	2.8	12
244	Efficient coherent diffractive imaging for sparsely varying objects. <i>Optics Express</i> , <b>2013</b> , 21, 6327-38	3.3	12
243	Distributed sparse signal recovery for sensor networks		12
242	High-Rate Interpolation of Random Signals From Nonideal Samples. <i>IEEE Transactions on Signal Processing</i> , <b>2009</b> , 57, 977-992	4.8	12
241	. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2010</b> , 4, 241-243	7.5	12
240	Universal Weighted MSE Improvement of the Least-Squares Estimator. <i>IEEE Transactions on Signal Processing</i> , <b>2008</b> , 56, 1788-1800	4.8	12
239	Orthogonal and projected orthogonal matched filter detection. <i>Signal Processing</i> , <b>2004</b> , 84, 677-693	4.4	12
238	Learned SPARCOM: unfolded deep super-resolution microscopy. <i>Optics Express</i> , <b>2020</b> , 28, 27736-27763	3.3	12
237	Artificial Intelligence and Early Detection of Pancreatic Cancer: 2020 Summative Review. <i>Pancreas</i> , <b>2021</b> , 50, 251-279	2.6	12
236	On the Sample Complexity of Multichannel Frequency Estimation via Convex Optimization. <i>IEEE Transactions on Information Theory</i> , <b>2019</b> , 65, 2302-2315	2.8	12

235	Single Letter Formulas for Quantized Compressed Sensing with Gaussian Codebooks <b>2018</b> ,		12
234	Performance of time delay estimation in a cognitive radar <b>2017</b> ,		11
233	Sparsity-based Ankylography for Recovering 3D molecular structures from single-shot 2D scattered light intensity. <i>Nature Communications</i> , <b>2015</b> , 6, 7950	17.4	11
232	Clutter Removal in Sub-Nyquist Radar. <i>IEEE Signal Processing Letters</i> , <b>2015</b> , 22, 177-181	3.2	11
231	Super-resolution photoacoustic and ultrasound imaging with sparse arrays. <i>Scientific Reports</i> , <b>2020</b> , 10, 4637	4.9	11
230	The Distortion Rate Function of Cyclostationary Gaussian Processes. <i>IEEE Transactions on Information Theory</i> , <b>2018</b> , 64, 3810-3824	2.8	11
229	Reduced time-on-target in pulse Doppler radar: Slow time domain compressed sensing <b>2016</b> ,		11
228	Towards sub-nyquist cognitive radar <b>2016</b> ,		11
227	Reference-based compressed sensing: A sample complexity approach <b>2016</b> ,		11
226	Sparsity-based super-resolution and phase-retrieval in waveguide arrays. <i>Optics Express</i> , <b>2013</b> , 21, 24015-24034	3.24	11
225	Systematic determination of replication activity type highlights interconnections between replication, chromatin structure and nuclear localization. <i>PLoS ONE</i> , <b>2012</b> , 7, e48986	3.7	11
224	Multi-Carrier Agile Phased Array Radar. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 5706-5721	4.8	11
223	The Communication-Aware Clustered Federated Learning Problem <b>2020</b> ,		11
222	Dynamic Metasurface Antennas for MIMO-OFDM Receivers With Bit-Limited ADCs. <i>IEEE Transactions on Communications</i> , <b>2021</b> , 69, 2643-2659	6.9	11
221	TenDSuR: Tensor-Based 4D Sub-Nyquist Radar. <i>IEEE Signal Processing Letters</i> , <b>2019</b> , 26, 237-241	3.2	11
220	. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , <b>2020</b> , 56, 937-955	3.7	11
219	Federated Learning: A signal processing perspective. <i>IEEE Signal Processing Magazine</i> , <b>2022</b> , 39, 14-41	9.4	11
218	On the 2D Phase Retrieval Problem. <i>IEEE Transactions on Signal Processing</i> , <b>2017</b> , 65, 1058-1067	4.8	10

217	Pilot Sequence Design for Mitigating Pilot Contamination With Reduced RF Chains. <i>IEEE Transactions on Communications</i> , <b>2020</b> , 68, 3536-3549	6.9	10
216	Generalized Sampling on Graphs With Subspace and Smoothness Priors. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 2272-2286	4.8	10
215	Minimax Approximation of Representation Coefficients From Generalized Samples. <i>IEEE Transactions on Signal Processing</i> , <b>2007</b> , 55, 4430-4443	4.8	10
214	Optimal Encoding of Classical Information in a Quantum Medium. <i>IEEE Transactions on Information Theory</i> , <b>2007</b> , 53, 1900-1907	2.8	10
213	Rapid quantum image scanning microscopy by joint sparse reconstruction. <i>Optica</i> , <b>2019</b> , 6, 1290	8.6	10
212	On the Spectral Efficiency of Noncooperative Uplink Massive MIMO Systems. <i>IEEE Transactions on Communications</i> , <b>2019</b> , 67, 1956-1971	6.9	10
211	Deep Learning for Ultrasound Image Formation: CUBDL Evaluation Framework and Open Datasets. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2021</b> , 68, 3466-3483	3.2	10
210	Sparse Doppler Sensing Based on Nested Arrays. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2018</b> , 65, 2349-2364	3.2	10
209	Blind Phaseless Short-Time Fourier Transform Recovery. <i>IEEE Transactions on Information Theory</i> , <b>2020</b> , 66, 3232-3241	2.8	9
208	Centralized Identification of Imbalances in Power Networks With Synchrophasor Data. <i>IEEE Transactions on Power Systems</i> , <b>2018</b> , 33, 1981-1992	7	9
207	Distributed approximate message passing for sparse signal recovery <b>2014</b> ,		9
206	. <i>IEEE Transactions on Information Theory</i> , <b>2011</b> , 57, 7856-7876	2.8	9
205	Sub-Nyquist processing with the modulated wideband converter <b>2010</b> ,		9
204	A Unified Approach to Dual Gabor Windows. <i>IEEE Transactions on Signal Processing</i> , <b>2007</b> , 55, 1758-1768	4.8	9
203	Sparsity-based recovery of three-photon quantum states from two-fold correlations. <i>Optica</i> , <b>2016</b> , 3, 226	8.6	9
202	Deep Neural Network Symbol Detection for Millimeter Wave Communications <b>2019</b> ,		9
201	Deep Networks for Direction-of-Arrival Estimation in Low SNR. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 69, 3714-3729	4.8	9
200	Robust Simultaneous Wireless Information and Power Transfer in Beamspace Massive MIMO. <i>IEEE Transactions on Wireless Communications</i> , <b>2019</b> , 18, 4199-4212	9.6	8

199	Backing Off From Infinity: Performance Bounds via Concentration of Spectral Measure for Random MIMO Channels. <i>IEEE Transactions on Information Theory</i> , <b>2015</b> , 61, 366-387	2.8	8
198	A unified view of diffusion maps and signal processing on graphs <b>2017</b> ,		8
197	Compressive Link Acquisition in Multiuser Communications. <i>IEEE Transactions on Signal Processing</i> , <b>2013</b> , 61, 3229-3245	4.8	8
196	Structured Total Maximum Likelihood: An Alternative to Structured Total Least Squares. <i>SIAM Journal on Matrix Analysis and Applications</i> , <b>2010</b> , 31, 2623-2649	1.5	8
195	Generic sensing hardware and real-time reconstruction for structured analog signals <b>2011</b> ,		8
194	Mean-Squared Error Estimation for Linear Systems with Block Circulant Uncertainty. <i>SIAM Journal on Matrix Analysis and Applications</i> , <b>2007</b> , 29, 712-730	1.5	8
193	Orthogonal multiuser detection. <i>Signal Processing</i> , <b>2002</b> , 82, 321-325	4.4	8
192	LoRD-Net: Unfolded Deep Detection Network With Low-Resolution Receivers. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 69, 5651-5664	4.8	8
191	Convolutional Phase Retrieval via Gradient Descent. <i>IEEE Transactions on Information Theory</i> , <b>2020</b> , 66, 1785-1821	2.8	8
190	. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , <b>2020</b> , 56, 2806-2822	3.7	8
189	The Distortion-Rate Function of Sampled Wiener Processes. <i>IEEE Transactions on Information Theory</i> , <b>2019</b> , 65, 482-499	2.8	8
188	On signal reconstruction from FROG measurements. <i>Applied and Computational Harmonic Analysis</i> , <b>2020</b> , 48, 1030-1044	3.1	8
187	Phase Transitions in Frequency Agile Radar Using Compressed Sensing. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 69, 4801-4818	4.8	8
186	Deep Quantization for MIMO Channel Estimation <b>2019</b> ,		7
185	Subspace Recovery From Structured Union of Subspaces. <i>IEEE Transactions on Information Theory</i> , <b>2015</b> , 61, 2101-2114	2.8	7
184	Deep Soft Interference Cancellation for MIMO Detection <b>2020</b> ,		7
183	PEAR: PEriodic And fixed Rank separation for fast fMRI. <i>Medical Physics</i> , <b>2017</b> , 44, 6166-6182	4.4	7
182	Pilot contamination mitigation with reduced RF chains <b>2017</b> ,		7

181	Sub-Nyquist acquisition hardware for wideband communication <b>2010</b> ,		7
180	Sparse source separation from orthogonal mixtures <b>2009</b> ,		7
179	A pre-test like estimator dominating the least-squares method. <i>Journal of Statistical Planning and Inference</i> , <b>2008</b> , 138, 3069-3085	0.8	7
178	Data-driven symbol detection via model-based machine learning. <i>Communications in Information and Systems</i> , <b>2020</b> , 20, 283-317	0.8	7
177	Task-based quantization with application to MIMO receivers. <i>Communications in Information and Systems</i> , <b>2020</b> , 20, 131-162	0.8	7
176	FRaC: FMCW-Based Joint Radar-Communications System Via Index Modulation. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2021</b> , 15, 1348-1364	7.5	7
175	Semi-Supervised Learning in Network-Structured Data via Total Variation Minimization. <i>IEEE Transactions on Signal Processing</i> , <b>2019</b> , 67, 6256-6269	4.8	7
174	Sampling and Super Resolution of Sparse Signals Beyond the Fourier Domain. <i>IEEE Transactions on Signal Processing</i> , <b>2019</b> , 67, 1508-1521	4.8	7
173	Graph Sampling with and Without Input Priors <b>2018</b> ,		7
172	iMAP Beamforming for High-Quality High Frame Rate Imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2019</b> , 66, 1830-1844	3.2	6
171	Dynamic Metasurface Antennas Based Downlink Massive MIMO Systems <b>2019</b> ,		6
170	Recovery of Sparse Positive Signals on the Sphere From Low Resolution Measurements. <i>IEEE Signal Processing Letters</i> , <b>2015</b> , 22, 2383-2386	3.2	6
169	Recovering signals from the Short-Time Fourier Transform magnitude <b>2015</b> ,		6
168	The Viterbi Algorithm for Subset Selection. <i>IEEE Signal Processing Letters</i> , <b>2015</b> , 22, 524-528	3.2	6
167	Tradeoff Between Delay and High SNR Capacity in Quantized MIMO Systems <b>2019</b> ,		6
166	<b>2017</b> ,		6
165	A network-based method for predicting gene-nutrient interactions and its application to yeast amino-acid metabolism. <i>Molecular BioSystems</i> , <b>2009</b> , 5, 1732-9		6
164	Optimal Generalized Inverses for Zero Forcing Precoding <b>2007</b> ,		6



163	. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2007</b> , 1, 651-659	7.5	6
162	Mean-Squared Error Sampling and Reconstruction in the Presence of Noise. <i>IEEE Transactions on Signal Processing</i> , <b>2006</b> , 54, 4619-4633	4.8	6
161	<b>2020</b> ,		6
160	A DFRC System Based on Multi-Carrier Agile FMCW MIMO Radar for Vehicular Applications <b>2020</b> ,		6
159	Guiding Principles for a Pediatric Neurology ICU (neuroPICU) Bedside Multimodal Monitor: Findings from an International Working Group. <i>Applied Clinical Informatics</i> , <b>2016</b> , 7, 380-98	3.1	6
158	Modeling and Recovery of Graph Signals and Difference-Based Signals <b>2019</b> ,		6
157	Learning Task-Based Analog-to-Digital Conversion for MIMO Receivers <b>2020</b> ,		6
156	Massive MIMO as an Extreme Learning Machine. <i>IEEE Transactions on Vehicular Technology</i> , <b>2021</b> , 70, 1046-1050	6.8	6
155	Optimized Sparse Array Design Based on the Sum Coarray <b>2018</b> ,		6
154	On the Minimax Capacity Loss Under Sub-Nyquist Universal Sampling. <i>IEEE Transactions on Information Theory</i> , <b>2017</b> , 63, 3348-3367	2.8	5
153	A Dual-Function Radar Communication System Using Index Modulation <b>2019</b> ,		5
152	Parallel Coordinate Descent Algorithms for Sparse Phase Retrieval <b>2019</b> ,		5
151	Deep Convolutional Robust PCA with Application to Ultrasound Imaging <b>2019</b> ,		5
150	Optimal trade-off between sampling rate and quantization precision in Sigma-Delta A/D conversion <b>2015</b> ,		5
149	Sparsity-driven super-localization in clinical contrast-enhanced ultrasound <b>2017</b> ,		5
148	Sparse Estimation of Faults by Compressed Sensing With Structural Constraints. <i>IEEE Transactions on Power Systems</i> , <b>2018</b> , 33, 5935-5944	7	5
147	Sparsity-Based Super Resolution for SEM Images. <i>Nano Letters</i> , <b>2017</b> , 17, 5437-5445	11.5	5
146	Estimation in autoregressive processes with partial observations <b>2017</b> ,		5

145	Revealing true coupling strengths in two-dimensional spectroscopy with sparsity-based signal recovery. <i>Light: Science and Applications</i> , <b>2017</b> , 6, e17115	16.7	5
144	Modified distributed iterative hard thresholding <b>2015</b> ,		5
143	Low-rate identification of memory polynomials <b>2014</b> ,		5
142	An algorithm for exact super-resolution and phase retrieval <b>2014</b> ,		5
141	Partially Linear Estimation With Application to Sparse Signal Recovery From Measurement Pairs. <i>IEEE Transactions on Signal Processing</i> , <b>2012</b> , 60, 2125-2137	4.8	5
140	Convex Optimization in Signal Processing [From the Guest Editors]. <i>IEEE Signal Processing Magazine</i> , <b>2010</b> , 27, 19-145	9.4	5
139	Solitonets: complex networks of interacting fields. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2009</b> , 465, 1093-1101	2.4	5
138	A Comment on the Weiss-Weinstein Bound for Constrained Parameter Sets. <i>IEEE Transactions on Information Theory</i> , <b>2008</b> , 54, 4682-4684	2.8	5
137	Mean-Squared Error Beamforming for Signal Estimation: A Competitive Approach <b>2005</b> , 259-298		5
136	Channel Estimation with Simultaneous Reflecting and Sensing Reconfigurable Intelligent Metasurfaces <b>2021</b> ,		5
135	Deep Unfolded Robust PCA with Application to Clutter Suppression in Ultrasound		5
134	Data-Driven Symbol Detection Via Model-Based Machine Learning <b>2021</b> ,		5
133	Deep-Sparse Array Cognitive Radar <b>2019</b> ,		5
132	On Multiterminal Communication over MIMO Channels with One-bit ADCs at the Receivers <b>2019</b> ,		5
131	Sensor calibration for off-the-grid spectral estimation. <i>Applied and Computational Harmonic Analysis</i> , <b>2020</b> , 48, 570-598	3.1	5
130	Structured LISTA for Multidimensional Harmonic Retrieval. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 69, 3459-3472	4.8	5
129	Unitary Approximate Message Passing for Sparse Bayesian Learning. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 1-1	4.8	5
128	Coupled Dictionary Learning for Multi-Contrast MRI Reconstruction <b>2018</b> ,		5

127	KalmanNet: Neural Network Aided Kalman Filtering for Partially Known Dynamics. <i>IEEE Transactions on Signal Processing</i> , <b>2022</b> , 70, 1532-1547	4.8	5
126	Joint Sampling and Recovery of Correlated Sources <b>2019</b> ,		4
125	<b>2019</b> ,		4
124	Compressive Shift Retrieval. <i>IEEE Transactions on Signal Processing</i> , <b>2014</b> , 62, 4105-4113	4.8	4
123	Minimum Variance Estimation of a Sparse Vector Within the Linear Gaussian Model: An RKHS Approach. <i>IEEE Transactions on Information Theory</i> , <b>2014</b> , 60, 6555-6575	2.8	4
122	The network nullspace property for compressed sensing over networks <b>2017</b> ,		4
121	Phase retrieval from STFT measurements via non-convex optimization <b>2017</b> ,		4
120	Analog compressed sensing for RF propagation channel sounding <b>2012</b> ,		4
119	Recovering Signals From Lowpass Data. <i>IEEE Transactions on Signal Processing</i> , <b>2010</b> , 58, 2636-2646	4.8	4
118	Super-resolution and reconstruction of sparse sub-wavelength images: erratum. <i>Optics Express</i> , <b>2010</b> , 18, 26631	3.3	4
117	Denosing of image patches via sparse representations with learned statistical dependencies <b>2011</b> ,		4
116	Sub-Nyquist sampling of short pulses <b>2011</b> ,		4
115	Automatic parameter setting for iterative shrinkage methods <b>2008</b> ,		4
114	A Constructive Inversion Framework for Twisted Convolution. <i>Monatshefte Fur Mathematik</i> , <b>2007</b> , 150, 297-308	0.7	4
113	Minimum MSE Estimation with Convex Constraints <b>2007</b> ,		4
112	Learned Factor Graphs for Inference From Stationary Time Sequences. <i>IEEE Transactions on Signal Processing</i> , <b>2022</b> , 70, 366-380	4.8	4
111	Deep Learning in Medical Ultrasound From Image Formation to Image Analysis. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2020</b> , 67, 2477-2480	3.2	4
110	Beam Focusing for Multi-User MIMO Communications with Dynamic Metasurface Antennas <b>2021</b> ,		4

109	<b>2021,</b>		4
108	Kalmanet: Data-Driven Kalman Filtering <b>2021,</b>		4
107	Point of Care Image Analysis for COVID-19 <b>2021,</b>		4
106	Blind Detection for Ambient Backscatter Communication System with Multiple-Antenna tags <b>2018,</b>		4
105	Subspace Estimation From Incomplete Observations: A High-Dimensional Analysis. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2018</b> , 12, 1240-1252	7.5	4
104	The Learned Inexact Project Gradient Descent Algorithm <b>2018,</b>		4
103	Task-Based Analog-to-Digital Converters. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 1-1	4.8	4
102	Sub-Nyquist MIMO radar prototype with Doppler processing <b>2017,</b>		3
101	Coordinated Pilot Design for Massive MIMO <b>2019,</b>		3
100	Magnetic Resonance Fingerprinting Using a Residual Convolutional Neural Network <b>2019,</b>		3
99	Sub-Nyquist sampling achieves optimal rate-distortion <b>2015,</b>		3
98	Mixer-based subarray beamforming for sub-Nyquist sampling ultrasound architectures <b>2015,</b>		3
97	Complex Trainable Ista for Linear and Nonlinear Inverse Problems <b>2020,</b>		3
96	Compressed 3D ultrasound imaging with 2D arrays <b>2014,</b>		3
95	Sparsity based super-resolution optical imaging using correlation information <b>2017,</b>		3
94	Sparse emission pattern in spectral blood Doppler <b>2017,</b>		3
93	Fundamental estimation limits in autoregressive processes with compressive measurements <b>2017,</b>		3
92	Super-resolution in Phase Space <b>2015,</b>		3

91	Gaussian distortion-rate function under sub-nyquist nonuniform sampling <b>2014</b> ,		3
90	Continuous sparse recovery for direction of arrival estimation with co-prime arrays <b>2014</b> ,		3
89	Sub-Nyquist sampling of OFDM signals for cognitive radios <b>2014</b> ,		3
88	Hidden Relationships: Bayesian Estimation With Partial Knowledge. <i>IEEE Transactions on Signal Processing</i> , <b>2011</b> , 59, 1933-1948	4.8	3
87	Low complexity acquisition of GPS signals <b>2011</b> ,		3
86	. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2007</b> , 1, 537-539	7.5	3
85	Enhancing the Kramers-Kronig receiver via dispersion-based spatial diversity. <i>Optics Letters</i> , <b>2020</b> , 45, 3494-3497	3	3
84	Deep Tomographic Image Reconstruction: Yesterday, Today, and Tomorrow Editorial for the 2nd Special Issue Machine Learning for Image Reconstruction <i>IEEE Transactions on Medical Imaging</i> , <b>2021</b> , 40, 2956-2964	11.7	3
83	Identifiability Conditions for Compressive Multichannel Blind Deconvolution. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 4627-4642	4.8	3
82	On Throughput of Millimeter Wave MIMO Systems with Low Resolution ADCs <b>2020</b> ,		3
81	Extended Cantor Arrays with Hole-Free Fourth-Order Difference Co-Arrays <b>2021</b> ,		3
80	Bit Constrained Communication Receivers In Joint Radar Communications Systems <b>2021</b> ,		3
79	The Global Optimization Geometry of Shallow Linear Neural Networks. <i>Journal of Mathematical Imaging and Vision</i> , <b>2020</b> , 62, 279-292	1.6	3
78	Learned Super Resolution Ultrasound for Improved Breast Lesion Characterization. <i>Lecture Notes in Computer Science</i> , <b>2021</b> , 109-118	0.9	3
77	Measurement Matrix Design for Phase Retrieval Based on Mutual Information. <i>IEEE Transactions on Signal Processing</i> , <b>2018</b> , 66, 324-339	4.8	3
76	Cramér-Rao Lower Bound on AoA Estimation Using an RF Lens-Embedded Antenna Array. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2018</b> , 17, 2359-2363	3.8	3
75	Deep Unfolded Recovery of Sub-Nyquist Sampled Ultrasound Images. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2021</b> , 68, 3484-3496	3.2	3
74	Deep Unrolled Recovery in Sparse Biological Imaging: Achieving fast, accurate results. <i>IEEE Signal Processing Magazine</i> , <b>2022</b> , 39, 45-57	9.4	3

73	Jointly Learned Symbol Detection and Signal Reflection in RIS-Aided Multi-user MIMO Systems <b>2021,</b>		3
72	Exploiting FRI signal structure for sub-Nyquist sampling and processing in medical ultrasound <b>2015,</b>		2
71	Sparse Convolutional Beamforming for Wireless Ultrasound <b>2020,</b>		2
70	Functional Nonlinear Sparse Models. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 2449-2463	4.8	2
69	Range-Doppler processing via fourier coefficients: The path to a sub-Nyquist SAR <b>2016,</b>		2
68	Frequency Agile Radar Using Atomic Norm Soft Thresholding with Modulations <b>2019,</b>		2
67	CNN-Based Cognitive Radar Array Selection <b>2019,</b>		2
66	Compressed LISTA Exploiting Toeplitz Structure <b>2019,</b>		2
65	Online dictionary learning aided target recognition in cognitive GPR <b>2017,</b>		2
64	Sparse signal recovery from nonlinear measurements <b>2013,</b>		2
63	Time delay estimation: Compressed sensing over an infinite union of subspaces <b>2010,</b>		2
62	Noninvertible Gabor Transforms. <i>IEEE Transactions on Signal Processing</i> , <b>2010</b> , 58, 2597-2612	4.8	2
61	Reduced-dimension multiuser detection <b>2010,</b>		2
60	Sparsity-based single-shot subwavelength coherent diffractive imaging <b>2012,</b>		2
59	Spectrum-blind reconstruction of multi-band signals. <i>Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing</i> , <b>2008,</b>	1.6	2
58	Recursive blind minimax estimation: improving mse over recursive least squares <b>2008,</b>		2
57	Parameter estimation in linear models based on outage probability minimization <b>2006,</b>		2
56	Improvement of Least-Squares Under Arbitrary Weighted MSE <b>2007,</b>		2

55	Least-squares orthogonalization using semidefinite programming. <i>Linear Algebra and Its Applications</i> , <b>2006</b> , 412, 453-470	0.9	2
54	Two-Timescale End-to-End Learning for Channel Acquisition and Hybrid Precoding. <i>IEEE Journal on Selected Areas in Communications</i> , <b>2022</b> , 40, 163-181	14.2	2
53	Integrating Domain Knowledge into Deep Networks for Lung Ultrasound with Applications to COVID-19. <i>IEEE Transactions on Medical Imaging</i> , <b>2021</b> , PP,	11.7	2
52	Analog to Digital Cognitive Radio <b>2017</b> , 1-49		2
51	Enhanced Channel Estimation in Massive MIMO via Coordinated Pilot Design. <i>IEEE Transactions on Communications</i> , <b>2020</b> , 68, 6872-6885	6.9	2
50	cSPARCOM: Multi-detector reconstruction by confocal super-resolution correlation microscopy. <i>Optics Express</i> , <b>2021</b> , 29, 12772-12786	3.3	2
49	Collaborative Inference via Ensembles on the Edge <b>2021</b> ,		2
48	Multi-Carrier Agile Phased Array Radar <b>2019</b> ,		2
47	Serial Quantization for Representing Sparse Signals <b>2019</b> ,		2
46	Hardware-Limited Task-Based Quantization <b>2019</b> ,		2
45	Graph Unrolling Networks: Interpretable Neural Networks for Graph Signal Denoising. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 69, 3699-3713	4.8	2
44	The Nystrom Extension for Signals Defined on a Graph <b>2018</b> ,		2
43	Optimal Number of Measurements in a Linear System With Quadratically Decreasing SNR. <i>IEEE Transactions on Signal Processing</i> , <b>2019</b> , 67, 2947-2959	4.8	1
42	Automotive Dual-Function Radar Communications Systems: An Overview <b>2020</b> ,		1
41	Dynamic Metasurface Antennas for Bit-Constrained MIMO-OFDM Receivers <b>2020</b> ,		1
40	Dictionary learning from phaseless measurements <b>2016</b> ,		1
39	Spectral Efficiency of Noncooperative Uplink Massive MIMO Systems with Joint Decoding <b>2019</b> ,		1
38	Sub-Nyquist medical ultrasound imaging: En route to cloud processing <b>2013</b> ,		1

37	Real-time change detection of steady-state evoked potentials. <i>Biological Cybernetics</i> , <b>2013</b> , 107, 49-59	2.8	1
36	Xampling-enabled coexistence in spectrally crowded environments <b>2017</b> ,		1
35	GSURS: Generalized sparse uniform resampling with application to MRI <b>2015</b> ,		1
34	A sub-nyquist analog front-end with subarray beamforming for ultrasound imaging <b>2015</b> ,		1
33	Compressive shift retrieval <b>2013</b> ,		1
32	The vector hybrid Wiener filter: Application to super-resolution <b>2009</b> ,		1
31	A Bayesian Estimation Bound based on the Optimal Bias Function <b>2007</b> ,		1
30	The Continuous Joint Sparsity Prior for Sparse Representations: Theory and Applications <b>2007</b> ,		1
29	MIMO Networks with One-Bit ADCs: Receiver Design and Communication Strategies. <i>IEEE Transactions on Communications</i> , <b>2021</b> , 1-1	6.9	1
28	Hardware prototype demonstration of a cognitive radar with sparse array antennas. <i>Electronics Letters</i> , <b>2020</b> , 56, 1210-1212	1.1	1
27	COVID-19 Classification of X-ray Images Using Deep Neural Networks		1
26	. <i>IEEE Signal Processing Magazine</i> , <b>2019</b> , 36, 125-131	9.4	1
25	Frequency-Resolved Optical Gating Recovery via Smoothing Gradient. <i>IEEE Transactions on Signal Processing</i> , <b>2019</b> , 67, 6121-6132	4.8	1
24	The Capacity of Memoryless Channels With Sampled Cyclostationary Gaussian Noise. <i>IEEE Transactions on Communications</i> , <b>2020</b> , 68, 106-121	6.9	1
23	BiLiMO: Bit-Limited MIMO Radar via Task-Based Quantization. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 1-1	4.8	1
22	Ensemble Wrapper Subsampling for Deep Modulation Classification. <i>IEEE Transactions on Cognitive Communications and Networking</i> , <b>2021</b> , 1-1	6.6	1
21	<b>2021</b> ,		1
20	Unambiguous Delay-Doppler Recovery From Random Phase Coded Pulses. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 69, 4991-5004	4.8	1



19	Multimodal Unrolled Robust PCA for Background Foreground Separation.. <i>IEEE Transactions on Image Processing</i> , <b>2022</b> , 31, 3553-3564	8.7	1
18	Transmit Beamforming with Fixed Covariance for Integrated MIMO Radar and Multiuser Communications <b>2022</b> ,		1
17	Phase-Space Function Recovery for Moving Target Imaging in SAR by Convex Optimization. <i>IEEE Transactions on Computational Imaging</i> , <b>2021</b> , 1-1	4.5	0
16	Sparse Convolutional Beamforming for 3-D Ultrafast Ultrasound Imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2021</b> , 68, 2444-2459	3.2	0
15	Bayesian Estimation of Graph Signals. <i>IEEE Transactions on Signal Processing</i> , <b>2022</b> , 1-1	4.8	0
14	FRI-TEM: Time Encoding Sampling of Finite-Rate-of-Innovation Signals. <i>IEEE Transactions on Signal Processing</i> , <b>2022</b> , 1-1	4.8	0
13	Sub-Nyquist Radar: Principles and Prototypes <b>2019</b> , 1-48		
12	Guest Editorial Special Issue on Sparsity Driven Methods in Medical Ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2018</b> , 65, 297-299	3.2	
11	WINDOW: wideband demodulator for optical waveforms. <i>Optics Express</i> , <b>2017</b> , 25, 19444-19456	3.3	
10	Mathematical Foundations of AIM <b>2021</b> , 1-18		
9	Phase retrieval of low-rank matrices by anchored regression. <i>Information and Inference</i> , <b>2021</b> , 10, 285-332.	4	
8	Introduction to Information Theory and Data Science. <b>2021</b> , 1-43		
7	Serial Quantization for Sparse Time Sequences. <i>IEEE Transactions on Signal Processing</i> , <b>2021</b> , 69, 3299-3314.	4.8	
6	Compressed Ultrasound Imaging: from Sub-Nyquist Rates to Super-Resolution. <i>IEEE BITS the Information Theory Magazine</i> , <b>2021</b> , 1-1		
5	An Information-Theoretic Approach to Analog-to-Digital Compression <b>2021</b> , 44-71		
4	Mathematical Foundations of AIM <b>2022</b> , 37-54		
3	Community Inference from Partially Observed Graph Signals: Algorithms and Analysis. <i>IEEE Transactions on Signal Processing</i> , <b>2022</b> , 1-1	4.8	
2	Guest Editorial Special Issue on Integrated Sensing and Communication Part I. <i>IEEE Journal on Selected Areas in Communications</i> , <b>2022</b> , 40, 1723-1727	14.2	

- 1 Deep Unfolding with Normalizing Flow Priors for Inverse Problems. *IEEE Transactions on Signal Processing*, **2022**, 1-1

4.8