Petros T Boufounos

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Signal Processing With Compressive Measurements. IEEE Journal on Selected Topics in Signal Processing, 2010, 4, 445-460. | 7.3 | 510 |
| 2 | Robust 1-Bit Compressive Sensing via Binary Stable Embeddings of Sparse Vectors. IEEE Transactions on Information Theory, 2013, 59, 2082-2102. | 1.5 | 484 |
| 3 | 1-Bit compressive sensing. , 2008, , . | | 422 |
| 4 | Democracy in action: Quantization, saturation, and compressive sensing. Applied and Computational Harmonic Analysis, 2011, 31, 429-443. | 1.1 | 217 |
| 5 | Greedy sparse signal reconstruction from sign measurements. , 2009, , . | | 92 |
| 6 | Sparse Signal Reconstruction from Noisy Compressive Measurements using Cross Validation. , 2007, , . | | 90 |
| 7 | Universal Rate-Efficient Scalar Quantization. IEEE Transactions on Information Theory, 2012, 58, 1861-1872. | 1.5 | 86 |
| 8 | Sparse Sensing and DMD-Based Identification of Flow Regimes and Bifurcations in Complex Flows. SIAM Journal on Applied Dynamical Systems, 2017, 16, 1164-1196. | 0.7 | 67 |
| 9 | Sparse Recovery From Combined Fusion Frame Measurements. IEEE Transactions on Information Theory, 2011, 57, 3864-3876. | 1.5 | 60 |
| 10 | Autocalibration of lidar and optical cameras via edge alignment. , 2016, , . | | 56 |
| 11 | Privacy-preserving nearest neighbor methods: comparing signals without revealing them. IEEE Signal Processing Magazine, 2013, 30, 18-28. | 4.6 | 55 |
| 12 | SEAGLE: Sparsity-Driven Image Reconstruction Under Multiple Scattering. IEEE Transactions on Computational Imaging, 2018, 4, 73-86. | 2.6 | 55 |
| 13 | A Recursive Born Approach to Nonlinear Inverse Scattering. IEEE Signal Processing Letters, 2016, 23, 1052-1056. | 2.1 | 45 |
| 14 | Secure binary embeddings for privacy preserving nearest neighbors. , 2011, , . | | 41 |
| 15 | Quantization and Compressive Sensing. Applied and Numerical Harmonic Analysis, 2015, , 193-237. | 0.1 | 37 |
| 16 | Quantization of Sparse Representations. , 2007, , . | | 34 |
| 17 | Position and Trajectory Learning for Microphone Arrays. IEEE Transactions on Audio Speech and Language Processing, 2007, 15, 358-368. | 3.8 | 30 |
| 18 | Reconstruction of sparse signals from distorted randomized measurements. , 2010, , . | | 30 |

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| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Learning Model-Based Sparsity via Projected Gradient Descent. IEEE Transactions on Information Theory, 2016, 62, 2092-2099. | 1.5 | 27 |
| 20 | Learning source trajectories using wrapped-phase hidden Markov models. , 0, , . | | 22 |
| 21 | A wideband compressive radio receiver. , 2010, , . | | 22 |
| 22 | What's the Frequency, Kenneth?: Sublinear Fourier Sampling Off the Grid. Lecture Notes in Computer Science, 2012, , 61-72. | 1.0 | 22 |
| 23 | On angular-domain channel estimation for one-bit massive MIMO systems with fixed and time-varying thresholds. , 2017, , . | | 21 |
| 24 | Quantization Noise Shaping on Arbitrary Frame Expansions. Eurasip Journal on Advances in Signal Processing, 2006, 2006, 1. | 1.0 | 19 |
| 25 | Post-silicon timing characterization by compressed sensing. , 2008, , . | | 19 |
| 26 | Compressive sampling for streaming signals with sparse frequency content. , 2010, , . | | 19 |
| 27 | Efficient Coding of Signal Distances Using Universal Quantized Embeddings. , 2013, , . | | 19 |
| 28 | Learning-Based Extended Object Tracking Using Hierarchical Truncation Measurement Model With Automotive Radar. IEEE Journal on Selected Topics in Signal Processing, 2021, 15, 1013-1029. | 7.3 | 19 |
| 29 | Sigma delta quantization for compressive sensing. Proceedings of SPIE, 2007, , . | 0.8 | 17 |
| 30 | Joint sparsity models for wideband array processing. , 2011, , . | | 17 |
| 31 | Universal encoding of multispectral images. , 2016, , . | | 17 |
| 32 | Online convolutional dictionary learning for multimodal imaging. , 2017, , . | | 17 |
| 33 | Basecalling using hidden Markov models. Journal of the Franklin Institute, 2004, 341, 23-36. | 1.9 | 16 |
| 34 | Streaming Compressive Sensing for high-speed periodic videos. , 2010, , . | | 16 |
| 35 | Sparse Blind Deconvolution for Distributed Radar Autofocus Imaging. IEEE Transactions on Computational Imaging, 2018, 4, 537-551. | 2.6 | 15 |
| 36 | Unrolled Projected Gradient Descent for Multi-spectral Image Fusion. , 2019, , . | | 15 |

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|----|--|-----|-----------|
| 37 | Noninvasive leakage power tomography of integrated circuits by compressive sensing. , 2008, , . | | 14 |
| 38 | Source localization in reverberant environments using sparse optimization. , 2013, , . | | 14 |
| 39 | Dictionary learning based pan-sharpening. , 2012, , . | | 13 |
| 40 | Reconstructing sparse signals from their zero crossings. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , . | 1.8 | 12 |
| 41 | Greedy sparsity-constrained optimization. , 2011, , . | | 12 |
| 42 | Quantized embeddings of scale-invariant image features for mobile augmented reality. , 2012, , . | | 12 |
| 43 | On the theoretical analysis of cross validation in compressive sensing. , 2014, , . | | 12 |
| 44 | Deepcasd: An End-to-End Approach for Multi-Spectral Image Super-Resolution. , 2018, , . | | 11 |
| 45 | Compressive Sensing for over-the-air ultrasound. , 2011, , . | | 10 |
| 46 | Radar Autofocus Using Sparse Blind Deconvolution. , 2018, , . | | 10 |
| 47 | Causal Compensation for Erasures in Frame Representations. IEEE Transactions on Signal Processing, 2008, 56, 1071-1082. | 3.2 | 9 |
| 48 | Video querying via compact descriptors of visually salient objects. , 2014, , . | | 9 |
| 49 | Accelerated Image Reconstruction for Nonlinear Diffractive Imaging. , 2018, , . | | 9 |
| 50 | Sparsity-driven distributed array imaging. , 2015, , . | | 8 |
| 51 | Representation and coding of signal geometry. Information and Inference, 2017, 6, 349-388. | 0.9 | 8 |
| 52 | Distributed compression of zerotrees of wavelet coefficients. , 2011, , . | | 7 |
| 53 | Depth sensing using active coherent illumination. , 2012, , . | | 7 |
| 54 | Angle-preserving quantized phase embeddings. , 2013, , . | | 7 |

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| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Quantized embeddings: an efficient and universal nearest neighbor method for cloud-based image retrieval. , 2013, , . | | 7 |
| 56 | Coded aperture compressive 3-D LIDAR. , 2015, , . | | 7 |
| 57 | Economics of Dynamic Pricing in a Reputation Brokered Agent Mediated Marketplace. Electronic Commerce Research, 2001, 1, 85-100. | 3.0 | 6 |
| 58 | Generating Binary Processes with all-Pole Spectra. , 2007, , . | | 6 |
| 59 | A compressive phase-locked loop. , 2012, , . | | 6 |
| 60 | Compressive tomographic radar imaging with total variation regularization. , 2016, , . | | 6 |
| 61 | Multispectral image compression using universal vector quantization. , 2016, , . | | 6 |
| 62 | Robust Sensor Localization Based on Euclidean Distance Matrix. , 2018, , . | | 6 |
| 63 | Compressive Sensing for streaming signals using the Streaming Greedy Pursuit. , 2010, , . | | 5 |
| 64 | Wyner-Ziv coding of multispectral images for space and airborne platforms. , 2010, , . | | 5 |
| 65 | Sparse MIMO architectures for through-the-wall imaging. , 2014, , . | | 5 |
| 66 | Coherent distributed array imaging under unknown position perturbations. , 2016, , . | | 5 |
| 67 | Motion-Adaptive Depth Superresolution. IEEE Transactions on Image Processing, 2017, 26, 1723-1731. | 6.0 | 5 |
| 68 | Robust Mutual Information-Based Multi-Image Registration. , 2019, , . | | 5 |
| 69 | High resolution SAR imaging using random pulse timing. , 2011, , . | | 4 |
| 70 | Pan-sharpening with multi-scale wavelet dictionary. , 2012, , . | | 4 |
| 71 | Random steerable arrays for synthetic aperture imaging. , 2013, , . | | 4 |

72 Compressive sensing based 3D SAR imaging with multi-PRF baselines. , 2014, , .

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| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Universal embeddings for kernel machine classification. , 2015, , . | | 4 |
| 74 | Depth superresolution using motion adaptive regularization. , 2016, , . | | 4 |
| 75 | Fusion of multi-angular aerial images based on epipolar geometry and matrix completion. , 2017, , . | | 4 |
| 76 | Extended Object Tracking Using Hierarchical Truncation Model with Partial-View Measurements. , 2020, , . | | 4 |
| 77 | Quantization Noise Shaping on Arbitrary Frame Expansions. , 0, , . | | 3 |
| 78 | Saturation-robust SAR image formation. , 2011, , . | | 3 |
| 79 | Synthetic aperture imaging using a randomly steered spotlight. , 2013, , . | | 3 |
| 80 | What's the Frequency, Kenneth?: Sublinear Fourier Sampling Off the Grid. Algorithmica, 2015, 73, 261-288. | 1.0 | 3 |
| 81 | Learning-based reduced order model stabilization for partial differential equations: Application to the coupled Burgers' equation. , 2016, , . | | 3 |
| 82 | Compressive imaging with iterative forward models. , 2017, , . | | 3 |
| 83 | Compressed sensing for fusion frames. Proceedings of SPIE, 2009, , . | 0.8 | 2 |
| 84 | Dimensionality reduction of visual features for efficient retrieval and classification. APSIPA Transactions on Signal and Information Processing, 2016, 5, . | 2.6 | 2 |
| 85 | Online blind deconvolution for sequential through-the-wall-radar-imaging. , 2016, , . | | 2 |
| 86 | A Deep Neural Network Architecture Using Dimensionality Reduction with Sparse Matrices. Lecture Notes in Computer Science, 2016, , 397-404. | 1.0 | 2 |
| 87 | Distributed coding of multispectral images. , 2017, , . | | 2 |
| 88 | Blind Multi-Spectral Image Pan-Sharpening. , 2020, , . | | 2 |
| 89 | High-Contrast Reflection Tomography With Total-Variation Constraints. IEEE Transactions on Computational Imaging, 2020, 6, 1523-1536. | 2.6 | 2 |
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| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Average case analysis of sparse recovery from combined fusion frame measurements. , 2010, , . | | 1 |
| 92 | Fast and High-Quality Blind Multi-Spectral Image Pansharpening. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17. | 2.7 | 1 |
| 93 | Low complexity efficient raw SAR data compression. , 2011, , . | | 1 |
| 94 | Embedding-based representation of signal distances. , 2013, , . | | 0 |
| 95 | Exploring the Resolution Limit for In-Air Synthetic-Aperture Audio Imaging. , 2015, , . | | 0 |
| 96 | Kernel Machine Classification Using Universal Embeddings. , 2015, , . | | 0 |
| 97 | High-Resolution Lidar Using Random Demodulation. , 2018, , . | | 0 |
| 98 | Distributed Coding of Quantized Random Projections. IEEE Transactions on Signal Processing, 2020, 68, 5924-5939. | 3.2 | 0 |
| 99 | Embedding-Based Representation of Signal Geometry. Applied and Numerical Harmonic Analysis, 2017, , 155-178. | 0.1 | 0 |
| 100 | Extended Object Tracking with Spatial Model Adaptation Using Automotive Radar. , 2021, , . | | 0 |