

# IEEE TRANSACTIONS ON SIGNAL PROCESSING

A PUBLICATION OF THE IEEE SIGNAL PROCESSING SOCIETY



[www.signalprocessingsociety.org](http://www.signalprocessingsociety.org)

Indexed in PubMed® and MEDLINE®, products of the United States National Library of Medicine



NOVEMBER 1, 2018

VOLUME 66

NUMBER 21

ITPRED

(ISSN 1053-587X)

---

## REGULAR PAPERS

Distributed Adaptive Learning With Multiple Kernels in Diffusion Networks .....	B.-S. Shin, M. Yukawa, R. L. G. Cavalcante, and A. Dekorsy .....	5505
Vandermonde Factorization of Hankel Matrix for Complex Exponential Signal Recovery—Application in Fast NMR Spectroscopy .....	J. Ying, J.-F. Cai, D. Guo, G. Tang, Z. Chen, and X. Qu .....	5520
Scaling Probabilistic Tensor Canonical Polyadic Decomposition to Massive Data .....	L. Cheng, Y.-C. Wu, and H. V. Poor .....	5534
Communication-Aware Waveform Design for MIMO Radar With Good Transmit Beampattern.....	Z. Cheng, C. Han, B. Liao, Z. He, and J. Li .....	5549
A Unified Framework for Manifold Landmarking .....	H. Xu, L. Yu, M. A. Davenport, and H. Zha .....	5563
Adaptive Subspace Tests for Multichannel Signal Detection in Auto-Regressive Disturbance .....	Y. Gao, H. Li, and B. Himed .....	5577
Fast Temporal Path Localization on Graphs via Multiscale Viterbi Decoding .....	Y. Yang, S. Chen, M. A. Maddah-Ali, P. Grover, S. Kar, and J. Kovacevic .....	5588
Solving Time-Domain Audio Inverse Problems Using Nonnegative Tensor Factorization .....	C. Bilen, A. Ozerov, and P. Pérez .....	5604
Skew- $t$ Filter and Smoother With Improved Covariance Matrix Approximation .....	H. Nurminen, T. Ardestiri, R. Piché, and F. Gustafsson .....	5618
Mobile Collaborative Spectrum Sensing for Heterogeneous Networks: A Bayesian Machine Learning Approach .....	Y. Xu, P. Cheng, Z. Chen, Y. Li, and B. Vucetic .....	5634
Robust Sequential Detection in Distributed Sensor Networks .....	M. R. Leonard and A. M. Zoubir .....	5648
Neural Network Detection of Data Sequences in Communication Systems .....	N. Farsad and A. Goldsmith .....	5663

---



---

The Instantaneous Spectrum: A General Framework for Time-Frequency Analysis .....	S. Sandoval and P. L. De Leon	5679
Number of Source Signal Estimation by the Mean Squared Eigenvalue Error .....	S. Beheshti and S. Sedghizadeh	5694
Regional Multi-Armed Bandits With Partial Informativeness .....	Z. Wang, R. Zhou, and C. Shen	5705
Optimal Precoders for Tracking the AoD and AoA of a mmWave Path .....	N. Garcia, H. Wyneersch, and D. T. M. Slock	5718
Identification of Overlapping Communities via Constrained Egonet Tensor Decomposition .....	F. Sheikholeslami and G. B. Giannakis	5730
Irregularity-Aware Graph Fourier Transforms .....	B. Girault, A. Ortega, and S. S. Narayanan	5746
On Finding a Subset of Non-Defective Items From a Large Population .....	A. Sharma and C. R. Murthy	5762
Non-Coherent Direction-of-Arrival Estimation Using Partly Calibrated Arrays .....	W. Suleiman, P. Parvazi, M. Pesavento, and A. M. Zoubir	5776
Orthogonal Ramanujan Sums, Its Properties, and Applications in Multiresolution Analysis .....	D. K. Yadav, G. Kuldeep, and S. D. Joshi	5789

---