

# IEEE TRANSACTIONS ON COMMUNICATIONS

A PUBLICATION OF THE IEEE COMMUNICATIONS SOCIETY



APRIL 2016

VOLUME 64

NUMBER 4

IECMBT

(ISSN 0090-6778)

## *Coding*

- Informed Decoding Algorithms of LDPC Codes Based on Dynamic Selection Strategy ..... X. Liu, Z. Zhou, R. Cui, and E. Liu 1357
- Repair for Distributed Storage Systems With Packet Erasure Channels and Dedicated Nodes for Repair ..... M. Gerami, M. Xiao, J. Li, C. Fischione, and Z. Lin 1367

## *Cognitive Radio Systems*

- On Throughput Maximization in Multichannel Cognitive Radio Networks Via Generalized Access Strategy ..... C. Yang, W. Lou, Y. Fu, S. Xie, and R. Yu 1384
- Achievable Throughput Analysis of Opportunistic Spectrum Access in Cognitive Radio Networks With Energy Harvesting ..... Y. H. Bae and J. W. Baek 1399
- Disruptive Attacks on Video Tactical Cognitive Radio Downlinks ..... M. Soysa, P. C. Cosman, and L. B. Milstein 1411
- Cooperative Precoding for Cognitive Transmission in Two-Tier Networks ..... R. Yao, Y. Liu, L. Lu, G. Y. Li, and A. Maaref 1423

## *Cooperative/Relay Systems*

- On the Feedback Reduction of Multiuser Relay Networks Using Compressive Sensing ..... K. Elkhailil, M. E. Eltayeb, A. Kammoun, T. Y. Al-Naffouri, and H. R. Bahrami 1437
- Blind Compute-and-Forward ..... C. Feng, D. Silva, and F. R. Kschischang 1451

## *Information Theory*

- Delay-Limited Capacity in the Low Power Regime ..... Z. Rezki and M.-S. Alouini 1464
- On the Degrees of Freedom of Interference Broadcast Channels With Topological Interference Management ..... P. Aquilina and T. Ratnarajah 1477
- An Information Theoretic Characterization of Channel Shortening Receivers ..... F. Rusek and O. Edfors 1490

## *MIMO*

- Distributed Bargaining Strategy for Downlink Virtual MIMO With Device-to-Device Communication ..... S. H. Lee, D. R. Shin, H. W. Jeong, and Y. H. Kim 1503
- Performance of Symbol-Level Combining and Bit-Level Combining in MIMO Multiple ARQ Systems ..... S. Park and S. Choi 1517
- Statistical 3-D Beamforming for Large-Scale MIMO Downlink Systems Over Rician Fading Channels ..... X. Li, S. Jin, H. A. Suraweera, J. Hou, and X. Gao 1529
- Success Probability and Area Spectral Efficiency in Multiuser MIMO HetNets ..... C. Li, J. Zhang, J. G. Andrews, and K. B. Letaief 1544
- Millimeter Wave MIMO With Lens Antenna Array: A New Path Division Multiplexing Paradigm ..... Y. Zeng and R. Zhang 1557

(Contents Continued on Back Cover)



---

Exploiting the Increasing Correlation of Space Constrained Massive MIMO for CSI Relaxation .....	1572
..... A. Garcia-Rodriguez and C. Masouros	
<i>Modulation/Detection</i>	
On the Achievable Rate of Generalized Spatial Modulation Using Multiplexing Under a Gaussian Mixture Model .....	1588
..... A. A. I. Ibrahim, T. Kim, and D. J. Love	
Log-Linear-Complexity GLRT-Optimal Noncoherent Sequence Detection for Orthogonal and RFID-Oriented Modulations .....	1600
..... P. N. Alevizos, Y. Fountzoulas, G. N. Karystinos, and A. Bletsas	
Read and Write Voltage Signal Optimization for Multi-Level-Cell (MLC) NAND Flash Memory .....	1613
..... C. A. Aslam, Y. L. Guan, and K. Cai	
<i>Multiple Access</i>	
A Simple Scheme for Realizing the Promised Gains of Downlink Nonorthogonal Multiple Access .....	1624
..... S.-L. Shieh and Y.-C. Huang	
<i>Networks</i>	
Modeling the Dynamic Processing of the Presynaptic Terminals for Intrabody Nanonetworks .....	1636
..... A. S. Cacciapuoti, A. Piras, and M. Caleffi	
On the Throughput Capacity Study for Aloha Mobile Ad Hoc Networks .....	1646
..... Y. Chen, Y. Shen, J. Zhu, X. Jiang, and H. Tokuda	
Delay Analysis of Social Group Multicast-Aided Content Dissemination in Cellular System .....	1660
..... J. Hu, L.-L. Yang, and L. Hanzo	
A Learning-Based Approach to Caching in Heterogenous Small Cell Networks .....	1674
..... B. N. Bharath, K. G. Nagananda, and H. V. Poor	
Protocol Sequences for the Multiple-Packet Reception Channel Without Feedback .....	1687
..... Y. Zhang, Y.-H. Lo, W. S. Wong, and F. Shu	
<i>Optical Communication</i>	
High-Speed Indoor Optical Wireless Links Employing Fast Angle and Power Adaptive Computer-Generated Holograms With Imaging Receivers .....	1699
..... M. T. Alresheedi and J. M. H. Elmirghani	
<i>Source-Channel Coding</i>	
Residual-Quantization Based Code Design for Compressing Noisy Sources With Arbitrary Decoder Side Information .....	1711
..... Y.-P. Wei, S.-C. Lin, S.-J. Lin, H.-J. Su, and H. V. Poor	
<i>Transmission Systems</i>	
Design and EXIT Chart Analysis of a Doubly Iterative Receiver for Mitigating Impulsive Interference in OFDM Systems .....	1726
..... Q. Li, J. Zhang, and U. Epple	
Theoretical Performance Evaluation and Optimization of UW-OFDM .....	1739
..... H. Steendam	
<i>Wireless Communications</i>	
Error Rate and Power Allocation Analysis of Regenerative Networks Over Generalized Fading Channels .....	1751
..... M. K. Fikadu, P. C. Sofotasios, S. Muhaidat, Q. Cui, G. K. Karagiannidis, and M. Valkama	
Throughput Analysis and Optimization of Wireless-Powered Multiple Antenna Full-Duplex Relay Systems .....	1769
..... M. Mohammadi, B. K. Chalise, H. A. Suraweera, C. Zhong, G. Zheng, and I. Krikidis	
Error Vector Magnitude Analysis of Fading SIMO Channels Relying on MRC Reception .....	1786
..... V. A. Thomas, S. Kumar, S. Kalyani, M. El-Hajjar, K. Giridhar, and L. Hanzo	

---