

IEEE TRANSACTIONS ON INFORMATION THEORY

A Journal Devoted to the Theoretical and Experimental Aspects of Information Transmission, Processing, and Utilization



SEPTEMBER 2016

VOLUME 62

NUMBER 9

IETTAW

(ISSN 0018-9448)

CODING THEORY

- L. Wei, D. G. M. Mitchell, T. E. Fuja, and D. J. Costello, Jr. Design of Spatially Coupled LDPC Codes Over GF(q) for Windowed Decoding 4781

- Y. Cassuto, S. Kvavitsky, and E. Yaakobi Information-Theoretic Sneak-Path Mitigation in Memristor Crossbar Arrays 4801
Y. Zhang and G. Ge

- D. Cullina, N. Kiyavash, and A. A. Kulkarni Snake-in-the-Box Codes for Rank Modulation under Kendall's τ -Metric in S_{2n+2} 4814
C. Tian and T. Liu

- J. Li and X. Tang Restricted Composition Deletion Correcting Codes 4819
Multilevel Diversity Coding With Regeneration 4833

- H.-H. Tang, C.-H. Wang, and M.-C. Lin Optimal Exact Repair Strategy for the Parity Nodes of the $(k + 2, k)$ Zigzag Code 4848
Further Exploration of Convolutional Encoders for Unequal Error Protection and New UEP Convolutional Codes 4857

- A. S. Castellanos, A. M. Masuda, and L. Quoos One- and Two-Point Codes Over Kummer Extensions 4867

SHANNON THEORY

- M. Alsan and E. Telatar A Simple Proof of Polarization and Polarization for Non-Stationary Memoryless Channels 4873
B. Nazer, V. R. Cadambe, V. Ntranos, and G. Caire Expanding the Compute-and-Forward Framework: Unequal Powers, Signal Levels, and Multiple Linear Combinations 4879

- A. Vahid and R. Calderbank Two-User Erasure Interference Channels With Local Delayed CSIT 4910
M. Ashok Kumar and I. Sason Projection Theorems for the Rényi Divergence on α -Convex Sets 4924
R. Kolte, A. Özgür, and H. Permuter Multicoding Schemes for Interference Channels 4936

COMMUNICATION NETWORKS

- S. L. Fong and V. Y. F. Tan Strong Converse Theorems for Classes of Multimessage Multicast Networks: A Rényi Divergence Approach 4953
S. Saeedi Bidokhti, V. M. Prabhakaran, and S. N. Diggavi Capacity Results for Multicasting Nested Message Sets Over Combination Networks 4968

GAUSSIAN NETWORKS

- M. Cardone, D. Tuninetti, and R. Knopp The Two-User Causal Cognitive Interference Channel: Novel Outer Bounds and Constant Gap Result for the Symmetric Gaussian Noise Channel in Weak Interference 4993



SECURE COMMUNICATION	
<i>W. Wang, L. Ying, and J. Zhang</i>	5018
On the Relation Between Identifiability, Differential Privacy, and Mutual-Information Privacy	
COMMUNICATIONS	
Power Optimization in Random Wireless Networks	5030
A Framework for Joint Design of Pilot Sequence and Linear Precoder	5059
SOURCE CODING	
Rate-Distortion Function for a Heegard-Berger Problem With Two Sources and Degraded Reconstruction Sets	5080
Multi-Class Source-Channel Coding	5093
<i>M. Benammar and A. Zaidi</i>	
<i>I. E. Bocharova, A. Guillén i Fàbregas, B. D. Kudryashov, A. Martínez, A. Tauste Campo, and G. Vazquez-Vilar</i>	
<i>R.-A. Pitaval, L. Wei, O. Tirkkonen, and J. Corander</i>	
Volume of Metric Balls in High-Dimensional Complex Grassmann Manifolds	5105
SIGNAL PROCESSING AND ESTIMATION	
From Denoising to Compressed Sensing	5117
Unknown Sparsity in Compressed Sensing: Denoising and Inference	5145
Representer Theorems for Sparsity-Promoting ℓ_1 Regularization	5167
Estimation for Models Defined by Conditions on Their L-Moments	5181
BOOLEAN FUNCTIONS AND SEQUENCES	
Recent Results on Balanced Symmetric Boolean Functions	5199
There Are Infinitely Many Bent Functions for Which the Dual Is Not Bent	5204
New Families of Optimal Frequency Hopping Sequence Sets	5209
Equiangular Tight Frames From Hyperovals	5225
Aperiodic Crosscorrelation of Sequences Derived From Characters	5237
QUANTUM INFORMATION THEORY	
On Zero-Error Communication via Quantum Channels in the Presence of Noiseless Feedback	5260
<i>G. Gao, Y. Guo, and Y. Zhao</i>	
<i>A. Çeşmelioglu, W. Meidl, and A. Pott</i>	
<i>J. Bao and L. Ji</i>	
<i>M. Fickus, D. G. Mixon, and J. Jasper</i>	
<i>D. J. Katz</i>	
<i>R. Duan, S. Severini, and A. Winter</i>	