

IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS

A PUBLICATION OF THE IEEE COMMUNICATIONS SOCIETY AND THE IEEE SIGNAL PROCESSING SOCIETY



OCTOBER 2016

VOLUME 15

NUMBER 10

ITWCAX

(ISSN 1536-1276)

REGULAR PAPERS

Joint Power and Bandwidth Allocation in Wireless Cooperative Localization Networks	6527
..... Tingting Zhang, Andreas F. Molisch, Yuan Shen, Qinyu Zhang, Hao Feng, and Moe Z. Win	
An Efficient Algorithm for Optimally Solving a Shortest Vector Problem in Compute-and-Forward Design	6541
..... Jinming Wen, Baojian Zhou, Wai Ho Mow, and Xiao-Wen Chang	
Millimeter Wave Receiver Design Using Low Precision Quantization and Parallel $\Delta\Sigma$ Architecture	6556
..... Deepan S. Palguna, David J. Love, Timothy A. Thomas, and Amitava Ghosh	
Utilization of Multiple-Antenna Multicarrier Systems and NLOS Mitigation for Accurate Wireless Indoor Positioning	6570
..... Abdo Gaber and Abbas Omar	
LBT-Based Adaptive Channel Access for LTE-U Systems	6585
..... Rui Yin, Guanding Yu, Amine Maaref, and Geoffrey Ye Li	
Error Analysis of the OTDOA From the Resolved First Arrival Path in LTE Seung-Hyun Kong and Binhee Kim	6598
Artificial-Noise-Aided Physical Layer Phase Challenge-Response Authentication for Practical OFDM Transmission	6611
..... Xiaofu Wu, Zhen Yang, Cong Ling, and Xiang-Gen Xia	
Caching Placement in Stochastic Wireless Caching Helper Networks: Channel Selection Diversity via Caching	6626
..... Seong Ho Chae and Wan Choi	
RSSI-Based Distributed Self-Localization for Wireless Sensor Networks Used in Precision Agriculture	6638
..... Pooyan Abouzar, David G. Michelson, and Maziyar Hamdi	
Efficient AL-FEC Mechanism Aided by Navigation Systems for SOTM Systems	6651
..... Kyu-Hwan Lee and Jae-Hyun Kim	
Efficient Identification of a Multi-Objective Pareto Front on a Wireless Experimentation Facility	6662
..... Michael Tatemke Mehari, Eli De Poorter, Ivo Couckuyt, Dirk Deschrijver, Günter Vermeeren, David Plets, Wout Joseph, Luc Martens, Tom Dhaene, and Ingrid Moerman	
Short Message Noisy Network Coding With Sliding-Window Decoding for Half-Duplex Multihop Relay Networks	6676
..... Song-Nam Hong, Ivana Marić, and Dennis Hui	
Resource Allocation in Two-Tier Wireless Backhaul Heterogeneous Networks	6690
..... Tri Minh Nguyen, Animesh Yadav, Wessam Ajib, and Chadi Assi	
Beamforming Design for Full-Duplex Two-Way Amplify-and-Forward MIMO Relay	6705
..... Yeonggyu Shim, Wan Choi, and Hyuncheol Park	
On the Outage Performance of Non-Orthogonal Multiple Access With 1-bit Feedback	6716
..... Peng Xu, Yi Yuan, Zhiguo Ding, Xuchu Dai, and Robert Schober	

(Contents Continued on Page 6525)



Performance Analysis of Non-Linear Generalized Pre-Coding Aided Spatial Modulation	6731
..... <i>Rong Zhang, Lie-Liang Yang, and Lajos Hanzo</i>	
Analytical Modeling of Interference Aware Power Control for the Uplink of Heterogeneous Cellular Networks	6742
..... <i>Francisco J. Martin-Vega, Gerardo Gomez, Mari Carmen Aguayo-Torres, and Marco Di Renzo</i>	
Dimensionality of Spatio-Temporal Broadband Signals Observed Over Finite Spatial and Temporal Windows	6758
..... <i>Farhana Bashar, Thushara D. Abhayapala, and S. M. Akramus Salehin</i>	
Sensor Deployment With Limited Communication Range in Homogeneous and Heterogeneous Wireless Sensor Networks	6771
..... <i>Jun Guo and Hamid Jafarkhani</i>	
Uplink Power Allocation for Distributed Interference Cancellation With Channel Estimation Error	6785
..... <i>Khalid Zeineddine, Michael L. Honig, and Shirish Nagaraj</i>	
In-Band α -Duplex Scheme for Cellular Networks: A Stochastic Geometry Approach	6797
..... <i>Ahmad AlAmmouri, Hesham ElSawy, Osama Amin, and Mohamed-Slim Alouini</i>	
Exploiting Secure and Energy-Efficient Collaborative Spectrum Sensing for Cognitive Radio Sensor Networks	6813
..... <i>Ju Ren, Yaoxue Zhang, Qiang Ye, Kan Yang, Kuan Zhang, and Xuemin Shen</i>	
Energy-Efficient Routing in Wireless Networks in the Presence of Jamming	6828
..... <i>Azadeh Sheikholeslami, Majid Ghaderi, Hossein Pishro-Nik, and Dennis Goeckel</i>	
Secure Transmission in Cooperative Relaying Networks With Multiple Antennas	6843
..... <i>Yuzhen Huang, Jinlong Wang, Caijun Zhong, Trung Q. Duong, and George K. Karagiannidis</i>	
Throughput Analysis of Proportional Fair Scheduling for Sparse and Ultra-Dense Interference-Limited OFDMA/LTE Networks	6857
..... <i>Donald Parruca and James Gross</i>	
Constant Envelope Precoding With Adaptive Receiver Constellation in MISO Fading Channel	6871
..... <i>Shuowen Zhang, Rui Zhang, and Teng Joon Lim</i>	
Cross-Layer Rethink on Sensing-Throughput Tradeoff for Multi-Channel Cognitive Radio Networks	6883
..... <i>Shaojie Zhang, Abdelhakim Senhaji Hafid, Haitao Zhao, and Shan Wang</i>	
User-Centric Energy Efficiency Maximization for Wireless Powered Communications	6898
..... <i>Qingqing Wu, Wen Chen, Derrick Wing Kwan Ng, Jun Li, and Robert Schober</i>	
On Secrecy Metrics for Physical Layer Security Over Quasi-Static Fading Channels	6913
..... <i>Biao He, Xiangyun Zhou, and A. Lee Swindlehurst</i>	
Channel Estimation for Full-Duplex Relay Systems With Large-Scale Antenna Arrays	6925
..... <i>Xin Xiong, Xiaodong Wang, Taneli Riihonen, and Xiaohu You</i>	
Directional Radio Propagation Path Loss Models for Millimeter-Wave Wireless Networks in the 28-, 60-, and 73-GHz Bands	6939
..... <i>Ahmed Iyanda Sulymian, Abdulmalik Alwarafy, George R. MacCartney, Jr., Theodore S. Rappaport, and Abdulhameed Alsanie</i>	
Antenna Selection and Hybrid Beamforming for Simultaneous Wireless Information and Power Transfer in Multi-Group Multicasting Systems	6948
..... <i>Özlem Tuğçe Demir and Temel Engin Tuncer</i>	
DoA Estimation and Capacity Analysis for 3-D Millimeter Wave Massive-MIMO/FD-MIMO OFDM Systems	6963
..... <i>Rubayet Shafin, Lingjia Liu, Jianzhong Zhang, and Yik-Chung Wu</i>	
Self-Coherent OFDM With Undersampling Downconversion for Wireless Communications	6979
..... <i>Qianyu Jin and Yi Hong</i>	
Caching as a Service: Small-Cell Caching Mechanism Design for Service Providers	6992
..... <i>Zhiwen Hu, Zijie Zheng, Tao Wang, Lingyang Song, and Xiaoming Li</i>	
Iunius: A Cross-Layer Peer-to-Peer System With Device-to-Device Communications	7005
..... <i>Yue Wu, Siyi Wang, Wuling Liu, Weisi Guo, and Xiaoli Chu</i>	
On Selective Activation in Dense Femtocell Networks	7018
..... <i>Michael Lin, Simone Silvestri, Novella Bartolini, and Thomas F. La Porta</i>	
Arbitrating Traffic Contention for Power Saving with Multiple PSM Clients	7030
..... <i>Dachuan Liu, Haining Wang, Gang Zhou, Weizhen Mao, and Boyang Li</i>	
Analysis of Urban Two-Tier Heterogeneous Mobile Networks With Small Cell Partitioning	7044
..... <i>Martin Taranetz, Robert W. Heath, Jr., and Markus Rupp</i>	
Multiuser MIMO Transmission Aided by Massive One-Bit Magnitude Measurements	7058
..... <i>Shengchu Wang, Lin Zhang, Yunzhou Li, Jing Wang, and Eiji Oki</i>	
On Optimality of Local Maximum-Likelihood Detectors in Large-Scale MIMO Channels	7074
..... <i>Yi Sun, Le Zheng, Pengcheng Zhu, and Xiaodong Wang</i>	
Analysis of a Frequency-Hopping Millimeter-Wave Cellular Uplink	7089
..... <i>Don Torrieri, Salvatore Talarico, and Matthew C. Valenti</i>	

Resource Allocation for D2D Communication Underlaid Cellular Networks Using Graph-Based Approach	7099
..... <i>Tuong Duc Hoang, Long Bao Le, and Tho Le-Ngoc</i>	
Statistical Trilateration With Skew-t Distributed Errors in LTE Networks	7114
..... <i>Philipp Müller, José A. del Peral-Rosado, Robert Piché, and Gonzalo Seco-Granados</i>	
A Belief Propagation-Based Framework for Soft Multiple-Symbol Differential Detection	7128
..... <i>Chanfei Wang, Tiejun Lv, Hui Gao, and Shaoshi Yang</i>	
Layered Spatial Modulation for Multiuser Communications	7143
..... <i>Mehdi Maleki, Hamid Reza Bahrami, and Ardalan Alizadeh</i>	
Robust Power and Bandwidth Allocation in Cognitive Radio System With Uncertain Distributional Interference Channels	7160
..... <i>Rongfei Fan, Wen Chen, Jianping An, Feifei Gao, and Gongpu Wang</i>	
Beyond One-Way Communication: Degrees of Freedom of Multi-Way Relay MIMO Interference Networks	7174
..... <i>Chenwei Wang</i>	
Proactive Caching for Mobile Video Streaming in Millimeter Wave 5G Networks	7187
..... <i>Jian Qiao, Yejun He, and Xuemin Shen</i>	
Synchronization Sequence Design for FBMC/OQAM Systems	7199
..... <i>Wonsuk Chung, Chanhong Kim, Sooyong Choi, and Daesik Hong</i>	
