
VTC2016-Fall Accepted Paper List

1. Antenna Systems, Propagation, and RF Design Papers

55351

1 An Extension of Spatial Channel Model with Spatial Consistency

Yi Wang, Huawei Technologies, CO., LTD; Zhenyu Shi, Huawei Technologies Co., Ltd.; Lei Huang, Ziming Yu, Huawei Technologies, CO., Ltd; Chang Cao, Communications Technology Lab Huawei Technologies Co., Ltd

87832

2 Angular Resolved Pathloss Measurements in Urban Macrocell Scenarios at 28 GHz

Christina Larsson, Bengt-Erik Olsson, Jonas Medbo, Ericsson Research

80174

3 Design of A wideband and dual-polarized CPW-Fed Monopole Antenna for Future 5G Communications

Haiyang ZHANG, Huan Sun, alcatel Shanghai BELL; Tao Yang, Alcatel Shanghai Bell

56240

4 Gaussian Modeling of Spatially Correlated LOS/NLOS Maps for Mobile Communications

Stefan Schwarz, Technische Universität (TU) Wien; Illia Safiulin, Vienna University of Technology; Tal Philofof, General Motors; Markus Rupp, Vienna University of Technology

84615

5 Geometry-Based Stochastic Modeling for Non-Stationary High-Speed Train MIMO Channels

Junhui Zhao, Shangyao Wang, Xu Liu, Beijing Jiaotong University; Yi Gong, South University of Science and Technology of China

32830

6 Modelling of Human Body Shadowing Based on 28 GHz Indoor Measurement Results

Xubin Chen, Beijing University of Posts and Telecommunications; Tian Lei, Beijing University of Posts and Telecommunication; Pan Tang, Zhang Jianhua, Beijing University of Posts and Telecommunications

89083

7 Moment-Based Parameter Estimation for the Two-Wave with Diffuse Power Fading Model

Jesus Lopez Fernandez, University of Malaga (Spain); Laureano Moreno-Pozas, Universidad de Málaga; Eduardo Martos-Naya, F. Javier Lopez-Martinez, Universidad de Malaga

14209

8 Path loss model based on cluster at 28GHz in the office and corridor environments

Lai Zhou, Jiahui Li, Limin Xiao, Zhi Yang, Jin Lian, Shidong Zhou, Tsinghua University

45812

9 Propagation Characteristics of Indoor Radio Channel from 3.5 GHz to 28 GHz

fusheng huang, Beijing University of Posts and Telecommunications

28423

10 Propagation Characteristics of Suburban Environments using Hybrid Ray-Tracing Simulation

Kyung-Gyu Lee, Seong-Jun Oh, Korea University

67966

11 Radiation Pattern Analysis of Single and Multi-Antenna Wearable Systems

Mohammad Waris Abdullah, Xenofon Fafoutis, Maciej Klemm, Geoffrey Hilton, University of Bristol

79674

12 Single Radio Transmission and Reception for Spatial Multiplexing MIMO

Gweon-Do Jo, Jung-Nam Lee, Hyoung-Oh Bae, ETRI; Yongho Lee, Electronics and Telecommunications Research Institute; Donghyuk Gwak, Jung-Hoon Oh, ETRI

10690

13 Spectrogram Analysis of Multipath Fading Channels Under Variations of the Mobile Speed

Matthias Pätzold, University of Agder; Carlos A. Gutierrez, Universidad Autonoma de San Luis Potosi

12212

14 The Variation on the Uplink Multipaths? DOA Distribution for the Maneuvering Mobile Station in the Wireless Cellular Network

Weiyuan CHEN, Yue Ivan WU, Sichuan University

38413

15 TV White Space Network Provisioning with Directional and Omni-directional Terminal Antennas

Qianyun Zhang, Queen Mary, University of London; Xingjian Zhang, Yue Gao, Queen Mary University of London; Oliver Holland, Mischa Dohler, King's College London; Pravir Chawdhry, Jean-Marc Chateau, Joint Research Centre of the European Commission

2. Signal Transmission and Reception Papers

68350

1 73 GHz Millimeter-Wave Human Blockage and Dynamic Measurements

George R. MacCartney Jr., Sija Deng, Shu Sun, Theodore Rappaport, New York University

81951

2 A Blind Polyphase Time-Domain Selected Mapping for Filtered Single-Carrier Signal Transmission

Amnart Boonkajay, Fumiuyuki Adachi, Tohoku University

28814

3 Adaptive Modulation and Coding for Large Open Office Indoor Wireless Environments

Indrakshi Dey, Geoffrey Messier, Sebastian Magierowski, University of Calgary

39138

4 A Different Approach in Transceiver Design for Full-Duplex MIMO Systems

Ali Cagatay Cirik, University of British Columbia; Omid Taghizadeh, RWTH Aachen University; Lutz Lampe, University of British Columbia; T. Ratnarajah, University of Edinburgh

36804

5 A List Orthogonal Matching Pursuit Detector for Generalized Space Shift Keying MIMO Systems

Kuan-Hua Chen, National Tsing-Hua University; Chiao-En Chen, National Chung Cheng University; Yuan-Hao Huang, National Tsing-Hua University

11360

6 Analysis of Urban Millimeter Wave Microcellular Networks

YUYANG WANG, KIRAN VENUGOPAL, UNIVERSITY OF TEXAS AT AUSTIN; Andreas F. Molisch, University of Southern California; Robert W. Heath Jr, University of Texas at Austin

57741

7 An Efficient User Selection Technique for Full-Duplex MU-MISO Systems

Minki Ahn, Korea University; Han-bae Kong, Nanyang Technological University; Hun Min Shin, Inkyu Lee, Korea University

65061

8 A Novel Interleaving Scheme for Polar Codes

Ya Meng, Liping Li, Yanjun Hu, Anhui University

26412

9 A Novel Multiuser Detection Algorithm in Uplink UFMC-IDMA Systems with Carrier Frequency Offsets

Chongbin Wu, Zhejiang University; Ming Lei, University of Zhejiang; Minjian Zhao, Ming-Min Zhao, Zhejiang University

67474

10 A Novel QAM-FBMC without Intrinsic Time-Domain Interference

Jinchao Wang, Zhang Yuyan, Hui Zhao, Lin Li, Hang Long, Beijing University of Posts and Telecommunications

99715

11 Area-Efficient Fault-Tolerant Design for Low-Density Parity-Check Decoders

Bohua Li, Yukui Pei, Ge Ning, Tsinghua University

11778

12 A Simple Transmission Scheme for Coordinated Multipoint Uplink Transmission with Limited Fronthaul

Jiyang Bai, Qingpeng Liang, University of Electronic Science and Technology of China; Chuan Huang, UESTC; Shihai SHAO, University of Electronic Science and Technology of China; Youxi Tang, UESTC

26023

13 A Singularity-free GFDM Modulation scheme with Parametric Shaping Filter Sampling

Atsushi Yoshizawa, Ryota Kimura, Ryo Sawai, Sony Corporation

41161

14 Bayesian Inference Algorithms for Multiuser Detection in M2M Communications

Xiaoxu Zhang, University of Electronic Science and Technology of China; Ying-Chang Liang, Institute for Infocomm Research; JUN FANG, University of Electronic Science and Technology of China

53504

15 BER Analysis of asynchronous and non linear FBMC Based Multi-Cellular Networks

Brahim ELMAROUD, Mohammed V University of Rabat; Ahmed Faqih, ENSIAS, Mohammed V University of Rabat; Driss Aboutajdine, Université Mohammed V Rabat, Maroc; Mohammed Abbad, Mohammed V University, Rabat

16177

16 Capacity Analysis of PLC over Rayleigh Fading Channels with Colored Nakagami-m Additive Noise

YUN AI, Michael Cheffena, Norwegian University of Science and Technology

54706

17 Channel Characteristics Analysis of Angle and Clustering in Indoor Office Environment at 28 GHz

xiaoxing gao, Beijing University of Posts and Telecommunications; Tian Lei, Beijing University of Posts and Telecommunication; Zhang Jianhua, Beijing University of Posts and Telecommunications

26905

18 Construction of Polar Codes Concatenated to Space-Time Block Coding in MIMO System

Bowen Feng, Jian Jiao, Sha Wang, Harbin Institute of Technology Shenzhen Graduate School; Shaohua Wu, Harbin Institute of Technology; Zhang Qinyu, Harbin Institute of Tech.

56101

19 Cooperative versus Full-Duplex Communication in Cellular Networks: A Comparison of the Total Degrees of Freedom

Amr El-Keyi, Halim Yanikomeroglu, Carleton University

64900

20 Distributed Antenna Selection for OFDM Space-Time Block Coded Diversity

Hiroyuki Miyazaki, Fumiyuki Adachi, Tohoku University

14790

21 Effective Beam Alignment Algorithm for Low Cost Millimeter Wave Communication

Tobias Kadur, Hsiao-Lan Chiang, Gerhard Fettweis, Technische Universität Dresden

59601

22 Energy Efficiency Maximization for Downlink OFDMA Systems with Feedback Channel Capacity Constraints

Xunan Li, Chen Chen, Peking University; Lin Bai, Beihang University (BUAA); Ye Jin, Peking University; Jinho Choi, Gwangju Institute of Science and Technology

17386

23 Fairness-aware Resource Allocation in Relay-enhanced TD-LTE-A Systems

Wu Xuanli, Yujie Pei, Harbin Institute of Technology; Fabrice Labeau, McGill University; Wanjun Zhao, Harbin Institute of Technology

29885

24 Generalized Spatial Pulse Position Modulation for Optical Wireless Communications

Hammed Gbolahan Olanrewaju, John Thompson, Wasiu Popoola, University of Edinburgh

93340

25 Higher-order circularity based I/Q imbalance compensation in direct-conversion receivers

Fanglin Gu, Wang Shan, National University of Defense Technology; Wenwu Wang, University of Surrey; Jibo Wei, National University of Defense Technology

70685

26 Improved decoder likelihoods for 3G cellular uplink over asynchronous multi-path fading channels

Shady Elbassiouny, American university in Cairo; Ayman Elezabi, American University in Cairo

11781

27 Inter-Subnetwork Interference Minimization in Partially Connected Two-Way Relaying Networks

Daniel Papsdorf, TU Darmstadt, Germany; Xiang Li, Tobias Weber, University of Rostock; Anja Klein, Technische Universität Darmstadt

23730

28 Joint Clustering and Precoding for a Downlink Non-Orthogonal Multiple Access System with Multiple Antennas

Chin-Liang Wang, Jyun-Yu Chen, Siu-Hang Lam, National Tsing Hua University; Pei Xiao, University of Surrey

33845

29 Joint Source-Channel Optimization of Vector Quantization with Polar Codes

Mohammad Sadegh Mohammadi, Aarhus University; Eryk Dutkiewicz, Macquarie University; Qi Zhang, Aarhus University

38997

30 Joint Transceiver Design for Full-Duplex K-Pair MIMO Interference Channel with Energy Harvesting

Yunlong Cai, Ming-Min Zhao, Zhejiang University; Qingjiang Shi, Zhejiang Sci-Tech University; Mingyi Hong, Iowa State University; Benoit Champagne, McGill University

24745

31 Linear Physical-layer Network Coding for the Fading Y-channel without Transmitter Channel State Information

Jiajia Guo, University of New South Wales; Tao Yang, University of Technology Sydney; Jinhong Yuan, University of New South Wales; Andrew Zhang, ICT Center, CSIRO

82672

32 Multi-stage Message Passing Algorithm for SCMA downlink Receiver

Han Zhang, Han Shuai, Weixiao Meng, Harbin Institute of Technology

73432

33 NOMA for Future Cellular Systems

Kenichi Higuchi, Tokyo University of Science

81037

34 Non-orthogonal Multiple Access with SIC Error Propagation in Downlink Wireless MIMO Networks

Haijian Sun, Bei Xie, Rose Qingyang Hu, Utah State University; Yi Qian, UNL; Geng Wu, Intel Corporation

43017

35 On the Downlink Performance of Massive MIMO With Finite Antenna Elements in Multi-Cellular Networks

Li-Chun Wang, National Chiao Tung University; Youyi Lu, National Chiao Tung University, Taiwan

12464

36 On the Performance of MC-CDMA Cellular Systems Employing Multiuser Decorrelating Detector and Antenna Array

Henry Ramiro Carvajal Mora, State University of Campinas - UNICAMP; Nathaly Verónica Orozco Garzón, State University of Campinas; Celso de Almeida, University of Campinas

87155

37 On the Polar Code Encoding in Fading Channels

Rui Deng, Anhui University; Liping Li, Yanjun Hu, Anhui University

52299

38 On the Precoding for Multi-Cell Massive MIMO Systems with Distributed Antenna Subarrays

Takeaki Nishiuchi, Hai Lin, Katsumi Yamashita, Osaka Prefecture University; Jingxian Wu, University of Arkansas, USA

28312

39 Optimizing Random Unitary Beamforming for Energy Efficiency in MIMO Broadcast Channels

Jae-Hong Kwon, Young-Chai Ko, Korea University; Hong-Chuan Yang, University of Victoria

51391

40 Outage Analysis of Asymmetric RF-FSO Systems

Imran Shafique Ansari, Texas A&M University at Qatar (TAMUQ); Mohamed Abdallah, Khalid Qaraqe, Texas A&M University at Qatar; Mohamed-Slim Alouini, KAUST

50328

41 Performance Analysis of Beam Sweeping in Millimeter Wave Assuming Noise and Imperfect Antenna Patterns

Vutha Va, Robert W. Heath Jr, University of Texas at Austin

82470

42 Performance Analysis of Opportunistic Systems Employing Maximal Ratio Combining and Antenna Array

Nathaly Verónica Orozco Garzón, State University of Campinas; Henry Ramiro Carvajal Mora, State University of Campinas - UNICAMP; Celso de Almeida, University of Campinas

32788

43 Performance Analysis of Two-Way Relaying Systems with Radio Frequency Energy Harvesting and Multiple Antennas

Duc-Dung Tran, Faculty of Electrical and Electronics Engineering, Duy Tan University; Ha-Vu Tran, University of Quebec, Ecole de Technologie Supérieure; Dac-Binh Ha, Duy Tan university; Hung Tran, School of Innovation, Design and Engineering, Mälardalen University; Georges Kaddoum, University of Quebec, Ecole de Technologie Supérieure

91090

44 Performance study of IEEE 802.15.4/g waveforms over the mobile underground mine radio-channel

Mohamed Said Mezghani, Université du Québec en Abitibi-Témiscamingue; Nahi Kandil, University of Québec, Abitibi-Témiscamingue; Nadir Hakem, Université du Québec en Abitibi-Témiscamingue

54772

45 Physical Layer Implementation of Standard Compliant Vehicular VLC

Bugra Turan, Koc University; Omer Narmanlioglu, Ozyegin University; Sinem Coleri Ergen, Koc University; Murat Uysal, Ozyegin University

84549

46 PLC Performance Evaluation with Non-Uniform Background Noise Phase

Aashish Mathur, Indian Institute of Technology Delhi; Manav R Bhatnagar, IIT Delhi; Bijaya K. Panigrahi, Indian Institute of Technology Delhi

50764

47 Quantization and Entropy Coding Scheme for Dictionary Learning Based Image Compression

Juan Wang, Tsinghua University; Tao Xiaoming, Tsinghua university; Liu Xijia, Tsinghua University

22124

48 Random Linear Fountain Code with Improved Decoding Success Probability

Jalaluddin Qureshi, Namal College

75104

49 Reshaped OFDM Transmission Scheme for Visible Light Communication using RGBA-LED

Lei Kong, Southeast University; Wei Xu, Southeast University, Nanjing; Hua Zhang, Chunming Zhao, Southeast University

75862

50 SCMA: A Promising Technology for 5G Radio Access Networks

Yan Chen, Huawei; Alireza Bayesteh, Huawei Technologies Canada Co. Ltd.; Yiqun Wu, Mahmoud Taherzadeh, Huawei; Dageng Chen, 2012 Communication Technology Lab, Huawei Technologies; Jianglei Ma, Huawei Technologies Canada Co., Ltd.

67501

51 Secrecy Performance of Dual-hop Threshold Relaying System with Diversity Reception

Chinmoy Kundu, Indian Institute of Technology Delhi; Ngatched Telex, Octavia A. Dobre, Memorial University

33449

52 Self-Interference Mitigation using Active Signal Injection Full-Duplex MIMO-OFDM Systems

Ahmed Masmoudi, Mcgill; Tho Le-Ngoc, McGill University

47402

53 Spectral Efficient Cooperative Downlink Transmission Schemes for DCO-OFDM-Based Optical Attocell Networks

Hossein Kazemi, The University of Edinburgh; Majid Safari, Harald Haas, University of Edinburgh

57358

54 Successive Interference Canceller with CSI Weighting Combining scheme

Hajime Katsuda, Seiji Ohmori, Nippon Telegraph and Telephone Corporation; Kazunori Akabane, NTT Network Innovation Laboratories, NTT Corporation

13510

55 Theoretical Shannon Capacity Performance of Nonlinearly Amplified Uplink OFDMA Signals in the Presence of Terminal Mobility

Takahiro Yamaguchi, Kei Nishimura, Fumiaki Maehara, Waseda University

10383

56 The User Selection and Power Allocation Scheme for NOMA based on Outage Probability and Imperfect CSI

Wenbo Cai, Chen Chen, Peking University; Lin Bai, Beihang University (BUAA); Ye Jin, Peking University; Jinho Choi, Gwangju Institute of Science and Technology

60806

57 Time-Interleaved Block-Windowed Burst OFDM

Telmo Fernandes, Marco Gomes, Instituto de Telecomunicações - University of Coimbra; Rui Dinis, Universidade Nova de Lisboa; Vitor Silva, Instituto de Telecomunicações - University of Coimbra

12044

58 Time Reversal SWIPT Networks with an Active Eavesdropper: SER-Energy Region Analysis

Ha-Vu Tran, Georges Kaddoum, University of Quebec, Ecole de Technologie Supérieure; Hung Tran, School of Innovation, Design and Engineering, Mälardalen University; Duc-Dung Tran, Faculty of

Electrical and Electronics Engineering, Duy Tan University; Dac-Binh Ha, Duy Tan university

99432

59 Towards PHY-aided Authentication via Weighted Fractional Fourier Transform

Xiaojie Fang, Sha Xuejun, Harbin Institute of Technology; Ning Zhang, University of Waterloo; Wu Xuanli, Harbin Institute of Technology; Xuemin (Sherman) Shen, University of Waterloo

28732

60 Transmit Beamforming Optimization for Wireless Information and Power Transfer in MISO Interference Channels with Signal Cooperation

Hoon Lee, Sang-Rim Lee, Korea University; Kyoung-Jae Lee, Hanbat National University; Han-bae Kong, Nanyang Technological University; Inkyu Lee, Korea University

57328

61 Use of the Recursive Least Squares Adaptive Filter for Online Self Interference Channel Estimation for In-Band Full Duplex Communications

Mark Adams, Vijay K. Bhargava, University of British Columbia

20954

62 User Matching with Relation to the Stable Marriage Problem in Cognitive Radio Networks

Doha Hamza, KAUST; Sonia Aissa, INRS, University of Quebec

67286

63 Variable-Rate Anytime Transmission with Feedback

Leeffe Grosjean, Ragnar Thobaben, Lars Rasmussen, Mikael Skoglund, KTH Royal Institute of Technology

98820

64 Virtual Pilot-based Channel Estimation and Multiuser Detection for Multiuser MIMO in LTE-Advanced

Sunho Park, Seoul National University; Jun Won Choi, Hanyang University; Ji-Yun Seol, Samsung Electronics Co., Ltd.; Byonghyo Shim, Seoul National University

3. Cognitive Radio and Spectrum Management Papers

91646

1 A Hybrid Power Line and TV White Space MIMO System for Indoor Broadband Communications

Mohammad Heggo, Xu Zhu, University of Liverpool; Sumei Sun, Institute for Infocomm Research; Yi Huang, University of Liverpool

82082

2 A Modified Jarque-Bera Test for Spectrum Sensing in Cognitive Networks Subject to Rayleigh Fading

Fabricio Braga Soares de Carvalho, Federal University of Paraíba; Waslon Terlizzie A. Lopes, Federal University of Campina Grande; Marcelo S. Alencar, Universidade Federal de Campina Grande

66056

3 A Novel q-Weighted Sequential Cooperative Energy Detection Method for Spectrum Sensing

Shaojie Liu, Sai Huang, Beijing University of Posts and Telecommunications; Wei Li, University of Victoria; Yifan Zhang, FENG Zhiyong, Beijing University of Posts and Telecommunications

47856

4 A Novel Spectrum Sensing Mechanism Based on Distribution Discontinuity Estimation within Cognitive Radio

Yogesh Nijssure, Ecole de Technologie Supérieure; Georges Kaddoum, University of Quebec, Ecole de Technologie Supérieure; Golnaz Ghodoosipour, ETS; Guofa Cai, Lin Wang, Xiamen University

28396

5 A Sparsity-Aware Approach for NBI Estimation and Mitigation in Large Cognitive Radio Networks

Gousssem Ala, Ridha Hamila, Qatar University; Naofal Al-Dahhir, University of Texas at Dallas; Sebti Fofou, Qatar University, Qatar

31883

6 Asymptotic Analysis of Cooperative Spectrum Sensing Under Noise Uncertainty

Jalal Khamse-Ashari, Carleton University; Hassan Halabian, Ericsson Canada; Mahmood Modarres Hashemi, Isfahan University of Technology; Ioannis Lambadaris, Carleton University

87349

7 Asynchronous Full Duplex Cognitive Radio

Vahid Towhidlou, M. Shikh-Bahaei, King's College London

49870

8 Automatic Blind Modulation Recognition of Analog and Digital Signals in Cognitive Radios

Francesco Benedetto, Univ. of Roma Tre - Signal Proc. for TLC and Economics; Antonio Tedeschi, University of Rome "Roma Tre"; Gaetano Giunta, University of Roma Tre

97597

9 Cooperative Sensing with Dependent Observations on BPSK Signal: to Quantize Amplitude or Sign

Huayan Guo, Wei Jiang, Luo Wu, Peking University

70339

10 Demonstration of RF Digitising Concurrent Dual-Band Receiver for Carrier Aggregation over TV White Spaces

Ravinder Singh, Qiang Bai, Timothy O'Farrell, Kenneth Lee Ford, Richard Langley, University of Sheffield

70313

11 Dynamic Licensed Shared Access - A new architecture and spectrum allocation techniques

Valerio Frascolla, Intel Deutschland; António J. Morgado, Alvaro Gomes, Portugal Telecom Inovação; M. Majid Butt, Nicola Marchetti, CONNECT - Trinity College Dublin; Konstantinos Voulgaris, Constantinos B. Papadias, Athens Information Technology

93017

12 Energy Detection with Diversity Combining Over KG Fading For Cognitive VANET

Haroon Rasheed, Bahria University Karachi; Farah Haroon, Institute of Industrial Electronics Engineering (IIEE-PCSIR); Nandana Rajatheva, University of Oulu

51852

13 Experimental Verification of Spectrum Superposing in Two Different Systems by Blind Adaptive Array with Subcarrier Transmission Power Assignment

Hideya So, Nippon Telegraph and Telephone Corporation; Kazuki Maruta, Jun Mashino, NTT Access Network Service Systems Laboratories; Kouhei Suzuki, NTT Network Innovation Laboratories

42369

14 Fundamental Capacity Limits of Spectrum-Sharing in Hoyt (Nakagami-q) Fading Channels

Juan Manuel Romero, University of Malaga; F. Javier Lopez-Martinez, Universidad de Malaga

39994

15 Game Theory-Based Energy Efficiency Optimization for Multi-User Cognitive Radio Over MIMO Interference Channels

Shujun Han, Yanhui Lu, Shouyi Yang, Xiaomin Mu, Ning Wang, Zhengzhou University

65520

16 Implementation of Compressive Sensing with Real-Time Signals over TV White Space Spectrum in Cognitive Radio

Yue Gao, Zhijin Qin, Queen Mary University of London

57372

17 Improved Cuckoo Search Algorithm for Spectrum Sensing in Sparse Satellite Cognitive Systems

Yuan Wanmai, Yang Mingchuan, Guo Qing, Harbin Institute of Technology

14525

18 Joint Optimization of Energy Harvesting and Spectrum Sensing for Energy Harvesting Cognitive Radio

Zhang Shaojie, National University of Defense Technology; Haitao Zhao, National University of Defense Technology, China; Abdelhakim Hafid, University of Montreal; Wang Shan, National University of Defense Technology

40075

19 Low Complexity Automatic Modulation Classification Based on Order Statistics

Lubing Han, Haozhou Xue, Feifei Gao, Tsinghua University; Zan Li, State Key Laboratory of ISN, Xidian University

47254

20 Mean Spectral Radius Detection for Cognitive Radio

yulonggao, Xinsheng Han, Yongkui Ma, Harbin Institute of Technology

36747

21 Multi-band Cooperative Spectrum Sensing in RF Powered Cognitive Radio Networks

Mehak Basharat, Waleed Ejaz, Kaamran Raahemifar, Alagan Anpalagan, Ryerson University

17359

22 Online Power Allocation for Opportunistic Radio Access in Dynamic OFDM Networks

Alexandre Marcastel, E. Veronica Belmega, ETIS/ENSEA-UCP-CNRS, Cergy-Pontoise; Panayotis Mertikopoulos, CNRS, Univ.Grenoble Alpes, LIG; Inbar Fijalkow, ENSEA - Université de Cergy Pontoise - CNRS

74778

23 On Reducing Multiband Spectrum Sensing Duration for Cognitive Radio Networks

Morteza Soltani, Tuncer Baykas, Istanbul Medipol University; Huseyin Arslan, Istanbul Medipol University; University of South Florida

58185

24 On the Achievable Rate and Average Sum Capacity of Spread Spectrum Underlay CR Networks

Saed Daoud, École Polytechnique de Montréal; David Haccoun, École Polytechnique de Montréal; Christian Cardinal, École Polytechnique de Montréal

46792

25 Performance Analysis of Interweave Cognitive Radio Systems with Imperfect Channel Knowledge over Nakagami Fading Channels

Ankit Kaushik, Karlsruhe Institute of Technology; Shree Krishna Sharma, Symeon Chatzinotas, SnT, University of Luxembourg; Bjorn Ottersten, University of Luxembourg; Friedrich K. Jondral, Karlsruhe Institute of Technology

97266

26 Performance of Enhanced Dynamic Frequency Hopping in IEEE 802.22 with MIMO Implementation

Aikaterini Dimogiorgi, Walaa Hamouda, Concordia University

47352

27 Positioning Primary Receiver for Underlay Spectrum Sharing in Cognitive Radio Networks

Guodong Zhao, Bo Chang, Zhi Chen, Liying Li, University of Electronic Science and Technology of China

31406

28 Power Allocation using Geometric Water Filling for OFDM-based Cognitive Radio Networks

Ajmyer Sultana, Lian Zhao, Xavier Fernando, Ryerson University

26882

29 Price Competition in Spectrum Markets: How Accurate is the Continuous Prices Approximation?

Aditya MVS, Abhishek Raghuvanshi, Indian Institute of Technology Bombay; Gaurav, Indian Institute of Technology, Bombay

79129

30 Proactive Cognitive Networks with Predictable Demand

Rana Ahmed, Nile University; John Tadrous, Rice University; Amr El-Keyi, Carleton University; Mohammed Nafie, Nile University

19320

31 Robust Spectrum Sharing under Channel Uncertainty for Cognitive Radio Networks

Le Wang, University of Science and Technology

88970

32 SOSAP: A Pareto-efficient Spectrum Access Protocol for Cognitive Radio Networks

Stefano Iellamo, FORTH-ICS; Marceau Coupechoux, TELECOM Paris Tech; Zaheer Khan, University of Oulu, Finland

15505

33 Square Law Selection Diversity for Wideband Spectrum Sensing Under Fading

Kamal Captain, Manjunath V. Joshi, Dhirubhai Ambani institute of information and communication technology

98717

34 Square-Law Selector and Square-Law Combiner for Cognitive Radio Systems: An Experimental Study

Lucas Rodes, Ankit Kaushik, Karlsruhe Institute of Technology; Shree Krishna Sharma, Symeon Chatzinotas, SnT, University of Luxembourg; Friedrich K. Jondral, Karlsruhe Institute of Technology

44844

35 The potential of offloading and spectrum sharing for 5G vehicular infotainment

John Harris, Mark Beach, Andrew Nix, Paul Thomas, University of Bristol

78127

36 Transmit Antenna Selection for Multi-User Underlay Cognitive Transmission With Zero-Forcing Beamforming

Muhammad Hanif, Hong-Chuan Yang, University of Victoria; Mohamed-Slim Alouini, KAUST

38211

37 Two-Phase Concurrent Sensing and Transmission Scheme for Full Duplex Cognitive Radio

Shree Krishna Sharma, SnT, University of Luxembourg; Tadilo Endeshaw Bogale, Long Le, INRS, University of Quebec; Symeon Chatzinotas, SnT, University of Luxembourg; Xianbin Wang, The University of Western Ontario; Bjorn Ottersten, University of Luxembourg

92102

38 Weighted Blind Spectrum Sensing Based on Signal Auto-Correlation and Cross-Correlation Characteristics in Rayleigh Fading Channels

Xinyu Wang, Min Jia, Guo Qing, Xuemai Gu, Harbin Institute of Technology

4. Multiple Antenna Systems and Cooperative Communications Papers

61962

1 3D MIMO Channel Characteristics and Capacity Evaluation for Different Dynamic Ranges in Outdoor-to-Indoor Scenario for 6 GHz

Yuxiang Zhang, Beijing University of Posts and Telecommunications; Tian Lei, Beijing University of Posts and Telecommunication; Zhang Jianhua, Beijing University of Posts and Telecommunications; Yu Zhang, Qualcomm

57532

2 Achievable Degrees of Freedom of the K-user MISO Broadcast Channel with Alternating CSIT via Interference Creation-Resurrection

Mohammed Seif, Nile University; Amr El-Keyi, Carleton University; Mohammed Nafie, Cairo University and Nile University

39741

3 A Hybrid TDMA-MAC Cooperative Relaying Scheme: Stability and Delay Analysis

Mohamed Salman, University of Colorado Boulder; Amr El-Keyi, Carleton University; Mohammed Nafie, Nile University; Mazen O. Hasna, Qatar University

25860

4 A Low-Complexity MIMO Detector Based on Fast Dual-lattice Reduction Algorithm

Changle Jing, Wang Xin, Bin Chen, Yue Ma, Jibo Wei, National University of Defense Technology

99334

5 A Network-Centric View on DASH in Wireless Multihop Networks

Mousie Fasil, Technical University Darmstadt; Hussein Al-Shatri, Technische Universitaet Darmstadt; Stefan Wilk, Technical University Darmstadt; Anja Klein, Technische Universitaet Darmstadt

86702

6 A New Design and Multiport Performance Evaluation for 3D Massive MIMO System

Yingni Jin, Research and Innovation Center, Bell Labs China

42064

7 Arbitrary Constellations with Coded Maximum Ratio Transmission over Downlink Nakagami-m Fading Channels

Mehmet Cagri Ilter, Carleton University; Pawel Dmochowski, Victoria University of Wellington; Halim Yanikomeroglu, Carleton University

72520

8 A Weighted Combining Algorithm for Spatial Multiplexing MIMO DF Relaying Systems

Kangli Zhang, Jian Wang, National University of Defense Technology; Jiabin Yang, Benoit Champagne, McGill University; Jibo Wei, National University of Defense Technology

37605

9 Beamforming Optimization for Multiuser Wireless Systems using Meta-Heuristics

Pedro Bento, Instituto de Telecomunicações - University of Coimbra; Carlos Henggeler Antunes, University of Coimbra; Marco Gomes, Instituto de Telecomunicações - University of Coimbra; Rui Dinis, Universidade Nova de Lisboa; Vitor Silva, Instituto de Telecomunicações - University of Coimbra

71261

10 Buffer-Aided Max-Link Relay Selection in Multi-Hop DF Cooperative Networks

B. R. Manoj, Ranjan K. Mallik, Manav R Bhatnagar, IIT Delhi

72141

11 Compress-and-Forward Relaying: Prototyping and Experimental Evaluation using SDRs

Irfan Ullah, Lahore University of Management Sciences; Fawad ud Din, McGill University; Jawwad Chattha, Momin Ayub Uppal, Lahore University of Management Sciences

96030

12 Coverage Performance of MIMO-MRC in Heterogeneous Networks: A Stochastic Geometry Perspective

Mohammad G. Khoshkholgh, UBC; Dr. Keivan Navaie, Lancaster University; Kang G. Shin, The University of Michigan; Victor C. M. Leung, The University of British Columbia

24275

13 Energy Efficient Pilot and Data Power Allocation in Multi-Cell Multi-User Massive MIMO Communication Systems

Ye Zhang, Wei-Ping Zhu, Concordia University

41113

14 Energy-Efficient Power Allocation for Cognitive MIMO Channels

Lokman Sboui, King Abdullah University of Science and Technology (KAUST); Zouheir Rezki, KAUST; Ahmed Kamal Sultan Salem, King Abdullah University of Science and Technology; Mohamed-Slim Alouini, KAUST

58320

15 Experimental Evaluation of DCOOP Protocol using USRP-RIO based testbed at 5.8GHz

Nasir Hussain, Karla Ziri-Castro, Dhammika Jayalath, Queensland University of Technology; Mohammed Arafah, King Saud University

43848

16 Finite-SNR DMT Analysis for Multisource Multirelay NCC Systems with Imperfect CSI

Ali Reza Heidarpour, Ozyegin University; Gunes Kurt, Istanbul Technical University; Murat Uysal, Ozyegin University

74338

17 L1/2-Regularization Based Antenna Selection for RF-Chain Limited Massive MIMO Systems

Shichao Qin, Xi'an Jiaotong University; Guobing Li, Gangming Lv, Xi'an Jiaotong University; Guomei Zhang, Xi'an Jiaotong University; Hui Hui, Xi'an University of Technology

92723

18 Large-Scale MIMO Systems with Practical Power Constraints

Rami Hamdi, École de Technologie Supérieure; Elmahdi Driouch, Université du Québec à Montréal; Wessam Ajib, University of Quebec at Montreal

13781

19 LDPC Coded Angular Modulation Scheme for Cooperative Wireless Networks

Dushantha Nalin K Jayakody, University of Tartu, Estonia

67589

20 Location Based Beamforming in 5G Ultra-Dense Networks

Petteri Kela, Mário Costa, Huawei Technologies Finland; Jussi Turkka, Magister Solutions; Mike Koivisto, Janis Werner, Aki Hakkarainen, Mikko Valkama, Tampere University of Technology; Riku Jäntti, Aalto University; Kari Leppänen, Huawei Technologies Finland

41371

21 Low Complexity Node Selection Algorithms in MU-MIMO Energy Harvesting WSNs

Amina Hentati, Ecole polytechnique de Montréal; Elmahdi Driouch, Université du Québec à Montréal; Jean-François Frigon, École Polytechnique de Montréal; Wessam Ajib, University of Quebec at Montreal

88091

22 Massive MIMO Performance with Pilot Reuse

Fredrik Athley, Sebastian Faxér, Ericsson Research

38193

23 Multi-layer Network Coding for Multiuser Relay Networks With Non-Uniform-Rate Users

Chunling Peng, Fangwei Li, Chongqing University of Posts and Telecommunications; Huaping Liu, Oregon State University

52889

24 Non-asymptotic Outage Probability of Large-scale MU-MIMO Systems with Linear Receivers

Mengmeng Liu, Zhang Jianhua, Xu Chao, Zhang Ping, Beijing University of Posts and Telecommunications

26507

25 On Normalization of Matched Filter Belief in GaBP for Large MIMO Detection

Takumi Takahashi, Shinsuke Ibi, Seiichi Sampei, Osaka University

60830

26 On the Capacity of Nonlinear Massive MIMO-OFDM Systems

Pedro Fernandes, Universidade Nova de Lisboa; João Guerreiro, Instituto de Telecomunicações, Universidade Nova de Lisboa; Rui Dinis, Universidade Nova de Lisboa; Paulo Carvalho, FCT-Universidade Nova de Lisboa

30878

27 On the Design of Robust Multi-User Receivers for Base Station Cooperation Systems

Filipe Casal Ribeiro, ISCTE-IUL; João Guerreiro, Instituto de Telecomunicações, Universidade Nova de Lisboa; Rui Dinis, Universidade Nova de Lisboa; Francisco Cercas, Instituto de Telecomunicações; Adão Silva, DETI / Instituto de Telecomunicações / University of Aveiro

15656

28 On the Evaluation of Clipping Effects in Massive MIMO-OFDM Systems

João Guerreiro, Instituto de Telecomunicações, Universidade Nova de Lisboa; Rui Dinis, Universidade Nova de Lisboa; Paulo Carvalho, FCT-Universidade Nova de Lisboa

40761

29 Opportunistic Scheduling Algorithm for Joint-Processing DL CoMP

Thierry Clessienne, Orange Labs

38020

30 Optimum HDAF Relay-Assisted Combining Scheme with Relay Decision Information

Rawan Alkurd, Carleton University; Ibrahim Abualhaol, 2VENUS Cybersecurity Corporation; Raed M. Shubair, Khalifa University of Science, Technology and Research; Raed Shubair, Muriel Medard, MIT

82565

31 Outage Probability of Two-Way Full-Duplex AF Relay Systems over Nakagami-m Fading Channel

Asil Koç, Istanbul Technical University; Ibrahim Altunbas, Istanbul Technical University, Electrical and Electronics Faculty; Abbas Yongacoglu, University of Ottawa

46302

32 Partial Variable-Gain AF Relay Selection with Outdated Channel Estimates in Spectrum-Sharing Networks

Jules Merlin Moualeu Mouatcho, University of the Witwatersrand; Walaa Hamouda, Concordia University; Fambirai Takawira, University of Witwatersrand

42334

33 Performance Analysis of Hybrid-ARQ with Chase Combining over Cooperative Relay Network with Asymmetric Fading Channels

YUN AI, Michael Cheffena, Norwegian University of Science and Technology

64159

34 Precoding Designs in Non-Regenerative MIMO Two-Way Relay Systems for Maximizing Weighted Sum Energy Efficiencies

Zhi Wang, Beijing University of Posts and Telecommunications; Li LiHua, Xingwang Li, Beijing University of Posts and Telecommunications

82326

35 Relaying with Signal Space Diversity in the Presence of Co-Channel Interference

Amir Hossein Forghani, Salama Ikki, Lakehead University; Sonia A?ssa, INRS

95572

36 Simplified Performance Analysis for Amplify-and-Forward Cooperative Diversity Optimal Detection of Binary Signals with Symmetric Alpha-Stable Noise

Tarik Shehata, Carleton University; Mohamed Fathy Feteiha, University of Waterloo; Mohamed Hossam Ahmed, Memorial University of Newfoundland

35077

37 Spectral Efficiency Analysis of Incremental Amplify-and-Forward Opportunistic Relaying with Outdated CSI

Tsingsong Zhou, Qiang Gao, School of Electronic and Information Engineering, Beihang University; Li Fei, Wuhan Maritime Communication Research Institute

67796

38 Sum Capacity of Block-Diagonalized Multiuser MIMO Downlink with Channel Estimation and Finite-Rate CSI Feedback Link

S. Alireza Banani, Xplornet Communications Inc.; Ali Rafiei, University of Technology Sydney; Rodney G. Vaughan, Simon Fraser University

36005

39 Two-Stage Relay Signal Detection for Hybrid Spatial Modulation Aided MIMO Dual-Hop Architecture
Jianping Zheng, Xidian University; Hao Li, DATANG MOBILE COMMUNICATIONS EQUIPMENT CO.,LTD

23664

40 Virtual Massive MIMO Beamforming Gains for 5G User Terminals

Muhammad Bilal Amin, Nokia Networks; Wolfgang Zirwas, Nokia Siemens Networks; Martin Haardt, TU Ilmenau

5. Radio Access Technology, LTE, 5G, and Wireless Heterogeneous Networks Papers

95759

1 5G Experimental Trial Achieving Over 20 Gbps Using Advanced Multi-antenna Solutions

Kiichi Tateishi, Daisuke Kurita, Atsushi Harada, Yoshihisa Kishiyama, NTT DOCOMO, INC.; Shoji Itoh, Ericsson Japan K.K.; Hideshi Murai, Ericsson Japan; Stefan Parkvall, Johan Furuskog, Ericsson Research; Peter Nauclér, Ericsson

38146

2 An efficient Radio Resource Re-Allocation Scheme for Delay Guaranteed Vehicle-to-Vehicle Network

Shao-Chou Hung, National Taiwan University; Xin Zhang, Andreas Festag, TU Dresden; K C Chen, National Taiwan University; Gerhard Fettweis, Technische Universität Dresden

37444

3 An Optimized Design of Irregular SCMA Codebook Based on Rotated Angles and EXIT Chart

Lisu Yu, Ping Zhi Fan, Zheng Ma, Xianfu Lei, Southwest Jiaotong University; Dageng Chen, Huawei Technologies,CO.,LTD

39233

4 A Proposal For Hybrid SDN C-RAN Architectures for Enhancing Control Signaling Under Mobility

Imad Al-samman, Angela Doufexi, Mark Beach, University of Bristol

51663

5 A Transforming Architecture for Future Wireless Networks: Transformium Network

Lietian Li, Haichao Wei, University of Science and Technology of China; Na Deng, University of Science and Technology; Bin Fang, Wuyang Zhou, University of Science and Technology of China

72437

6 Auction based Energy-Efficient Resource Allocation and Power Control for Device-to-Device underlay communication

Wei Wei, Qiang Wang, Lina Yang, Xin Hu, Beijing University of Posts and Telecommunications

85603

7 Bandwidth Provisioning in Cache-enabled Software-defined Mobile Networks: A Robust Optimization Approach

Chengchao Liang, Carleton University; F. Richard Yu, Carleton University, Canada

26950

8 Bio-Inspired Resource Allocation for Relay-Aided Device-to-Device Communications

Christoforos Vlachos, King's College London; Hisham Elshaer, Vodafone Group; Jian Chen, Northeastern University; Vasilis Friderikos, Mischa Dohler, King's College London

64831

9 Carrying MTC Services in 5G - A Network Management Perspective

Xu Li, Huawei; Jaya Rao, Huawei Technologies Canada Inc., Ottawa, Ontario CANADA; Hang Zhang, Huawei Technologies Canada; Sophie Vrzic, Huawei Technologies Canada Inc., Ottawa, Ontario CANADA

54270

10 Client-Based Control Channel Analysis for Connectivity Estimation in LTE Networks

Robert Falkenberg, Christoph Ide, Christian Wietfeld, TU Dortmund University

53804

11 Cluster-based Joint Cell Association and Interference Coordination Control in Heterogeneous Networks

Liang Chen, Harbin Institute of Technology; Lin Ma, Communication Research Center Harbin Institute of Technology; Yubin Xu, Harbin Institute of Technology; Victor C. M. Leung, The University of British Columbia

51690

12 Deploying Multiple Antennas on High-speed Trains: Equidistant Strategy v.s. Fixed-Interval Strategy

Yang Lu, Ke Xiong, Beijing Jiaotong University; Pingyi Fan, Tsinghua University; Yu Zhang, University of Science and Technology Beijing; Zhangdui Zhong, Beijing Jiaotong University

20636

13 Design and Evaluation of LTE/WLAN Traffic Steering and Link Aggregation Algorithms

Panagiotis Fotiadis, Pablo Soldati, Huawei Technologies Sweden AB; Peter Legg, R&D center, Huawei Technologies Sweden AB

26129

14 Design and implementation of an LTE system with multi-thread parallel processing on OpenAirInterface [Invited paper]

Hengyang Shen, Xingguang Wei, Beijing University of Posts and Telecommunications; Yang Liu, Technology Innovation Center of China Telecom Corporation Limited; Lin Li, Kan Zheng, Beijing University of Posts and Telecommunications

48248

15 Distribution Reshaping for Massive Access Control in Cellular Networks

Hua CHAO, Nokia Shanghai Bell Co. Ltd; Yu Chen, Nokia Shanghai Bell; Jinsong Wu, Universidad de Chile

90499

16 Downlink Non-Orthogonal Multiple Access (NOMA) Constellation Rotation

Jian Zhang, Fujitsu

13048

17 Downlink Transmission Scheme Based on Virtual Cell Merging in Ultra Dense Networks

Chiyang Xiao, Jie Zeng, Xin Su, Jing Wang, Xibin Xu, Tsinghua University

26902

18 E-MQS - A new Downlink scheduler for Real-time flows in LTE network

Duy-Huy Nguyen, Hang Nguyen, Institut Mines-Telecom, Telecom SudParis; Eric Renault, Institut Mines-telecom

89120

19 Energy Efficient Joint User Association and Power Allocation Design in Massive MIMO Empowered Dense HetNets

Yan Lin, Yi Wang, Chunguo Li, Yongming Huang, Luxi Yang, Southeast University

16903

20 Energy-Efficient Power Control for Device-to-Device Communications with Max-Min Fairness

Kai Yang, Beijing Institute of Technology; Jinsong Wu, Universidad de Chile; XiaoZheng Gao, Xiangyuan Bu, Beijing Institute of Technology; Song Guo, The University of Aizu

29333

21 Exploiting Geographical Context in D2D Communications

Afef Feki, Melissa Duarte, France Research Center, Huawei Technologies; stefan valentin, luca rose, huawei

77081

22 Flexible Carrier Utilization in Dense Stadium

Kewen Yang, Zezhou Luo, Huawei Technologies Co., Ltd.; Hongcheng Zhuang, Huawei Technogeis; Jietao Zhang, Quanzhong Gao, Huawei Technologies Co., Ltd.

31876

23 GFDM with Different Subcarrier Bandwidths

Yuta Akai, Yuka Enjoji, Yukitoshi Sanada, Keio University; Ryota Kimura, Ryo Sawai, Sony Corporation

62528

24 HARQ Enriched Feedback Design for 5G Technology

Saeed R. Khosravirad, Klaus I. Pedersen, Luke Mudolo, Krzysztof Bakowski, Nokia - Bell Labs

44941

25 Impact of Correlated Group Mobility Modelling in the Context of Realistic Mobile Network Simulation Scenarios

Sören Hahn, Dennis M. Rose, Christoph Herold, Technische Universität Braunschweig; Thomas Kürner, Technische Universitaet Braunschweig

54791

26 Initial Cell Search Method Based on Two-Step Frequency Offset Estimation for Small Cells in Heterogeneous Networks

Naoki Noguchi, Mamoru Sawahashi, Tokyo City University; Satoshi Nagata, Yoshihisa Kishiyama, NTT DOCOMO, INC.

62255

27 Investigation of Massive MIMO in Dense Small Cell Deployment for 5G

Xiaolin Hou, DOCOMO Beijing Communications Laboratories Co., Ltd; Xin Wang, DOCOMO Beijing Labs; Huiling Jiang, DOCOMO Beijing Communications Laboratories Co., Ltd; Hidetoshi Kayama, DOCOMO Beijing Communications Laboratories Co., Ltd.

93786

28 Joint Beamforming and Remote Radio Head Selection in Limited Fronthaul C-RAN

Thi Thu Phuong Luong, Ecole Technologie de Superieure; Le-Nam Tran, Maynooth University; Charles Despains, École de Technologie Supérieure; Francois Gagnon, Ecole de Technologie Superieure

82870

29 Joint Codebook Design and Assignment for Detection Complexity Minimization in Uplink SCMA Networks

Daosenzhai, University of Xidian; Min Sheng, Xijun Wang, Xidian University; Jiandong Li, State Key Lab of Integrated Service Networks?Xidian University

25543

30 Joint Queue-Aware and Channel-Aware for A Novel Operation of Hybrid FSO/RF Systems

Vuong V. Mai, The University of Aizu; Anh T. Pham, University of Aizu

72804

31 Joint Resource Block Reuse and Power Control for Multi-Sharing Device-to-Device Communication

Jung-Chun Kao, National Tsing Hua University

72768

32 Joint Tx/Rx Signal Processing for Distributed Antenna MU-MIMO Downlink

Yuta Seki, Shinya Kumagai, Fumiyuki Adachi, Tohoku University

47827

33 Load-based Resource Allocation and Interference Coordination for Multi-carrier Dense Networks

Zhiyi Zhou, Hao Ge, Northwestern University; Jialing Liu, Weimin Xiao, Huawei

23077

34 Low-Latency Communications in LTE Using Spatial Diversity and Encoding Redundancy

Stepan Kucera, Bell Labs Nokia; Yu Yu, JAIST; Milind Buddhikot, Bell Labs Nokia; Yuto Lim, JAIST

79106

35 Multichannel Design of Non uniform Constellations for Broadcast/Multicast Services

Belkacem Mouhouche, Samsung Electronics; Mohammed Al-Imari, Samsung Electronics R&D Institute UK; Daniel Ansoerregui, Samsung Electronics

54876

36 On the Design of Irregular HetNets with Flow-Level Traffic Dynamics

Arman Shojaeifard, University College London; Khairi Hamdi, Emad Alsusa, Daniel K C So, University of Manchester; Kai-Kit Wong, University College London

97888

37 On the Number and 3D Placement of Drone Base Stations in Wireless Cellular Networks

Elham Kalantari, University of Ottawa; Halim Yanikomeroglu, Carleton University; Abbas Yongacoglu, University of Ottawa

71322

38 Optimal Approach to Provide Electric Vehicles with Charging Service by Using Mobile Charging Facilities in Heterogeneous Networks

Zhou Su, Shanghai University, China; Huawei Chen, Hui Hui, Shanghai University

96498

39 Optimizing Channel Allocation for D2D Overlaying Multichannel Downlink Cellular Networks

Jiajia Liu, Xidian University, China; Jiahao Dai, Xidian University; Yuichi Kawamoto, Nei Kato, Tohoku University

73354

40 Performance Evaluation of MISO-SDMA in Heterogeneous Networks with Practical Cell Association

Mohammad G. Khoshkholgh, UBC; Dr. Keivan Navaie, Lancaster University; Victor C. M. Leung, The University of British Columbia; Kang G. Shin, The University of Michigan

41279

41 Quantifying the Regularity of Perturbed Triangular Lattices using CoV-Based Metrics for Modeling the Locations of Base Stations in HetNets

Faraj Lagum, Sebastian Szyszkowicz, Halim Yanikomeroglu, Carleton University

58609

42 Resource Allocation in LTE-based MIMO Systems with Carrier Aggregation

Soheil Rostami, Kamran Ashrad, University of Greenwich; Predrag Rapajic, University of Greenwich at Medway, UK

88175

43 Resource Scheduling for Content Downloading Network with D2D Support

Lina Yang, Qiang Wang, Wei Wei, Jianou Huang, Beijing University of Posts and Telecommunications

39913

44 Scheduling and transmission point selection methods for space division full duplex systems

Lei Song, Fujitsu R&D Center Co., Ltd; Weiwei Wang, Fujitsu R&D center Co., Ltd.; Xin Wang, Fujitsu R&D Center Co., Ltd

96621

45 Scheduling for Device-to-Device Communication Considering Spatial Reuse and User Fairness in Public Safety LTE

Kazushi Muraoka, Taichi Ohtsuji, Hiroaki Aminaka, Gen Motoyoshi, Yasuhiko Matsunaga, NEC Corporation

18388

46 Scheduling in D2D Underlaid Cellular Networks with Deadline Constraints

Yi Li, Mustafa Cenk Gursoy, Senem Velipasalar, Syracuse University

71668

47 Signalling Minimization Framework for Short Data Packet Transmission in 5G

Danish Aziz, Alcatel-Lucent Bell Labs; Hajo Bakker, Alcatel-Lucent Bell Labs Stuttgart; Anton Ambrosy, Alcatel-Lucent Bell Labs; Qi Liao, Nokia Bell Labs

18924

48 Statistical Covariance Based Signal Detection for Ambient Backscatter Communication Systems

Tengchan Zeng, Gongpu Wang, Beijing Jiaotong University; Yanwen Wang, ZTE Corporation; Zhangdui Zhong, Beijing Jiaotong University; Chintia Tellambura, University of Alberta

33017

49 System Capacity of 72 GHz mmWave Transmission in Hybrid Networks

Zhenyu Shi, Huawei Technologies Co., Ltd.; Yi Wang, Huawei Technologies, CO., LTD; Lei Huang, Huawei Technologies, CO., Ltd; Jianglei Ma, Huawei Technologies Canada Co., Ltd.

35915

50 TCP performance for practical implementation of very tight coupling between LTE and WiFi

Younes Khadraoui, Télécom Bretagne; Xavier Lagrange, Telecom Bretagne, IRISA D2; Annie Gravey, Telecom Bretagne

28826

51 Towards a Low-Delay Edge Cloud Computing Through a Combined Communication and Computation Approach

Tiago Gama Rodrigues, Tohoku University; Katsuya Suto, University of Waterloo; Hiroki Nishiyama, Nei Kato, Tohoku University; Kimihiro Mizutani, Takeru Inoue, Osamu Akashi, NTT Corporation

64701

52 Towards an M2M overlay network on PRACH in LTE/LTE-A

Jelena Mistic, Vojislav Mistic, Ryerson University

96064

53 Traffic profile based clustering for dynamic TDD in dense mobile networks

Paolo Baracca, Bell Labs, Nokia

99188

54 Transmission Mode Selection and Resource Allocation for D2D Unicast Communications

Richa Gupta, Nokia; Suresh Kalyanasundaram, Nokia Networks; Ajith Kumar P R, Nokia

94278

55 Universal Time-domain Windowed OFDM

Keiichi Mizutani, Hiroshi Harada, Kyoto University

6. Green Communications and Networks Papers

63905

1 Aggregated V2I Communications for Improved Energy Efficiency using Non-Orthogonal Multiplexed Modulation

Yanan Liu, Western University; Xianbin Wang, Xiaoyu Duan, The University of Western Ontario; Hai Lin, Osaka Prefecture University

34828

2 An Energy-Saving Algorithm Based on Base Station Sleeping in Multi-hop D2D Communication

Yanan Zhang, Yong Zhang, Mei Song, Beijing University of Posts and Telecommunications

19151

3 An Enhanced Scheduling Mechanism for Elephant Flows in SDN-based Data Center

Zehui Liu, Deyun Gao, Ying Liu, Zhang Hongke, Beijing Jiaotong University

42944

4 A Virtual Resource Allocation Model for Multimedia Service Based on SMDP in 5G Network

Hongbin Liang, Lei Zheng, Southwest Jiaotong University; Wei Li, University of Victoria; Qingchun Chen, Southwest Jiaotong University

36986

5 BaLance: Battery Lifetime-Aware LTE Switching-Off Strategy in Green Network Infrastructures

Christoph Ide, Oleg Belov, Dennis Kaulbars, Christian Wietfeld, TU Dortmund University

51033

6 Beamforming in Coexisting Wireless Systems with Uncertain Channel State Information

Tuan Le, Middlesex University London; Dr. Keivan Navaie, Lancaster University; Quoc-Tuan Vien, Huan X. Nguyen, Middlesex University

98963

7 Bi-SON: Big-Data Self Organizing Network for Energy Efficient Ultra-Dense Small Cells

Li-Chun Wang, Shao Hung Cheng, National Chiao Tung University; Ang-Hsun Tsai, National Defense University

93757

8 Cognitive Radio Water-Filling for Energy Harvesting and Smart Power Grid Coexisting System

Peter He, Lian Zhao, Bala Venkatesh, Ryerson University

39140

9 Cost-Efficient Codebook Assignment and Power Allocation for Energy Efficiency Maximization in SCMA Networks

Yuzhou Li, Huazhong University of Science and Technology; Min Sheng, Zhisheng Sun, Yuhua Sun, Lei Liu, Xidian University; Daosenzhai, University of Xidian; Jiandong Li, State Key Lab of Integrated Service Networks?Xidian University

69308

10 DSA?based Energy Efficient Cellular Networks: Integration with The Smart Grid

Hany Kamal Hassan, Amr Mohamed, Qatar University; Abdulla Alali, Qatar university

79538

11 Dynamic Power Allocation for a hybrid Energy Harvesting transmitter with Multiuser in Fading Channels

D. Xidian University; JIming Lin, Junyi Wang, Xiaohui Chen, Yibin Chen, Guilin University of Electronic Technology

77753

12 Efficient and Fair Hybrid TDMA-CSMA for Virtualized Green Wireless Networks

Atoosa Dalili Shoaei, McGill university; Mahsa Derakhshani, Imperial College; Saeedeh Parsaeefard, McGill university; Tho Le-Ngoc, McGill University

40915

13 Energy-aware Design for MIMO-OFDM Network with Realistic Interference Model

Jun Chen, Huawei Technologies; Zezhou Luo, Huawei Technologies Co., Ltd.; Hongcheng Zhuang, Huawei Technolgeis; Miaona Huang, Dongguan University of Technology, China

44365

14 Energy-Aware Optimal Data Offloading over Unlicensed Spectrums

Yuan Wu, Haohan Chai, Liping Qian, Weidang Lu, Zhejiang University of Technology; Qinglin Zhao, Macau University of Science and Technology; Changsheng Yu, Nokia Solutions and Networks System Technology, Co. Ltd

31047

15 Energy Efficiency in Relay-Assisted mmWave Cellular Networks

Esma Turgut, Mustafa Cenk Gursoy, Syracuse University

29760

16 Energy Efficiency Throughput Tradeoff in ARQ-based Multi-Hop: Centralized versus Distributed Power Allocation

Ali A. Haghighi, McGill University; Mohammad G. Khoshkholgh, UBC; Victor C. M. Leung, The University of British Columbia

31455

17 Energy-efficient Access Scheme with Joint Consideration on Backhauling in UDN

Xi Li, Hong Ji, Beijing University of Posts and Telecommunications; Ke Wang, Beijing University of Posts and Telecommunications, China; Heli Zhang, Beijing University of Posts and Telecommunications

20806

18 Energy-Efficient Full-Duplex Wireless Information and Power Transfer

Tewodros A. Zewde, Mustafa Cenk Gursoy, Syracuse University

69533

19 EVTour: Online Scheduling System for Tours with Multiple Destinations by One-Way EV Sharing

Naoki Shibata, Tomoyuki Ueda, Minoru Ito, Nara Institute of Science and Technology

12433

20 Game Theoretic Approach to Demand Side Management in Smart Grid with User-Dependent Acceptance Prices

Panagiotis D. Diamantoulakis, Koralia Pappi, Aristotle University of Thessaloniki; Peng-Yong Kong, Khalifa University of Science, Technology & Research (KUSTAR); George K. Karagiannidis, Aristotle University of Thessaloniki

93855

21 Green Cellular Demand Control with User-in-the-loop Enabled by Smart Data Pricing using an Effective Quantum (eBit) Tariff

Rainer Schoenen, HAW Hamburg; Hamza Umit Sokun, Halim Yanikomeroglu, Carleton University

72420

22 Impact of Dynamic Planning on Uplink Service Quality in Heterogeneous Cellular Networks

Mohamed Kashef, Muhammad Ismail, Texas A&M University at Qatar; Dr. Erchin Serpedin, Texas A&M University; Khalid Qaraqa, Texas A&M University at Qatar

79525

23 Measurement and Analysis of Available Ambient Radio Frequency Energy for Wireless Energy Harvesting

Jonathan C. Kwan, Abraham O. Fapojuwo, University of Calgary

43218

24 Opportunistic Energy Scheduling in Wireless Powered Sensor Networks

Dusit Niyato, Ping Wang, Nanyang Technological University; Dong In Kim, Sungkyunkwan University (SKKU), Korea; Zhu Han, University of Maryland

12174

25 Optimal Base Station Sleeping Control in Energy Harvesting Heterogeneous Cellular Networks

Yanzi Song, Haichao Wei, Ming Zhao, Wuyang Zhou, University of Science and Technology of China; Dong Peng, Zhao Lijun, Research Institute of China Mobile

84338

26 Optimal Energy-Efficient Resource Allocation in Energy Harvesting Cognitive Radio Networks with Spectrum Sensing

Ramnaresh, Indira Gandhi Delhi Technical University; Keshav Singh, School of Engineering, University of Edinburgh; Ankit Gupta, Aricent Technologies Limited, Gurgaon, India; Ashwani Kumar, Indra Gandhi Delhi Technical University, Delhi

14941

27 Optimum zoning in wireless recharged sensor networks

Vojislav Mistic, Jelena Mistic, Shahnoor Khan, Ryerson University

68200

28 Partial Critical Path Based Greedy Offloading in Small Cell Cloud

Pengtao Zhao, Beijing University Of Posts And Telecommunications; Tian Hui, Bo Fan, Beijing University of Posts and Telecommunications

65320

29 Reducing Energy Consumption for Reconfiguration in Cloud Data Centers

Omar Chakroun, University of Sherbrooke; Soumaya Cherkaoui, Université de Sherbrooke, Canada

20662

30 Regular and Static Sector-Based Cell Switch-Off Patterns

Tamer Beitelmal, Sebastian Szyszkwicz, Halim Yanikomeroglu, Carleton University

25564

31 Resource Allocation for Wireless Information and Energy Transfer in Macrocell-Small Cell Networks

Sudha Lohani, University of British Columbia; Ekram Hossain, University of Manitoba; Vijay K. Bhargava, University of British Columbia

68172

32 Robots-Aided Participatory Crowdsourcing with Limited Task Budget

Bo Zhang, Beijing University of Posts and Telecommunications; Chi Harold Liu, Beijing Institute of Technology; Zheng Zhang, Beijing University of Posts and Telecommunications; Ziyu Ren, Tsinghua University; Jian Ma, Wuxi Smart Sensing Star Co.Ltd; Wendong Wang, Beijing University of Post and Telecommunication

45121

33 SDN Enabled High Performance Multicast in Vehicular Networks

Zongjian He, Daqiang Zhang, Shaomin Zhu, Tongji University; Xuefeng Liu, The Hong Kong Polytechnic University; Jiannong Cao, Hong Kong Polytechnic University, Hong Kong

75046

34 Small Cells Deployment for Cost Reduction of Hybrid-Energy Cellular Networks

Hussein Al Haj Hassan, Loutfi A. Nuaymi, Alexander Pelov, Telecom Bretagne

45429

35 Social-Aware Data Dissemination via Opportunistic Device-to-Device Communications

Yiming Zhao, University of New Brunswick, Fredericton, Canada; Wei Song, University of New Brunswick

49304

36 Successive Interference Cancellation for Throughput Maximization in Wireless Powered Communication Networks

Ming Lei, University of xi'an jiaotong

92397

37 Sum-Power Minimization Under Rate Constraints in Full-Duplex MIMO Systems

Ali Cagatay Cirik, University of British Columbia; Omid Taghizadeh, RWTH Aachen University; Lutz Lampe, University of British Columbia; Rudolf Mathar, RWTH Aachen University; Yingbo Hua, University of California, Riverside

30242

38 Uplink Cooperative Transmission For Machine-Type-Communication Traffic in Cellular System

Yue Li, Mohammad Ghasemianmadi, Lin Cai, University of Victoria

7. Ad-Hoc, M2M, and Sensor Networks Papers

88610

1 Absolute Localization via DSRC Signal Strength

Samir Al-Stouhi, Honda R&D Americas Inc.

35356

2 A Software Defined Radio Based IEEE 802.15.4k Testbed for M2M Applications

Rongtao XU, Lei Lei, Beijing Jiaotong University; Xiong Xiong, Kan Zheng, Hengyang Shen, Beijing University of Posts and Telecommunications

27339

3 A Space-Time Fusion Scheme for Dynamic-Event Region Detection in Sensor Networks

Tsang-Yi Wang, National Sun Yat-Sen University; Ming-Hsun Yang, National Chiao Tung University; Jwo-Yuh Wu, National Chiao Tung University

49652

4 D2D Network-assisted Discovery through Keyword Matching for offering Cloud Services

Salam Doumiani, American University of Beirut

44502

5 Dynamic Inter-Channel Resource Allocation for Massive M2M Control Signaling Storm Mitigation

Ting-Hua Chen, Jun-Wei Chang, Hung-Yu Wei, National Taiwan University

98560

6 Energy-Efficient Cooperative Positioning in Mobile Social Networks

Chaofeng Zhang, Muroran Institute of Technology; Kaoru Ota, Muroran Institute of Technology, Japan; Mianxiong Dong, Muroran Institute of Technology

75790

7 Exploiting Spatial and Temporal Correlations for Signal-Centric MAC in M2M Communications

Rung-Hung Gau, Fu-Ta Kuo, National Chiao Tung University

83017

8 Exploiting Taxi Demand Hotspots Based on Vehicular Big Data Analytics

Lu Zhang, Cailian Chen, Yiyin Wang, Xinping Guan, Shanghai Jiao Tong University

94710

9 Fast loop-free transition of routing protocols

Nina Pelagie Bekono, Nancy El Rachkidy, Alexandre Guitton, Université Blaise Pascal

48086

10 Fault-Tolerant Mechanism for Multimedia Transmission in Wireless Sensor Networks

Bouatit, CEDRIC/CNAM PARIS; Selma Boumerdassi, CNAM / CEDRIC; Pascale Minet, Inria; Adel Djama, ESI Algiers, Algeria

91818

11 Inversely Proportional Transmission Power and Carrier Sense Threshold Setting for WLANs: Experimental Evaluation of Partial Settings

Daichi Okuhara, Koji Yamamoto, Takayuki Nishio, Kyoto University; Masahiro Morikura, Graduate School of Informatics, Kyoto-University; Hirantha Abeysekera, NTT Corporation

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12 LRRR: Location-related Rate Adaptation Algorithm in IEEE 802.11p for DSRC Technology in VANET

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13 LTE Field Performance for IoT Applications

Jin Yang, Verizon Communications Inc.; Lei Song, Adam Koeppel, Verizon Communications

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14 Maximum Lifetime SMDP Routing for Energy-harvesting Wireless Sensor Networks

Gina Martinez, Lewis University; Chi Zhou, Illinois Institute of Technology

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15 Narrow-Band SCMA: a New Solution for 5G IoT Uplink Communications

Jian Wang, Huawei Technologies; Chaolong Zhang, Huawei Technologies, Co. Ltd., Hangzhou, China; Rong Li, Guijie Wang, Jun Wang, Huawei Technologies

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16 Opportunistic forwarding using rateless codes in OFDMA multihop networks

Fabian Hohmann, TU Darmstadt; Anja Klein, Technische Universitaet Darmstadt

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17 Performance Evaluation of Uplink Narrow-Band SCMA for 5G IoT

Chaolong Zhang, Huawei Technologies, Co. Ltd., Hangzhou, China; Jian Wang, Huawei Technologies; Yourui Huangfu, Huawei Technologies, Co. Ltd., Hangzhou, China; Rong Li, Jun Wang, Huawei Technologies

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18 Resource Allocation and Massive Access Control Method using Relay Assisted Machine-Type Communication in LTE Networks

Lilatul Ferdouse, Alagan Anpalagan, Ryerson University; Koji Yamamoto, Kyoto University; Waleed Ejaz, Ryerson University; HYUNG YUN KONG, University of Ulsan

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25 Utility based Resource Management in D2D Networks using Mesh Adaptive Direct Search Method

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1 An Adaptive Ternary Query Splitting based Tag Anti-collision Protocol for Mobile RFID Systems

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2 An Energy-Efficient and Self-regioning based RPL for Low-power and Lossy Networks

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3 A Novel Method for Smoothing Raw GPS Data with Low Cost and High Reliability

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4 Combined Physical Network Coding and Jamming for Secure Wireless Cooperative Communications

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8 Disaster Management and Response for Modern Cellular Networks using Flow-based Multi-hop Device-to-Device Communications

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9 Dynamic Resource Allocation for Full-Duplex OFDMA Wireless Cellular Networks

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10 Full Duplex Medium Access Control Protocol for Asymmetric Traffic

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Md. Ashiqur Rahman, Khulna University of Engineering & Technology; Dr. G. G. Md. Nawaz Ali, Nanyang Technological University; Dr Peter Han Joo Chong, Nanyang Technology University

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Communication Systems using Random Antenna Subsets

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14 Optimization of Effective Area Spectral Efficiency for Wireless Communications Systems Under Nakagami-m Fading Channels

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15 Power Allocation for AN-aided Beamforming Design in MISO Wiretap Channels with Finite-alphabet Signaling

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16 Primary Secure Communication with the Cooperation of Energy Harvesting Secondary System

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17 Privacy-Preserving Real-Time Navigation System Using Vehicular Crowdsourcing

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18 Proactive Location-Based Scheduling of Delay-Constrained Traffic Over Fading Channels

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21 Secrecy Analysis of A MIMO Full-Duplex Active Eavesdropper with Channel Estimation Errors

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22 Secure and Energy Efficient Transmission in Multiuser uplink Wireless Networks

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23 Secure D2D Communication Underlying Cellular Networks: Artificial Noise Assisted

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4 A Waveform Matching Based Data-processing Method for TOF Ranging

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5 Cooperative Infrastructure-based Vehicle Positioning

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- 8 Hotspot Identification Through Call Trace Analysis**
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- 9 Improved SMC-PHD Filter for Multi-target Track-Before-Detect**
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- 1 A Complete Observation Model for Tracking Vehicles from Mobile Phone Signal Strengths and its Potential in Travel-time Estimation**
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11 Design and Implementation of a SIP-aware Detecting System of VoLTE Device

Zhang Shen, Lu Zhou, MingLi Wu, Zhushou Tang, Shanghai JiaoTong University; Na Ruan, Shanghai Jiaotong University; Haojin Zhu, Shanghai Jiaotong Univ,China

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21 Network Virtualization Optimization in Software Defined Vehicular Ad-Hoc Networks

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22 On Trajectory-based Network Construction for Time-Constrained Data Delivery in VANETs

Jun Qin, Yanmin Zhu, Guangtao Xue, Shiyu Qian, Minglu Li, Shanghai Jiao Tong University

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23 Performance Analysis of the Functional Interaction of Awareness Control and DCC in VANETs

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24 Protocol-Compliant DoS Attacks on CAN: Demonstration and Mitigation

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25 Reliable forwarding strategy in Vehicular networks based on NDN

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26 Scheduling Energy Harvesting Roadside Units in Vehicular Ad hoc Networks

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27 SDN Enabled Dual Cluster Head Selection and Adaptive Clustering in 5G-VANET

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William Angeles Galvan, Federal University of Technology - Parana; Anelise Munaretto, Graduate Program in Electrical and Computer Engineering (CPGEI), UTFPR; Mauro Fonseca, Federal University of Technology - Parana

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7 Monocular Fisheye Lens Model-Based Distance Estimation for Forward Collision Warning Systems

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9 Power-Flow Assessment of Different Compensation Topologies in Bidirectional IWPT System for V2G Applications

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10 pSafety: A Collision Prevention System for Pedestrians Using Smartphone

Chi-Han Lin, Yi-Ting Chen, Department of Computer Science, National Tsing Hua University; JYUN-JIE CHEN, Department of Computer Science, National Tsing Hua University,; Wen-Chan Shih, Wen-Tsuen Chen, Institute of Information Science, Academia Sinica

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14 Urban Area Congestion Detection and Propagation Using Histogram Model

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1 HDA Communication of a Bi-variate Gaussian source over a Fading MAC

Chathura Illangakoon, Pradeepa, University of Manitoba

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2 Lane-level Vehicular Localization Utilizing Smartphones

Siyu Zhu, Xiong Wang, Zhehui Zhang, Xiaohua Tian, Shanghai Jiao Tong University; Xinbing Wang, Shanghai Jiaotong University

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3 Performance Analysis for Wireless Distributed Storage via D2D Links

Yinan Ding, Li Wang, Huaqing Wu, Shuangshuang Ma, Beijing University of Posts and Telecommunications; Antti Ylä-Jääski, Aalto University

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- 3 A Fast Algorithm for Solving Cave-filling Problems**
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- 4 A New Performance Evaluation Metric for Radio Resource Management in Wireless Local Area Networks**
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- 5 An Experimental Study on Network-Listening Based Synchronization with Loop-Back Self-Interference Canceller**
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- 6 A Roadside Unit-Based Localization Scheme to Improve Positioning for Vehicular Networks**
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Faouzi Bouali, Institute for Communication Systems, University of Surrey, UK; Klaus Moessner, University of Surrey; Michael Fitch, BT Group

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Yejian Chen, Mark Doll, Bell Labs, Nokia

27591

- 22 Enhanced CSI Feedback for FD-MIMO with Beamformed CSI-RS in LTE-A Pro Systems**
Gregory Morozov, Alexei Davydov, Victor Sergeev, Intel Corporation

47617

- 23 Ergodic Rate Analysis of Massive MIMO Systems in K-Fading Environment**
Muhammad Tauseef Mushtaq, National University of Sciences and Technology (NUST), Pakistan; Syed Ali Hassan, National University of Sciences and Technology; Dushantha Nalin K Jayakody, University of Tartu, Estonia

64784

- 24 EVM based Primary User Monitoring in Cognitive Radio Systems**
Narayan Nepal, Philippa A. Martin, Desmond Taylor, University of Canterbury

50344

- 25 Experimental Verification of Null-Space Expansion for Multiuser Massive MIMO using Measured Channel State Information**
Tatsuhiko Iwakuni, NTT Corporation; Kazuki Maruta, NTT Access Network Service Systems Laboratories; Atsushi Ohta, NTT

- Corporation; Yushi Shirato, Takuto Arai, Masataka Iizuka, NTT Access Network Service Systems Laboratories
- 79070**
- 26 Fast 3D Ray Tracing For Indoor Coverage Solutions**
Ahmed Abdelgawwad, Mohamed ashour, German University in Cairo; Tallal El-Shabrawy, The German University of Cairo; Hany Hammad, German University in Cairo
- 29575**
- 27 Fog RAN over General Purpose Processor Platform**
Yu-Jen Ku, Dian-Yu Lin, Hung-Yu Wei, National Taiwan University
- 67262**
- 28 Frequency Switching for Simultaneous Wireless Information and Power Transfer**
Dogay Altinel, Istanbul Medeniyet University; Gunes Kurt, Istanbul Technical University
- 96791**
- 29 Highly Accurate Distance Estimation Using Spatial Filtering and GNSS in Urban Environments**
Ahmad El Assaad, Novero GmbH; Prof. Dr. Markus Krug, University of Applied Science Munich, Munich; Georg Fischer, University Erlangen-Nuremberg
- 94640**
- 30 Integrating 3D Channel Model and Grid of Beams for 5G mMIMO System Level Simulations**
Rakash SivaSiva Ganesan, Bell Labs, Nokia; Wolfgang Zirwas, Nokia Siemens Networks; Berthold Panzner, Nokia; Klaus I. Pedersen, Nokia - Bell Labs; Kimmo Valkealahti, Bell Labs, Nokia
- 40956**
- 31 Intelligent Vehicle Operating Robot**
Oded Yechiel, Hugo Guterman, Ben-Gurion University
- 89532**
- 32 Low Complexity Precoder Selection for FD-MIMO Systems**
Federico Penna, Hongbing Cheng, Jungwon Lee, Samsung
- 21980**
- 33 Low-Complexity Transceiver Design for Multi-User Millimeter Wave Communication Systems under Imperfect CSI**
Deepa Jagyasi, International Institute of Information Technology; P. Ubaidulla, International Institute of Information Technology, Hyderabad
- 44256**
- 34 MIMO Channel Dimension Estimation in Interference Channels with Antenna Disparity**
Chris Waters, University of Bristol; Simon Armour, Electrical and Electronic Department, University of Bristol; Angela Doufexi, University of Bristol; Woon Hau Chin, Toshiba Research Europe Limited; Filippo Tosato, Toshiba Telecommunications Research Lab
- 29302**
- 35 Mitigating Power Consumption in Mobile Devices with Dynamic Triggering of XMPP Ping Requests**
kiran kumar guduru, samsung electronics; Sachin Dev, Samsung Research India ? Bangalore, India; Rajaram Naganur, Samsung Research India - Bangalore
- 47545**
- 36 Modeling the Evolution of Line-of-Sight Blockage for V2V Channels**
Mate Boban, Huawei European Research Center; Xitao Gong, HUAWEI TECHNOLOGIES DUESSELDORF GmbH; Wen Xu, Huawei Technologies
- 21587**
- 37 Multicarrier Air to Ground MIMO Communication System Performance**
HOSSEINALI JAMAL, David Matolak, University of South Carolina
- 72415**
- 38 Noise Estimation for Spectrum Sensing Schemes**
Mahdi H. Al-Badrawi, Nicholas J. Kirsch, University of New Hampshire; Bessam Z. Al-Jewad, Cihan University
- 88330**
- 39 On the Diversity Gain of SIMO Relay-aided Underlay Communications**
Zakaria El-Moutaouakkil, Télécom Bretagne
- 52382**
- 40 On the Performance of Cooperative Relaying Systems Using Non-orthogonal Multiple Access over Rician Fading Channels**
Ruicheng Jiao, Linglong Dai, Talha Mir, Tsinghua University; Jiayi Zhang, Beijing Jiaotong University; Jianjun Li, Tsinghua University
- 12620**
- 41 On the Performance of MIMO OFDM-Based Intra-Vehicular VLC Networks**
Bugra Turan, Koc University; Omer Narmanlioglu, Ozyegin University; Sinem Coleri Ergen, Koc University; Murat Uysal, Ozyegin University
- 70317**
- 42 On the Ratio of Exponential and Generalized Gamma Random Variables with Applications to Ad Hoc SISO Networks**
Muhammad Ahsen, Syed Ali Hassan, National University of Sciences and Technology
- 20584**
- 43 On the Virtualisation and Dynamic Orchestration of Satellite Communication Services**
Ramon Ferrus, Universitat Politècnica de Catalunya (UPC); Haris Koumaras, National Centre for Scientific Research "Demokritos"; Oriol Sallent, Universitat Politècnica de Catalunya (UPC); Tinku Rasheed, Create-Net Research Center; Emmanuel Duros, OneAccess; Roberto Riggio, CREATE-NET; Nicolas Kuhn, Centre National d'Etudes Spatiales; Patrick Gélard, CNES; Toufik Ahmed, University of Bordeaux I
- 87811**
- 44 Performance Evaluation of Massive MIMO with Low-Height Small-Cell Using Realistic Channel Models**
Boonsarn Pitakdumrongkija, Masayuki Ariyoshi, NEC Corporation; Leszek Raschkowski, Stephan Jaeckel, Lars Thiele, Fraunhofer Heinrich Hertz Institute
- 91724**
- 45 Performance Evaluation of Traffic Information Dissemination Protocols for Dynamic Route Planning Application in VANETs**
Ibrahim Rashdan, German Aerospace Center; Fabian de Ponte Müller, Stephan Sand, German Aerospace Center (DLR)
- 94726**
- 46 Polarization Diversity in Ring Topology Networks**
Philippe Ezran, Yoram Haddad, Jerusalem College of Technology; Mérouane Debbah, CentraleSupélec
- 25056**
- 47 Power Efficiency of Millimeter Wave Transmission Systems with Large Numbers of Antennas**
Gaojian Wang, RWTH-Aachen; Andreas Bytyn, RWTH Aachen University; Dara Khajavi, RWTH-Aachen; Yanlu Wang, Renato Negra, Gerd Ascheid, RWTH Aachen University
- 10403**
- 48 Radio Resource Management Techniques for eMBB and mMTC services in 5G Dense Small Cell Scenarios**
Nurul Huda Mahmood, Mads Lauridsen, Gilberto Berardinelli, Davide Catania, Preben E. Mogensen, Aalborg University

26579

49 Security Performance Analysis of SIMO Generalized-K Fading Channels Using a Mixture Gamma Distribution

Hongjiang Lei, Chongqing University of Posts and Telecommunications; Imran Shafique Ansari, Texas A&M University at Qatar (TAMUQ); Huan Zhang, Chongqing University of Posts and Telecommunications; Khalid Qaraqe, Texas A&M University at Qatar; Gaofeng Pan, Southwest University

78567

50 Spatially-Coupled LDPC Coding in Threshold-Based Lossy Forwarding Scheme

Dushantha Nalin K Jayakody, University of Tartu, Estonia; Eirik Rosnes, University of Bergen

59412

51 Super-Resolution Channel Estimation for mmWave Massive MIMO with Hybrid Precoding

Chen Hu, Linglong Dai, Zhen Gao, Jianjun Li, Tsinghua University

21409

52 Switch Control Based Single-RF Transmitter for Multiplexing gain

Park, Daehye, Dong-Ho Cho, KAIST

83921

53 The Benefits of Large-Scale Attenuation Over the Antenna Array in Massive MIMO Systems

Liu Liu, Beijing Jiaotong University; David Matolak, University of South Carolina; Cheng Tao, Yongzhi Li, Houjin Chen, Beijing Jiaotong University

78745

54 The Urban Hannover Scenario ? Realistic 3D Pathloss Predictions and Mobility Patterns

Dennis M. Rose, Technische Universität Braunschweig; Thomas Jansen, TU Braunschweig, Braunschweig, Germany; Thomas Werthmann, Universität Stuttgart; Ulrich Türke, Atesio, Berlin, Germany; Thomas Kürner, Technische Universität Braunschweig

79035

55 Throughput Evaluation of Dynamic Frame Slotted ALOHA for Spatially Distributed RFID Tags

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74049

56 Wavelet-Coded OFDM for Next Generation Mobile Communications

Lucas Cavalcante, Denmark Technical University; Rui Dinis, Universidade Nova de Lisboa; J.J. Vegas Olmos, Idelfonso T. Monroy, Denmark Technical University; Luiz Felipe Q. Silveira, Luiz Gonzaga Q. Silveira, Universidade Federal do Rio Grande do Norte
