ICC 2014 – 2014 IEEE **International Conference on Communications**

Sydney, Australia 10-14 June 2014

Pages 1-809



IEEE Catalog Number: CFP14ICC-POD ISBN:

978-1-4799-2005-1

Table of Contents

2014 IEEE International Conference on Communications (ICC)

ICC'14 AHSN: IEEE ICC 2014 - Ad-hoc and Sensor Networking Symposium

Wireless Sensor Networks I

Characterization of Long Term Channel Variations in Industrial Wireless Sensor Networks
Piyush Agrawal (Uppsala University, Sweden), Anders Ahlen (Uppsala University, Sweden), Tomas Olofsson (Uppsala University, Sweden), Mikael Gidlund (ABB, Sweden)
A Decision-Support Tool for Wireless Sensor Networks
Cédric Ramassamy (Université des Antilles et de la Guyane, Martinique), Hacene Fouchal (Université de Reims Champagne-Ardenne, France)
Routing towards a mobile sink using virtual coordinates in a wireless sensor network
Rouhollah Rahmatizadeh (University of Central Florida, USA), Saad Khan (University of Central Florida & University of Engineering and Technology Lahore, USA), Anura P Jayasumana (Colorado State University, USA), Damla Turgut (University of Central Florida, USA), Ladislau Bölöni (University of Central Florida, USA)
A Novel Compressive Sensing Based Data Aggregation Scheme for Wireless Sensor Networks
Cheng Zhao (University of Chinese Academy of Sciences & Shanghai Research Center for Wireless Communications, P.R. China), Wuxiong Zhang (Shanghai Research Center for Wireless Communications, P.R. China), Xiumei Yang (Shanghai Research Center for Wireless Communications, P.R. China), Yang Yang (Chinese Academy of Science, P.R. China), Ye-Qiong Song (LORIA, France)
Partial Sensing Coverage in 3D Wireless Lattice Sensor Networks
Yun Wang (Bradley University, USA), William Chu (Bradley University, USA), Zhifeng Xiao (Penn State Erie, the Behrend College, USA), Yanping Zhang (Gonzaga University, USA)
On the Efficiency of Merging Procedures in Hierarchical Mobile Cooperative Networks Victor Sucasas (Instituto de Telecomunicacoes, Portugal), Ayman Radwan (Instituto de Telecomunicações & Queen's University, Portugal), Hugo Marques (University of Aveiro, Portugal), Jonathan Rodriguez (Instituto de Telecomunicações, Portugal), Seiamak Vahid (University of Surrey, United Kingdom), Rahim Tafazolli (University of Surrey, United
Kingdom)
Information-Centric Collaborative Data Collection for Mobile Devices in Wireless Sensor Networks
Gang Xu (Uppsala University, Sweden), Edith CH. Ngai (Uppsala University & Division of Computer Systems, Sweden), Jiangchuan Liu (Simon Fraser University, Canada)
A Neighbor Collaboration Mechanism for Mobile Crowd Sensing in Opportunistic Networks
Takamasa Higuchi (Osaka University, Japan), Hirozumi Yamaguchi (Osaka University, Japan), Teruo Higashino (Osaka University, Japan), Mineo Takai (University of California, Los Angeles & Osaka University, USA)
CLARET: A Cooperative Cluster-Head Failure Detection Mechanism for Wireless Sensor Networks
Qihang Shu (Southeast University, P.R. China), Qiang Hu (Southeast University, P.R. China), Jun Zheng (Southeast University, P.R. China)
Multi-Channel Directional Medium Access Control for Ad Hoc Networks: A Cooperative Approach
Yu Wang (National University of Singapore, Singapore), Mehul Motani (National University of Singapore, Singapore), Hari Krishna Garg (National University of Singapore, Singapore), Qian Chen (Institute for Infocomm Research, Singapore), Tie Luo (Institute for Infocomm Research & National University of Singapore, Singapore)
a National Oniversity of Singapore, Singapore,

Performance Evaluation I

On Throughput Gain of Interference Alignment in Multi-Hop MIMO Networks Xin Ao (Dongguan University of Technology, P.R. China), F. Richard Yu (Carleton University, Canada), Shengming Jiang (Shanghai Maritime University, P.R. China), Yuan Huaqiang (Dongguan University of Technology, P.R. China) Adaptive Hierarchical Data Aggregation using Compressive Sensing (A-HDACS) for Non-smooth	59
Data Field Xi Xu (University of Illinois at Chicago, USA), Rashid Ansari (University of Illinois at Chicago, USA), Ashfaq Khokhar (University of Illinois at Chicago, USA) On Modulation for Magnetic Induction based Transmission in Wireless Underground Sensor Networks	65
Steven Kisseleff (Friedrich-Alexander-University Erlangen-Nürnberg (FAU), Germany), Ian F. Akyildiz (Georgia Institute of Technology, USA), Wolfgang Gerstacker (University of Erlangen-Nuernberg, Germany)	71
Network Connectivity: Stochastic vs. Deterministic Wireless Channels Orestis Georgiou (Toshiba Telecommunications Research Laboratory, United Kingdom), Carl Dettmann (University of Bristol, United Kingdom), Justin P Coon (University of Oxford, United Kingdom)	77
MMCD: Max-throughput and Min-delay Cooperative Downloading for Drive-thru Internet Systems	
Kaoru Ota (Muroran Institute of Technology, Japan), Mianxiong Dong (National Institute of Information and Communications Technology, Japan), Shan Chang (Donghua University, P.R. China), Hongzi Zhu (Shanghai Jiao Tong University, P.R. China)	83
Your Friends Are More Powerful Than You: Efficient Task Offloading Through Social Contacts Qingyu Li (College of Communication Engineering, PLA University of Science and Technology,	
P.R. China), Panlong Yang (Institute of Communication Engineering, PLAUST, P.R. China), Yubo Yan (PLA University of Science and Technology, P.R. China), Yue Tao (Illinois Institute of Technology, USA)	88
Optimal Buffer Management Policies in DTNs: A POMDP Approach	
Imane Rahmouni (LIM, FSDM, Sidi Mohamed Ben Abdallah University, Morocco), Mohamed El Kamili (LIM, Sidi Mohammed Ben Abdellah University, Fez, Morocco), Mohammed Raiss-elfenni (LIA, University of Avignon, France), Lahcen Omari (LIM, FSDM, Sidi Mohamed Ben Abdallah University Fez, Morocco), Abdellatif Kobbane (ENSIAS, University Mohammed V-Souissi & ENSIAS, Morocco)	94
The effect of imperfect CSI on the performance of random ad-hoc networks	
Yaniv George (Bar-Ilan University, Israel), Itsik Bergel (Bar Ilan University, Israel), Ephraim Zehavi (Bar-Ilan University, Israel)	100
Energy-balancing method to detect denial of service attacks in wireless sensor networks	
Quentin Monnet (University of Paris-Est & Lacl - Laboratory of Algorithmics, Complexity and Logic, France), Lynda Mokdad (Université de Paris 12 & Laboratoire LACL, France), Jalel Ben-Othman (University of Paris 13, France)	106
Mobile and Vehicular Ad Hoc Networks I	
A Hybrid Video Dissemination Protocol for VANETs	
Farahnaz Naeimipoor (University of Ottawa & Paradise Labratory, Canada), Azzedine Boukerche (University of Ottawa, Canada)	112
An Efficient Data Aggregation Algorithm in Delay Tolerant Vehicular Networks	
Qingwen Zhao (Shanghai Jiao Tong University, P.R. China), Yanmin Zhu (Shanghai Jiao Tong University, P.R. China)	118
Information Dissemination in Vehicular Networks via Evolutionary Game Theory	-
Jun Zhang (Telecom ParisTech, France), Vincent Gauthier (Institut TELECOM; Telecom SudParis; SAMOVAR UMR, France), Houda Labiod (TELECOM ParisTech (ex: ENST), France), Abhik Serie (Samsung Research India - Bangalore, India), Hossam Afifi (Institut Telecom	404
& Paris South, France)	124

A Knapsack Constrained Steiner Tree Model for Continuous Cover Huang Cheng (University of Ottawa, Canada), Xin Fei (University Mohammed Almulla (Kuwait University, Kuwait), Azzedine Bou Canada)	ity of Ottawa, Canada), kerche (University of Ottawa,
Connectivity preserving task allocation in mobile robotic sensor	
Zhenqiang Mi (University of Science and Technology Beijing, P (University of Science and Technology, P.R. China), Huan Ma (Technology Beijing (USTB), P.R. China), Dandan Wang (School	University of Science and I of Computer and
Communication Engineering, University of Science and Techno	ology Beljing, P.R. China)136
Localization I	
Efficient Localization based on Imprecise Anchors in RFID System	n
Xiang Lu (Nanjing University, P.R. China), Lei Xie (Nanjing Un (Nanjing University, P.R. China), Wei Wang (Nanjing Universit (Nanjing University, P.R. China), Sanglu Lu (Nanjing Universit	y, P.R. China), Baoliu Ye
INBS: An Improved Naive Bayes Simple Learning Approach for A	
Wenzhe Zhang (Dalian University of Technology, P.R. China), Technology, P.R. China), Zhenquan Qin (Dalian University of The Zheng (Dalian University of Technology, P.R. China), Lei Shu (Guangdong University of Persistent China), Najara Jin (Dalian University of Technology, P.R. China)	echnology, P.R. China), Xueshu n (Dalian University of trochemical Technology, P.R.
China), Naigao Jin (Dalian University of Technology, P.R. Ching Multihop Range-Free Localization with Approximate Shortest Pate	-
Sangwoo Lee (Hanyang University, Korea), Jaehoon Choi (Har Sunwoo Kim (Hanyang University, Korea)	nyang University, Korea),
A RSS-EKF Localization Method Using HMM-based LOS/NLOS Ch	
Xiufang Shi (Zhejiang University, P.R. China), Yong Huat Chev Research, Singapore), Chau Yuen (Singapore University of Teo Singapore), Zaiyue Yang (Zhejiang University, P.R. China)	chnology and Design,
FLYER: Fine-Grained Landmark based Greedy Geographic Routin	
Xiaopei Lu (National University of Defense Technology, P.R. Cl University of Defense Technology & Hong Kong University of S China), Xiangke Liao (NUDT, P.R. China)	cience and Technology, P.R.
Energy-Efficient Networks I	
Maximizing Continuous Barrier Coverage in Energy Harvesting S	ensor Networks
Jonathan DeWitt (Haverford College, USA), Suzanne Patt (Ripe (Texas State University, USA)	
Joint Mode Selection, Channel Allocation and Power Assignment Communications	for Green Device-to-Device
Chenfei Gao (Syracuse University, USA), Xiang Sheng (Syracuse University, USA), Weiyi Zhang (AT&T Labs Research University of Posts&Telecommunications, P.R. China), Mohsen	n, USA), Shihong Zou (Beijing
Energy Efficient Relay Selection Scheme for Cooperative Uniforn Networks	nly Distributed Wireless Sensor
Wafic Alameddine (Concordia University, Canada), Walaa Ham Canada), Javad Haghighat (Shiraz University of Technology, In	
Energy-Aware Ant Routing in Wireless Multi-Hop Networks	
Michael Frey (Humboldt-Universität zu Berlin, Germany), Fried Berlin, Germany), Mesut Guenes (Freie Universität Berlin, Ger	

Energy-Efficient Topology Control with Selective Diversity in Cooperative Wireless Ad Hoc	
Networks Bingyi Guo (South China University of Technology, P.R. China), Quansheng Guan (South China University of Technology, P.R. China), F. Richard Yu (Carleton University, Canada), Shengming Jiang (Shanghai Maritime University, P.R. China), Victor CM Leung (The University, P.R. China)	sity
of British Columbia, Canada)	
Cognitive Wireless Networks	
A Novel Spectrum Sharing Scheme for Industrial Cognitive Radio Networks: From Collective Motion Perspective	
Feilong Lin (Shanghai Jiao Tong University, P.R. China), Cailian Chen (Shanghai Jiao Tong University, P.R. China), Li'an Li (Shanghai Jiao tong University, P.R. China), Honghua Xu (Shanghai Jiao Tong University, P.R. China), Xinping Guan (Shanghai Jiao Tong University, P.R. China)	203
Throughput Performance of MIMO Cognitive Networks	
Amiotosh Ghosh (Concordia University, Canada), Walaa Hamouda (Concordia University, Canada)	209
Exploiting Primary User Social Features for Reliability-Driven Routing in Multi-hop Cognitive Radio Networks	
Huimin Wu (Faculty of Automation, Guangdong University of Technology, P.R. China), Rong Yu (Guangdong University of Technology, P.R. China), Yan Zhang (Simula Research Laboratory and University of Oslo, Norway)	
Maximum Throughput Adaptive Rate Transmission Scheme for Multihop Diversity Aided Multihop Links	
Chen Dong (University of Southampton, United Kingdom), Lie-Liang Yang (University of Southampton, United Kingdom), Jing Zuo (University of Southampton, United Kingdom), Soon Xin Ng (University of Southampton, United Kingdom), Lajos Hanzo (University of	224
Southampton, United Kingdom)	221
Jiajun Sun (Beijing University of Posts and Telecommunications, P.R. China), Huadong Ma (Beijing University of Posts and Telecommunications, P.R. China)	227
Localization II	227
Time-bounded Localization Algorithm based on Distributed Multidimensional Scaling for Wirel Sensor Networks	ess
Ferdews Tlili (University of Manouba, Tunisia), Abderrezak Rachedi (University Paris-Est Marne-la-Vallée, France), Abderrahim Benslimane (University of Avignon & LIA/CERI, France)	233
Optimal Selection of Aggregation Locations for Urban Sensing	
Jagruti Sahoo (Université de Sherbrooke, Canada), Soumaya Cherkaoui (Université de Sherbrooke, Canada), Abdelhakim Hafid (University of Montreal, Canada)	239
A Location-Based Friend-Assisted Coding-Aware Routing Protocol for Wireless Multihop Networks	
Cheng Li (Memorial University of Newfoundland, Canada), Guanhua Guo (University of the Chinese Academy of Sciences, P.R. China), Zhenzhen Jiao (University of Chinese Academy Sciences, P.R. China), Zheng Yao (Graduate University of the Chinese Academy of Sciences, P.R. China), Baoxian Zhang (University of the Chinese Academy of Sciences, P.R. China)	5,
GEDAR: Geographic and Opportunistic Routing Protocol with Depth Adjustment for Mobile Underwater Sensor Networks	
Rodolfo W. L. Coutinho (Federal University of Minas Gerais, Brazil), Azzedine Boukerche (University of Ottawa, Canada), Luiz F. M. Vieira (Universidade Federal de Minas Gerais, Brazil), Antonio A.F. Loureiro (Federal University of Minas Gerais, Brazil)	251

Jihed Eddine Said (University of Moncton, Canada), Lutful Karim (Seneca College of Applied Arts and Technology, Canada), Jalal N Almhana (Universite de Moncton, Canada), Alagan Anpalagan (Ryerson University, Canada)	257
Energy-Efficient Networks II	
Optimal topology design for energy efficient consensus in broadcast Wireless Sensor Networks César Asensio-Marco (Universidad de Valencia, Spain), Baltasar Beferull-Lozano (Universidad de Valencia, Spain)	269
BWS: Beacon-driven Wake-up Scheme for Train Localization using Wireless Sensor Networks Adeel Javed (University of Otago, New Zealand), Haibo Zhang (University of Otago, New Zealand), Zhiyi Huang (University of Otago, New Zealand), Jeremiah D. Deng (University of Otago, New Zealand)	276
Energy Efficient Interference-Aware Resource Allocation in LTE-D2D Communication Shahid Mumtaz (Instituto de Telecomunicações, Portugal), Kazi Mohammed Saidul Huq (Instituto de Telecomunicações, Portugal), Ayman Radwan (Instituto de Telecomunicações & Queen's University, Portugal), Jonathan Rodriguez (Instituto de Telecomunicações, Portugal), Rui L Aguiar (University of Aveiro & Instituto de Telecomunicações, Portugal)	202
Minimum-Energy Reprogramming with Guaranteed Quality-of-Sensing in Software-Defined Sensor Networks	282
Deze Zeng (China University of Geosciences, P.R. China), Peng Li (The University of Aizu, Japan), Song Guo (The University of Aizu, Japan), Toshiaki Miyazaki (The University of Aizu, Japan)	288
Wireless Network Applications	
Congestion-Aware MTC Device Triggering Adlen Ksentini (University of Rennes 1 / IRISA Lab, France), Tarik Taleb (NEC Europe Ltd., Germany), Ge Xiaohu (Huazhong University of Science & Technology, P.R. China), Honglin Hu (Shanghai Research Center for Wireless Communications, P.R. China)	294
OptimizingHandover Decision in LTE-ANetwork-based on MIH Protocol Houda Mzoughi (LETI, University of Sfax, Tunisia), Faouzi Zarai (Sfax University, Tunisia), Mohammad S. Obaidat (Monmouth University, USA), Lotfi Kamoun (LETI Laboratory	
University of Sfax Tunisia, Tunisia)	299
Saewoong Bahk (Seoul National University, Korea) Combining Successive Interference Cancellation and CSMA/CA in a Beam Forming IEEE 802.15.4 Gateway	305
Chih-Kuang Lin (Bell Labs & Alcatel-Lucent, Ireland), Irwin O Kennedy (Alcatel-Lucent, Ireland)	311
Mobile and Vehicular Ad Hoc Networks II	
Cooperative Information Forwarding in Vehicular Networks Subject to Channel Randomness Zijie Zhang (University of Sydney, Australia), Guoqiang Mao (The University of Technology, Sydney, Australia), Tao Han (Huazhong University of Science and Technology, P.R. China), Brian Anderson (Australian National University & National ICT Australia, Australia)	324

Heterogeneous Mobility and Connectivity-based Clustering Protocol for Wireless Sensor

Networks

Polling Scheme for Reliable Broadcasting in Vehicular Networks	
Huong Nguyen-Minh (University of Avignon, France), Abderrahim Benslimane (University of Avignon & LIA/CERI, France)	
SAN-Based Modeling of Fault Tolerant Protocols for MANETs	
Haroun Benkaouha (LSI Laboratory & USTHB University, Algeria), Lynda Mokdad (Universit de Paris 12 & Laboratoire LACL, France), Abdelkrim Abdelli (USTHB University- Algiers, Algeria)	
Dynamic Multi-Attribute Network Selection Algorithm for Vertical Handover Procedures over Mobile Ad Hoc Networks	
Igor Bisio (University of Genoa, Italy), Carlo Braccini (University of Genoa, Italy), Stefano Delucchi (University of Genoa, Italy), Fabio Lavagetto (University of Genoa, Italy), Mario Marchese (DIST- University of Genoa, Italy)	342
A Mobility Driven Joint Clustering and Relay Selection for IEEE 802.11p/WAVE Vehicular Networks	
Francesco Chiti (Università degli Studi di Firenze, Italy), Romano Fantacci (University of Florence, Italy), Giovanni Rigazzi (University of Florence, Italy)	348
Wireless Sensor Networks II	
Understanding the Benefits of Successive Interference Cancellation in Multi-Rate Multi-Hop Wireless Networks	
Long Qu (Ningbo University, P.R. China), Jiaming He (Ningbo University, P.R. China), Chadi Assi (Concordia University, Canada)	
A Novel Distributed Algorithm for Complete Targets Coverage in Energy Harvesting Wireless Sensor Networks	
Changlin Yang (University of Wollongong, Australia), Kwan-Wu Chin (University of Wollongong, Australia)	361
Data Fusion Utilization for optimizing Large-Scale Wireless Sensor Networks	
Mohammadreza Soltani (University of Nebraska-Lincoln, USA), Michael Hempel (University Nebraska-Lincoln, USA), Hamid Sharif (University of Nebraska-Lincoln, USA)	
Low-complexity 3D Target Tracking in Wireless Aerial Sensor Networks	
Suleyman Uludag (The University of Michigan - Flint, USA), Murat Karakus (IUPUI, USA), Evrim Guler (The University of Michigan - Flint, USA)	373
Distributed Joint Iterative Localization Algorithm for WSN	o.f
Weixiao Meng (Harbin Institute of Technology, P.R. China), Dekun Zhang (Harbin Institute Technology, P.R. China), Yao Zhao (N/A, P.R. China), Cheng Li (Memorial University of Newfoundland, Canada)	
Scheduling	
Optimal Scheduling with Pairwise Coding under Heterogeneous Delay Constraints	
Yafei Mao (Nanjing University, P.R. China), Chao Dong (College of Communication Engineering, P. L. A University of Science and Technology, P.R. China), Haipeng Dai (Nanjir University & State Key Laboratory for Novel Software Technology, P.R. China), Xiaojun Zhu (Nanjing University of Aeronautics and Astronautics, P.R. China), Guihai Chen (Shanghai Jia	10
Tong University, P.R. China) Scheduling schemes for Interference Suppression in Healthcare Sensor Networks	385
Anagha Jamthe (University of Cincinnati, USA), Amitabh Mishra (University of Cincinnati,	
USA), Dharma P Agrawal (University of Cincinnati, USA)	391
Resource Scheduling in SC-FDMA Based Relay Wireless Sensor Networks	
Maodong Li (Institute for Infocomm Research, Singapore), Chen-Khong Tham (National University of Singapore, Singapore)	397

Xin Ao (Dongguan University of Technology, P.R. China), F. Richard Yu (Carleton University, Canada), Yuan Huaqiang (Dongguan University of Technology, P.R. China), Shengming Jiang (Shanghai Maritime University, P.R. China)	403
Adaptive Wakeup Scheduling Based On Power-Law Distributed Contacts in Delay Tolerant Networks	
Bentao Zhang (Tsinghua University, P.R. China), Yong Li (Tsinghua University, P.R. China), Depeng Jin (Tsinghua University, P.R. China), Pan Hui (Hong Kong University of Science and Technology & Telekom Innovation Laboratories, Hong Kong)	409
Performance Evaluation II	
Maximizing Packet Delivery Ratio in Stochastic Routing: An Analytical Perspective	
Udara Sadathana Wijetunge (University of South Australia, Australia), Ramanan Subramanian (University of South Australia & Institute of Telecommunications Research, Australia), André Pollok (University of South Australia, Australia), Sylvie Perreau (University of South Australia,	415
Australia)	415
Shahram Mohrehkesh (Old Dominion University, USA), Tamer Nadeem (Old Dominion University, USA)	421
An Evaluation of the TPGF Protocol Implementation over NS-2	
Ismail Bennis (University of Mohamed V & Université de Reims Champagne-Ardenne, Morocco), Hacene Fouchal (Université de Reims Champagne-Ardenne, France), Ouadoudi Zytoune (Ibn Tofail University, Morocco), Driss Aboutajdine (CNRST & LRIT Mohammed Vagdal University, Morocco)	428
Modeling and Analysis on Congestion Control in the Internet of Things	
Jun Huang (Chongqing University of Posts and Telecomm, P.R. China), Donggai Du (Chongqing University of Posts and Telecommunications, P.R. China), Qiang Duan (The Pennsylvania State University, USA), Yi Sun (Chongqing University of Posts and Telecommunications, P.R. China), Yin Ying (Chongqing University of Posts and Telecommunications, P.R. China), Tiantian Zhou (Chongqing University of Posts and Telecommunications, P.R. China), Yanguang Zhang (Chongqing University of Posts and Telecommunications, P.R. China)	434
Telecommunications, P.R. China)	434
Minming Ni (University of Victoria, Canada), Jianping Pan (University of Victoria, Canada), Lin Cai (University of Victoria, Canada)	440
Multi-channel Wireless Networks with Infrastructure Support: Capacity and Delay	
Hong-Ning Dai (Macau University of Science and Technology, Macao), Raymond Chi-Wing Wong (Hong Kong University of Science and Technology, Hong Kong), Qinglin Zhao (Macau University of Science and Technology, P.R. China)	446
Explore and exploit in wireless ad hoc emergency response networks	
Panayiotis Kolios (University of Cyprus, Cyprus), Andreas Pitsillides (University of Cyprus, Cyprus), Osnat (Ossi) Mokryn (Tel Aviv Yaffo Academic College, Israel), Katerina Papadaki (London School of Economics, United Kingdom)	452
On Pathsets and Cutsets of a Wireless Sensor Network Surveillance Problem	
Mohammed Elmorsy (Alberta University, Canada), Ehab S. Elmallah (University of Alberta, Canada)	459
IEEE 802.15.4 MAC Layer Performance Enhancement by employing RTS/CTS combined with	
Packet Concatenation Norberto Barroca (Instituto de Telecomunicações, Portugal), Luís M. Borges (Instituto de Telecomunicações, Portugal), Fernando J. Velez (University of Beira Interior & Instituto de Telecomunicações, Portugal), Periklis Chatzimisios (Alexander TEI of Thessaloniki, Greece)	466

Traffic-aware Link Scheduling with Interference Alignment for Multi-user MIMO Networks

Clustering

	Asynchronous Clustering of Multihop Wireless Sensor Networks Serdar Vural (University of Surrey & Centre for Communication Systems Research, United Kingdom), Pirabakaran Navaratnam (University of Surrey, United Kingdom), Ning Wang (University of Surrey, United Kingdom), Rahim Tafazolli (University of Surrey, United Kingdom)	472
	Sensor Grouping for Linear Distributed Estimation in a Wireless Sensor Network	
	Jian Su (University of Saskatchewan, Canada), Ha Nguyen (University of Saskatchewan, Canada)	478
	On Improving the Group Paging Method For Machine-type-Communications	
	Osama Arouk (University of Rennes 1 & IRISA / INRIA Rennes, France), Adlen Ksentini (University of Rennes 1 / IRISA Lab, France), Yassine Hadjadj-Aoul (University of Rennes 1, France), Tarik Taleb (NEC Europe Ltd., Germany)	484
	Social-Oriented Adaptive Transmission in Wireless Ad Hoc Networks	
	Zhaolong Ning (Northeastern University, P.R. China), Qingyang Song (Northeastern University, P.R. China), Lei Guo (Northeastern University, P.R. China), Koji Okamura (Kyushu University, Japan)	490
	Minimum Cost Localization Problem in Three-Dimensional Ocean Sensor Networks	
	Chao Zhang (University of North Carolina at Charlotte, USA), Yingjian Liu (Ocean University of China, P.R. China), Zhongwen Guo (Ocean University of China, P.R. China), Guodong Sun (Beijing Forestry University, P.R. China), Yu Wang (University of North Carolina at Charlotte,	
	ÙSA)	496
	Minimum Cost Opportunistic Routing with Intra-session Network Coding Shun Cai (School of Computer Science and Engineering, Southeast University, P.R. China), Sanfeng Zhang (Southeast University & Key Laboratory of Computer Network and Information Integration In Southeast University, Ministry of , P.R. China), Guoxin Wu (School of Computer Science and Engineering, Southeast University, P.R. China), Yongqiang Dong	503
	(Southeast University, P.R. China), Taieb Znati (University of Pittsburgh, USA) Coalitional Relay Selection Game to Extend Battery Lifetime of Multi-standard Mobile Terminals	502
	Firooz B. Saghezchi (Instituto de Telecomunicações, Portugal), Ayman Radwan (Instituto de Telecomunicações & Queen's University, Portugal), Jonathan Rodriguez (Instituto de Telecomunicações, Portugal), Abd-Elhamid M. Taha (Alfaisal University, Saudi Arabia)	508
	2FSK Modulation for Multiuser Physical-layer Network Coding Network	
	Deyou Zhang (Harbin Institute of Technology, P.R. China), Qiyue Yu (Harbin Institute of Technology, P.R. China), Weixiao Meng (Harbin Institute of Technology, P.R. China), Cheng Li (Memorial University of Newfoundland, Canada)	514
	Joint TOA-Based Sensor Synchronization and Localization Using Semidefinite Programming	
	Reza Monir Vaghefi (Virginia Tech, USA), Michael Buehrer (Virginia Tech, USA)	520
	Opportunistic Forwarding in Energy Harvesting Mobile Delay Tolerant Networks	
	Yue Lu (Zhejiang University, P.R. China), Wei Wang (Zhejiang University, P.R. China), Lin Chen (The University of Paris-Sud, France), Zhaoyang Zhang (Zhejiang University, P.R. China), Aiping Huang (Zhejiang University, P.R. China)	526
Security	Voronoi-based Deployment of Mobile Sensors in the Face of Adversaries Novella Bartolini (Sapienza University of Rome, Italy), Giancarlo Bongiovanni (Universita` di Roma "La Sapienza", Italy), Tom La Porta (Penn State University, USA), Simone Silvestri (Missouri University of Science and Technology, USA), Francesco Vincenti (Sapienza University of Rome, Italy)	522
	oniversity of Northe, Italy)	332

	A New Intrusion Detection Framework for Vehicular Networks	
	Hichem Sedjelmaci (University of Bourgogne, DRIVE Lab, France), Sidi-Mohammed Senouci (University of Bourgogne - ISAT Nevers, France)	538
	Performance Estimation of AODV Variant with Trust Mechanism	
	Ruki Harwahyu (Universitas Indonesia, Indonesia), Harris Simaremare (Universitas Islam Negri SUSKA Riau & Universitas Islam Negri SUSKA Riau, Indonesia), Riri Fitri Sari (Universitas Indonesia, Indonesia), Pascal Lorenz (University of Haute Alsace, France)	544
	Evaluation of RPL with a Transmission Count-Efficient and Trust-Aware Routing Metric	
	Panagiotis Karkazis (Technical University of Crete, Greece), Ioannis Papaefstathiou (Technical University of Crete, Greece), Lambros Sarakis (Technological Educational Institute of Sterea Ellada, Greece), Theodore Zahariadis (TEI of Chalkida & Synelixis Solutions Ltd, Greece), Terpsichori-Helen Velivassaki (Technological Educational Institute of Sterea Ellada, Greece), Dimitrios Bargiotas (TEI of Chalkida, Greece)	550
	A Trust and Reputation Management System for Cloud and Sensor Networks Integration	
	Chunsheng Zhu (The University of British Columbia, Canada), Hasen Nicanfar (The University of British Columbia, Canada), Victor CM Leung (The University of British Columbia, Canada), Wenxiang Li (Wuhan University of Science and Technology, P.R. China), Laurence T. Yang (St. Francis Xavier University, Canada)	557
Mobile an	d Vehicular Ad Hoc Networks III	
	DAYcast: A Dynamic Transmission Delay Based Broadcast Protocol for Vehicular Ad Hoc Networks	
	Xu Wu (Southeast University, P.R. China), Jun Zheng (Southeast University, P.R. China), Hui Tong (Southeast University, P.R. China), Nathalie Mitton (Inria Lille - Nord Europe, France)	563
	Omar Chakroun (Université de Sherbrooke, Canada), Soumaya Cherkaoui (Université de Sherbrooke, Canada)	568
	Fast and Reliable Broadcasting in VANETs using SNR with ACK Decoupling	
	Razvan Voicu (Southern Polytechnic State Universitry, USA), Hamza Ijaz Abbasi (Georgia Institute of Technology, USA), Huangwei Fang (Southern Polytechnic State University, USA), Billy Kihei (Georgia Institute of Technology, USA), John A. Copeland (Georgia Institute of Technology, USA), Yusun Chang (Southern Polytechnic State University & The Georgia Institute of Technology, USA)	574
	Video Streaming Over Vehicular Networks by a Multiple Path Solution with Error Correction	
	Renfei Wang (University of Ottawa & PARADISE Research Laboratory, Canada), Mohammed Almulla (Kuwait University, Kuwait), Cristiano Rezende (University of Ottawa, Canada),	F00
	Azzedine Boukerche (University of Ottawa, Canada)	580
	Sylvere Kwatirayo (University de Moncton, Canada), Jalal N Almhana (Universite de Moncton, Canada), Zikuan Liu (Universite de Moncton, Canada), Jad Siblini (Télécom Saint-Etienne,	
	Canada)	586
ICC'14 (Sympos	CISS: IEEE ICC 2014 - Communication and Information Systems Securition	ty
Security o	of Cyber-physical Systems	
	Morphing Communications of Cyber-Physical Systems Towards Moving-Target Defense	
	Yu Li (Wright State University, USA), Rui Dai (North Dakota State University, USA), Junjie	F02
	Zhang (Wright State University, USA)	592

Anti-Cheating Prosumer Energy Exchange based on Indirect Reciprocity	
Liang Xiao (Xiamen University, P.R. China), Yan Chen (University of Maryland, College Park, USA), K. J. Ray Liu (University of Maryland, USA)	599
NFD: A Practical Scheme to Detect Non-Technical Loss Fraud in Smart Grid	
Wenlin Han (University of Alabama, USA), Yang Xiao (The University of Alabama, USA)	605
Integrity Based Relationships and Trustworthy Communication between Network Participants	
Alexander Oberle (Fraunhofer SIT, Germany), Pedro Larbig (Fraunhofer SIT, Germany), Nicolai Kuntze (Fraunhofer SIT, Germany), Carsten Rudolph (Fraunhofer SIT, Germany)	610
The Sequential Attack against Power Grid Networks	
Yihai Zhu (University of Rhode Island & URI, USA), Jun Yan (URI, USA), Yufei Tang (University of Rhode Island, USA), Yan Sun (University of Rhode Island, USA), Haibo He (University of Rhode Island, USA)	616
	010
Special Topics on Security I	
Enhancing Email Classification Using Data Reduction and Disagreement-based Semi-Supervised Learning	
Weizhi Meng (Institute for Infocom Research (I2R), Singapore), Wenjuan Li (City University of Hong Kong, Hong Kong), Lam-for Kwok (City University of Hong Kong, P.R. China)	622
A Context-dependent Privacy Preserving Framework in Road Networks	
Yong Wang (University of Electronic and Science Technology of China, P.R. China), Long-ping He (University of Electronic and Science Technology of China, P.R. China), Jing Peng (University of Electronic Science and Technology of China, P.R. China), Jie Hou (University of Electronic and Science Technology of China, P.R. China), Yun Xia (University of Electronic	
Science and Technology of China, P.R. China)	628
Achieving Multi-Authority Access Control with Efficient Attribute Revocation in Smart Grid	
Dongxiao Liu (University of Electronic Science and Technology of China, P.R. China), Hongwei Li (University of Electronic Science and Technology of China, P.R. China), Yi Yang (University of Electronic Science and Technology of China, P.R. China), Haomiao Yang (University of Electronic Science and Technology of China, P.R. China)	634
Inferring Internet-scale Infections by Correlating Malware and Probing Activities	03 1
Elias Bou-Harb (National Cyber-Forensics and Training Alliance & Concordia University,	
Canada), Claude Fachkha (National Cyber-Forensics and Training Alliance Canada & Concordia University, Canada), Mourad Debbabi (Concordia University, Montreal, Canada), Chadi Assi (Concordia University, Canada)	640
A Non-Key Based Security Scheme Supporting Emergency Treatment of Wireless Implants	
Guanglou Zheng (Macquarie University, Australia), Gengfa Fang (Macquarie University, Australia), Mehmet Orgun (Macquarie University, Australia), Rajan Shankaran (Macquarie University, Australia)	647
A Factor-searching-based Multiple String Matching Algorithm for Intrusion Detection	
Yanbing Liu (Institute of Information Engineering, Chinese Academy of Sciences, P.R. China), Qingyun Liu (Institute of Information Engineering, Chinese Academy of Sciences, P.R. China), Ping Liu (Institute of Information Engineering, Chinese Academy of Sciences, P.R. China), Jianlong Tan (Institute of Information Engineering, Chinese Academy of Sciences, Beijing, P.R. China), Li Guo (Institute of Information Engineering, Chinese Academy of Sciences, P.R. China)	653
Android Low Entropy Demystified	
Yu Ding (Peking University and UC Berkeley, USA), Zhuo Peng (University of Michigan, USA), Yuanyuan Zhou (University of Michigan, USA), Chao Zhang (UC Berkeley, USA)	659

Trust Models, Management and Certificate Handling

Fast Authentication in Multi-Hop Infrastructure-based Mobile Communication	
Kevin Lee (Cisco, USA), Jing Deng (University of North Carolina at Greensboro, USA), Raghuram S Sudhaakar (Cisco Systems Inc., USA)	665
Trust Establishment with Data Fusion for Secure Routing in MANETs	
Zhexiong Wei (Carleton University, Canada), Helen Tang (DRDC Ottawa, Canada), F. Richard Yu (Carleton University, Canada), Maoyu Wang (Communications Research Centre Canada, Canada), Peter C Mason (Defence Research & Development Canada, Canada)	671
Quality of Interaction among Path Computation Elements for Trust-aware Inter-Provider Cooperation	
Carol J Fung (Virginia Commonwealth University, USA), Molka Gharbaoui (Scuola Superiore Sant'Anna, Italy), Francesco Paolucci (Scuola Superiore Sant'Anna, Italy), Alessio Giorgetti (Scuola Superiore Sant'Anna, Italy), Piero Castoldi (Scuola Superiore Sant'Anna, Italy), Barbara Martini (CNIT, Italy)	677
A Multi-Resolution Flow-Net Methodology for Accountable Logging and Its Application in TCP/IP Networks	
Bo Fu (Cisco Systems, Inc, USA), Yang Xiao (The University of Alabama, USA)	683
A Content Privacy-Preserving Protocol for Energy-Efficient Access to Commercial Online Social Networks	
Yi-Hui Lin (Academia Sinica, Taiwan), Chih-Yu Wang (National Taiwan University, Taiwan), Wen-Tsuen Chen (Academia Sinica, Taiwan)	688
Security in Wired Systems and Optical Networks	
Byzantine-Resilient Secure Software-Defined Networks with Multiple Controllers	
He Li (University of Aizu, Japan), Peng Li (The University of Aizu, Japan), Song Guo (The University of Aizu, Japan), Shui Yu (Deakin University, Australia)	695
Analysis of Network Address Shuffling as a Moving Target Defense	
Thomas E Carroll (Pacific Northwest National Laboratory, USA), Michael Crouse (Harvard University, USA), Errin Fulp (Wake Forest University, USA), Kenneth Berenhaut (Wake Forest University, USA)	701
Detection on Application Layer DDoS using Random Walk Model	
Chuan Xu (Chongqing University of Posts and Telecommunications, P.R. China), Guofeng Zhao (ChongQing University of Posts and Telecommunications & Network and Computation Research Center, P.R. China), Gaogang Xie (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China), Shui Yu (Deakin University, Australia)	707
The NewShrew Attack: A New Type of Low-Rate TCP-Targeted DoS Attack	
Jingtang Luo (University of Electronic Science and Technology of China, P.R. China), Xiaolong Yang (University of Science and Technology Beijing, P.R. China)	713
Design, Implementation and Security Analysis of Hardware Trojan Threats in FPGA	
Devu Manikantan Shila (United Technologies Research Center, USA), Vivek Venugopal (United Technologies Research Center, USA)	719
Cryptography and Evaluation	
Performance Evaluation of Attribute-Based Encryption: Toward Data Privacy in the IoT	
Xinlei (Oscar) Wang (University of California, Davis, USA), Jianqing Zhang (Intel Corporation, USA), Eve M Schooler (Intel Corporation, USA), Mihaela Ion (Google, USA)	725
Safe cryptographic random number generation using untrusted generators	
Helena Bruyninckx (Université Libre de Bruxelles & Royal Military Academy - Brussels, Belgium), Frédéric Lafitte (Royal Military Academy, Belgium), Dirk Van Heule (Royal Military Academy, Belgium)	731
+ -·· / /· · · · · · · · · · · · · ·	

	'6ci bXg'cb'GYWfYh?YmFUhYg']b': UX]b['7\UbbY'g'i bXYf'DfUWh]WU`7\UbbY`9gh]a Uh]cb'GW\Ya Yg 'A]W\UY`AW i]fY'fl b]j Yfg]hmcZ'J]Whcf]Už'7UbUXUŁž'5`]fYnU'Acj U\YX]Ub'fl b]j Yfg]hm	
	°cZJ JWcfJuž 7 UbuXuŁSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	SS + + +
	Revisiting a Primitive: Analysis of Approximate Message Authentication Codes	
	S. Amir Hossein A. E. Tabatabaei (University of Siegen, Germany), Natasa Zivic (University of Siegen, Germany)	743
	An Analysis of an HMM-Based Attack on the Substitution Cipher with Error-Prone Ciphertext Nathaniel L Gross (University of Colorado Colorado Springs & UCCS, USA), Willie K Harrison (University of Colorado Colorado Springs, USA)	740
		749
Anonymity	, Anonymous Communication, Metrics and their Performance Analysis	
	A Context-based Parametric Relationship Model (CPRM) to Measure the Security and QoS tradeoff in Configurable Environments	
	Ana Nieto (University of Malaga, Spain), Javier Lopez-Munoz (University of Malaga, Spain)	755
	Hasnain Lakhani (SRI International, USA), Fareed Zaffar (LUMS, Pakistan)	761
	Collusion-Resistant Query Anonymization for Location-Based Services	701
	Qin Zhang (University of Arizona, USA), Loukas Lazos (University of Arizona, USA)	769
	Strictly Positive Secrecy Capacity of Log-Normal Fading Channel with Multiple Eavesdroppers	700
	Xian Liu (University of Arkansas at Little Rock, USA)	775
		//3
	Achieving Positive Rate With Undetectable Communication Over AWGN and Rayleigh Channels Seonwoo Lee (Georgia Institute of Technology, USA), Robert John Baxley (Georgia Tech	
	Research Institute, USA)	780
Cloud and	Virtual Machine Allocation Policies against Co-resident Attacks in Cloud Computing Yi Han (University of Melbourne, Australia), Jeffrey Chan (University of Melbourne, Australia),	
	Tansu Alpcan (The University of Melbourne, Australia), Christopher Leckie (University of Melbourne, Australia)	786
	A Privacy-Preserving Human Tracking Scheme in Centralized Cloud based Camera Networks	
	Yu-Chi Chen (Academia Sinica, Taiwan), Chun-Te Chu (University of Washington, USA), Jenq-Neng Hwang (University of Washington, USA), Jang-Hee Yoo (Electronics and Telecommunications Research Institute, Korea)	793
	Auditing Cloud Service Level Agreement on VM CPU Speed	
	Ryan Houlihan (Temple University, USA), Xiaojiang Du (Temple University, USA), Chiu C. Tan (Temple University, USA), Jie Wu (Temple University, USA), Mohsen Guizani (QU, USA)	799
	A Moving-target Defense Strategy for Cloud-based Services with Heterogeneous and Dynamic Attack Surfaces	
	Wei Peng (Indiana University-Purdue University Indianapolis, USA), Feng Li (Indiana University-Purdue University Indianapolis, USA), Chin-Tser Huang (University of South Carolina, USA), Xukai Zou (School of Science, Purdue University-Indianapolis, USA)	804
	Efficient Privacy-preserving Multicast in Cloud Data Centers	
	He Li (University of Aizu, Japan), Peng Li (The University of Aizu, Japan), Song Guo (The University of Aizu, Japan)	810
Formal Tru	st Models, Security Modeling and Protocol Design	
	Towards a Unified Model for the Analysis of Timing-based Covert Channels	
	Pradhumna L Shrestha (University of Nebraska-Lincoln, USA), Michael Hempel (University of Nebraska-Lincoln, USA), Hamid Sharif (University of Nebraska-Lincoln, USA)	816

A Secure Synchronized Reading System over Time-Critical Online Contests	
Wei Wang (Peking University, P.R. China), Peng Xu (Huazhong University of Science and Technology, P.R. China), Li Hui (Shenzhen Graduate School, Peking University, P.R. China), Laurence Yang (Huazhong University of Science and Technology, P.R. China)	821
Security Analysis of the Non-Aggressive Challenge Response of the DNP3 Protocol using a CPN	
Model Raphael Amoah (Queensland University of Technology, Australia), Suriadi Suriadi (Queensland University of Technology, Australia), Seyit A. Camtepe (Queensland University of Technology & Science and Engineering Faculty, Australia), Ernest Foo (Queensland University of Technology, Australia)	827
Security-aware Virtual Network Embedding	0_;
Shuhao Liu (National University of Defense Technology, P.R. China), Zhiping Cai (University of Florida & National University of Defense Technology, USA), Hong Xu (City University of Hong Kong, Hong Kong), Ming Xu (National University of Defense Technology, P.R. China)	834
Containing Sybil Attacks on Trust Management Schemes for Peer-to-Peer Networks	0/1
Lin Cai (NJIT, USA), Roberto Rojas-Cessa (New Jersey Institute of Technology, USA)	841
Botnet Detection, Prevention, and Defense	
Towards the Automated Detection of Unknown Malware on Live Systems	
Gábor Pék (Budapest University of Technology and Economics, Hungary), Levente Buttyan (Budapest University of Technology and Economics, Hungary)	847
Detection of Malicious Payload Distribution Channels in DNS	
A. Mert Kara (Concordia University, Canada), Hamad Binsalleeh (Concordia University, Canada), Mohammad Mannan (Concordia University, Canada), Amr Youssef (Concordia University, Canada), Mourad Debbabi (Concordia University, Montreal, Canada)	853
Optimized Packet Classification for Software-Defined Networking	
Keissy Guerra Perez (Queen University of Belfast, United Kingdom), Xin Yang (Queen's University Belfast, United Kingdom), Sandra Scott-Hayward (Queen's University Belfast, United Kingdom), Sakir Sezer (Queens University Belfast, United Kingdom)	859
Bayesian Mechanisms for Wireless Network Security	
Anil Kumar Chorppath (Technical University of Munich, Germany), Tansu Alpcan (The University of Melbourne, Australia), Holger Boche (Technical University Munich, Germany)	865
On Advanced Monitoring in Resilient and Unstructured P2P Botnets	
Shankar Karuppayah (Technische Universität Darmstadt & NAv6, Universiti Sains Malaysia, Germany), Mathias Fischer (Technische Universität Darmstadt & Center for Advanced Security Research Darmstadt (CASED), Germany), Christian Rossow (VU University Amsterdam, The	071
Netherlands), Max Muehlhaeuser (Technical University Darmstadt, Germany)	8/1
Computer and Network Forensics	
Histogram Shape-Based Robust Image Watermarking Method	
Tianrui Zong (Deakin University, Australia), Yong Xiang (Deakin University, Australia), Iynkaran Natgunanathan (Deakin University, Australia)	878
Malicious BGP Hijacks: Appearances Can Be Deceiving Pierre-Antoine Vervier (Symantec Research Labs, France), Quentin Jacquemart (EURECOM,	
France), Johann Schlamp (Technische Universität München, Germany), Olivier Thonnard (Symantec & Symantec Research Labs, France), Georg Carle (Technische Universität München, Germany), Guillaume Urvoy-Keller (Université de Nice Sophia-Antipolis, France),	
Ernst W Biersack (EURECOM, France), Marc Dacier (QCRI, France)	884

Robustness Enhancement of Quantization Based Audio Watermarking Method Using Adaptive Safe-band	9
Iynkaran Natgunanathan (Deakin University, Australia), Yong Xiang (Deakin University,	
Australia), Tianrui Zong (Deakin University, Australia), Yang Xiang (Deakin University, Australia)	890
A new interpolation error expansion based reversible watermarking algorithm considering th human visual system	e
Suzan Elbadry (Deakin University, Australia), Yong Xiang (Deakin University, Australia), Tianrui Zong (Deakin University, Australia), Iynkaran Natgunanathan (Deakin University, Australia)	896
Special Topics on Security II	
Delay Analysis of Physical Layer Key Generation in Multi-user Dynamic Wireless Networks	
Rong Jin (University of Michigan, Dearborn, USA), Xianru Du (University of Michigan - Dearborn, USA), Kai Zeng (University of Michigan - Dearborn, USA), Laiyuan Xiao (Huazho University of Science and Technology, P.R. China), Jing Xu (Huazhong University of Science and Technology, P.R. China)	e
Firecycle: A scalable test bed for large-scale LTE security research	
Jill Jermyn (Columbia University, USA), Roger Piqueras Jover (AT&T Security Research Center, USA), Mikhail Istomin (AT&T Security Research Center, USA), Ilona Murynets (AT& Security Research Center, USA)	
Using Opcode-Sequences to Detect Malicious Android Applications	
Quentin Jerome (University of Luxembourg, Luxemburg), Kevin Allix (University of Luxembourg, Luxemburg), Thomas Engel (University of Luxemburg, Luxemburg, Luxemburg)	914
Game-Based Adaptive Security in the Internet of Things for eHealth	
Mohammed Hamdi (Norwegian Computing Center, Norway), Habtamu Abie (Norwegian Computing Center, Norway)	920
Two-party and Multi-party Private Matching for Proximity-based Mobile Social Networks	920
Xiaoyan Zhu (Xidian University, P.R. China), Zengbao Chen (Xidian University, P.R. China) Haotian Chi (Xidian University, P.R. China), Jie Liu (Xidian University, P.R. China), Shunror Jiang (Xidian University, P.R. China)	ng
Trust-Aware Privacy Evaluation in Online Social Networks	
Yongbo Zeng (University of Rhode Island, USA), Yan Sun (University of Rhode Island, USA Liudong Xing (University of Massachusetts Dartmouth, USA), Vinod M. Vokkarane (Univers of Massachusetts Lowell & Massachusetts Institute of Technology (MIT), USA)	ity
Performance Enhancement of I/Q Imbalance Based Wireless Device Authentication Through Collaboration of Multiple Receivers	
Peng Hao (The University of Western Ontario, Canada), Xianbin Wang (The University of Western Ontario, Canada), Aydin Behnad (The University of Western Ontario, Canada)	939
Privacy and Privacy Enhancing Technologies	
Privacy Aware Display Strategy in Friend Search	
Na Li (Northwest Missouri State University, USA)	945
Achieving Ranked Range Query in Smart Grid Auction Market Yi Yang (University of Electronic Science and Technology of China, P.R. China), Hongwei Li	
(University of Electronic Science and Technology of China, P.R. China), Hongwel Li University of Electronic Science and Technology of China, P.R. China), Mi Wen (Shanghai University of Electric Power, P.R. China), Hongwei Luo (China Acedemy of Telecom Resear P.R. China), Rongxing Lu (Nanyang Technological University, Singapore)	ch,
Privacy-Area Aware Dummy Generation Algorithms for Location-Based Services	331
Ben Niu (Xidian University, P.R. China), Zhengyan Zhang (Wuhan University of Technology P.R. China), Xiaoqing Li (XiDian University, P.R. China), Hui Li (Xidian University, P.R. China)	

Advances in Multiuser Data Embedding in Digital Media: Orthogonal Sum-SINR-optimal Carriers	
Lili Wei (Intel Corporation, USA), Dimitris A. Pados (The State University of New York at	
Buffalo, USA), Stella N. Batalama (State University of New York at Buffalo, USA), Michael	
Medley (Air Force Research Laboratory, USA), Rose Qingyang Hu (Utah State University, USA)	963
Achieving Robustness and Capacity Gains in Covert Timing Channels	
Fahimeh Rezaei (University of Nebraska Lincoln, USA), Michael Hempel (University of	
Nebraska-Lincoln, USA), Pradhumna L Shrestha (University of Nebraska-Lincoln, USA), Hamid	
Sharif (University of Nebraska-Lincoln, USA)	969
Network Security Metrics and their Performance Evaluation	
IDS Performance Enhancement Technique based on Dynamic Traffic Awareness Histograms	
Zouheir Trabelsi (UAE University, UAE), Safaa Zeidan (UAE University, UAE)	975
Physical Layer Security in Wiretap Two-Wave with Diffuse Power Fading Channels	
Lifeng Wang (Queen Mary, University of London, United Kingdom), Nan Yang (Australian	
National University, Australia), Maged Elkashlan (Queen Mary, University of London, United	
Kingdom), Phee Lep Yeoh (University of Melbourne, Australia), Jinhong Yuan (University of New South Wales, Australia)	0.81
On the Target Secrecy Rate for SISOME Wiretap Channels	301
Shihao Yan (The University of New South Wales, Australia), Giovanni Geraci (Singapore	
University of Technology and Design, Singapore), Nan Yang (Australian National University,	
Australia), Robert Malaney (University of New South Wales, Australia), Jinhong Yuan	
(University of New South Wales, Australia)	987
Key-Based Coded Permutation Ciphers with Improved Error Performance and Security in Wireless Channels	
Walid Y Zibideh (Qualcomm Technologies Inc. & Product and Test Engineering, USA), Mustafa Muhammad Matalgah (University of Mississippi, USA)	993
Reliability Analysis for Cryptographic Key Management	
Sheng Xiao (Hunan University, P.R. China), Weibo Gong (University of Massachusetts at	
Amherst, USA), Don Towsley (University of Massachusetts at Amherst, USA), Qingquan	
Zhang (University of Minnesota, USA), Ting Zhu (University of Maryland, Baltimore County,	000
USA)	999
Mobile and Wireless Network Security	
RemindU: A Secure and Efficient Location Based Reminder System	
Xinxin Zhao (Arizona State University, USA), Lingjun Li (Arizona State University, USA),	
Guoliang Xue (Arizona State University, USA)	1005
SEGR: A Secure and Efficient Group Roaming Scheme for Machine to Machine Communications between 3GPP and WiMAX Networks	
Chengzhe Lai (Xidian University, P.R. China), Hui Li (Xidian University, P.R. China), Rongxing	
Lu (Nanyang Technological University, Singapore), Rong Jiang (National University of Defense Technology, P.R. China), Sherman Shen (University of Waterloo, Canada)	
Signalling Storms in 3G Mobile Networks	
Omer H. Abdelrahman (Imperial College London, United Kingdom), Erol Gelenbe (Imperial	
College London, United Kingdom)	1017
MIMO Multi-User Secrecy Rate Analysis	
Giovanni Geraci (Singapore University of Technology and Design, Singapore), Sarabjot Singh	
(The University of Texas at Austin, USA), Jeffrey Andrews (The University of Texas at Austin,	
USA), Jinhong Yuan (University of New South Wales, Australia), Iain B. Collings (CSIRO,	4000
Australia)	1023

ICC'14 CQRM: IEEE ICC 2014 - Communication QoS, Reliability and Modeling **Symposium**

Performance Analysis

An Analysis of Backhaul Costs of Radio Access Networks using Stochastic Geometry Vinay Suryaprakash (Technische Universität Dresden & Vodafone Chair Mobile Communication Systems, Germany), Gerhard Fettweis (Technische Universität Dresden, Germany)	1035
Performance Analysis of Poisson Cellular Networks with Lognormal Shadowed Rayleigh Fading Xiaobin Yang (University of Calgary, Canada), Abraham O Fapojuwo (University of Calgary,	1042
Effective Capacities of Dual-Hop Networks with a Concurrent Buffer-aided Relaying Protocol Khoa Tran Phan (McGill University, Canada), Tho Le-Ngoc (McGill University, Canada)	1048
Performance analysis of dynamic adaptive video streaming over mobile content delivery networks	
Daniele Munaretto (University of Padova, Italy), Fabio Giust (Universidad Carlos III de Madrid, Spain), Gerald Kunzmann (DOCOMO Communications Laboratories Europe, Germany), Michele Zorzi (Università degli Studi di Padova, Italy)	1053
Goodput Performance Improvement in High-Speed Railway Communication Systems: A Link Adaptation Approach	
Quansheng Xu (Beijing University of Posts and Telecommunications, P.R. China), Hong Ji (Beijing University of Posts and Telecommunications, P.R. China), Xi Li (Beijing University of Posts and Telecommunications, P.R. China)	1059
Experience Study	

Quality of E

A QoE-aware Joint Resource Allocation Algorithm for Uplink Carrier Aggregation in LTE- Advanced Systems	
Yujae Song (KAIST, Korea), Yonghoon Choi (KAIST, Korea), Youngnam Han (KAIST, Korea)	1065
Crowdsourcing 2.0: Enhancing Execution Speed and Reliability of Web-based QoE Testing	
Bruno Gardlo (Telecommunications Research Center Vienna (FTW), Austria), Sebastian Egger (FTW - Telecommunications Research Center Vienna & Signal Processing and Speech Communication Laboratory, Graz University of Technology, Austria), Michael Seufert (University of Würzburg, Germany), Raimund Schatz (Telecommunications Research Center	
Vienna (FTW), Austria)	1070
Video-QoE Aware Radio Resource Allocation for HTTP Adaptive Streaming	
Vishwanath Ramamurthi (Intel Corporation, USA), Ozgur Oyman (Intel Corporation, USA)	1076
On Modeling and Measuring Quality of Experience Performance in IEEE802.11n Wireless Networks	
Jaya B Rao (University of Calgary, Canada), Abraham O Fapojuwo (University of Calgary, Canada), Salman Naqvi (Shaw Communications Inc., Canada), Isaac Osunkunle (Shaw Communications Inc., Canada), Chad Rumpel (Shaw Communications Inc., Canada), Dave Morley (Shaw Communications Inc., Canada)	1082

Dradiation	11000 005	Catiofaction	:	Current Mobile Networks
Predicting	usei Que	: Sausiacuoii	<i>II I</i>	Current Mobile Networks

Jiri Hosek (Brno University of Technology, Czech Republic), Michal Ries (Vienna University of Technology, Austria), Pavel Vajsar (Brno University of Technology, Czech Republic), Lubos Nagy (Brno University of Technology, Czech Republic), Olga Galinina (Tampere University of Technology, Finland), Sergey Andreev (Tampere University of Technology, Finland), Yevgeni Koucheryavy (Tampere University of Technology, Finland), Zdenek Sulc (T-Mobile Czech Republic, Czech Republic), Petr Hais (T-Mobile Czech Republic, Czech Republic), Radek Penizek (T-Mobile Czech Republic)

1088

Energy Efficient Communications

Energy Analysis of a Contention Tree-based Access Protocol for Machine-to-Machine Networks with Idle-to-Saturation Traffic Transitions Francisco Vázquez-Gallego (Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Spain), Jesus Alonso-Zarate (Centre Tecnologic de Telecomunicacions de Catalunya - CTTC, Spain), Pere Tuset-Peiro (Universitat Oberta de Catalunya, Spain), Luis Alonso (Universidad Politecnica de Catalunya-BarcelonaTECH & Telecommunications and Aerospatial Engineering School of Castelldefels, Spain)	. 1094
Trade-offs between compression, energy and quality of video streaming applications in wireless networks	
Kamiar Radnosrati (VTT Technical Research Centre of Finland, Finland), Dmitri Moltchanov (Tampere University of Technology, Finland), Yevgeni Koucheryavy (Tampere University of Technology, Finland)	. 1100
Competitive Wireless Energy Transfer Bidding: A Game Theoretic Approach	
Dusit Niyato (Nanyang Technological University, Singapore), Ping Wang (Nanyang Technological University, Singapore)	. 1106
Investigation on Energy Efficiency in HetNet CoMP Architecture	
Kazi Mohammed Saidul Huq (Instituto de Telecomunicações, Portugal), Shahid Mumtaz (Instituto de Telecomunicações, Portugal), Jonathan Rodriguez (Instituto de Telecomunicações, Portugal), Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)	. 1112
Admission Control Policy for Wireless Networks with RF Energy Transfer	
Dusit Niyato (Nanyang Technological University, Singapore), Ping Wang (Nanyang Technological University, Singapore), Dong In Kim (Sungkyunkwan University (SKKU), Korea)	. 1118

Network Routing and Planning

Time-dependent combined network design and routing optimization Dimitri Papadimitriou (Alcatel-Lucent Bell & UGent, Belgium), Bernard Fortz (Université Libre de Bruxelles, Belgium)	1124
Discussion on the Combination of Loop-Free Alternates and Maximally Redundant Trees for IP Networks Fast Reroute	
Kaixuan Kuang (University of Electronic Science and Technology of China, P.R. China), Sheng Wang (University of Electronic Science and Technology of China, P.R. China), Xiong Wang (University of Electronic Science and Technology of China, P.R. China)	1131
Fragmentation Aware Routing and Spectrum Assignment Algorithm	
Pedro Moura (State University of Campinas, Brazil), Nelson L. S. da Fonseca (State University of Campinas, Brazil), Rafael Scaraficci (University of Campinas, Brazil)	1137
A Heuristic Routing Algorithm with Erasure Correcting Code Based Instantaneous Recovery Technique	
Abu Hena Al Muktadir (The University of Electro-Communications, Japan), Eiji Oki (The University of Electro-Communications, Japan)	1143

(Quantifying AS-level routing policy changes	
	Shen Su (Harbin Institute of Technology, P.R. China), Hongli Zhang (Harbin Institute of Technology, P.R. China), Binxing Fang (Harbin Institute of Technology, P.R. China), Lin Ye (Harbin Institute of Technology, P.R. China)	1148
	(Harsin Institute of Teetinology, Find Gima)	. 1110
COPM Inter	active Presentations	
CQRW IIIter	active Fresentations	
/	Memory Partitioning in Memcached: An Experimental Performance Analysis	
	Damiano Carra (University of Verona, Italy), Pietro Michiardi (EURECOM, France)	. 1154
H	KPAT: A Kernel and Protocol Analysis Tool for Embedded Networking Devices	
	Ming-Hung Wang (National Chiao Tung University, Taiwan), Chia-Ming Yu (National Chiao Tung University, Taiwan), Li-Hsing Yen (National University of Kaohsiung, Taiwan), Chia-Liang Lin (National Chiao Tung University, Taiwan), Chien-Chao Tseng (National Chiao-Tung	4450
,	University, Taiwan)	. 1160
· ·	Coping with Physical Attacks on Random Network Structures	1166
ı	Omer Gold (Bar-Ilan University, Israel), Reuven Cohen (Bar-Ilan University, Israel) Exploiting Graph Compression Techniques for Coding and Monitoring of Networks	. 1100
L	Adriel Cheng (Defence Science and Technology Organisation & Department of Defence,	
	Australia), Peter Dickinson (Defence Science and Technology Organisation, Australia)	. 1173
/	MIP: Minimizing the Idle Period of Data Transmission in Data Center Networks	
	Xiaoliang Wang (Nanjing University, P.R. China), Sanglu Lu (Nanjing University, P.R. China), Deng Chen (Nanjing University, P.R. China)	. 1179
A	A Low Overhead Synchronization Mechanism for Beam-formed Systems	
	Md Saifur Rahman (Samsung Research America - Dallas & Samsung Information Systems America, USA), Rakesh Taori (Samsung Researcg America, USA)	. 1185
/	Mitigation of Sounding Pilot Contamination in Massive MIMO Systems	
	Taeseop Lee (Seoul National University, Korea), Hyung-Sin Kim (Seoul National University, Korea), Sangkyu Park (Seoul National University, Korea), Saewoong Bahk (Seoul National University, Korea)	. 1191
7	The effectiveness of throughput sampling for capacity management: a queueing approach	
	Wendy Ellens (University of Amsterdam, The Netherlands), Michel Mandjes (University of Amsterdam, The Netherlands), Daniel Worm (TNO, The Netherlands), Hans van den Berg	1107
	(TNO, The Netherlands)	. 1197
Efficient Tra	ansport Protocols	
1	Impact of Traffic Splitting on the Delay Performance of MPTCP	
	Se-yong Park (Seoul National University, Korea), Changhee Joo (UNIST, Korea), Yong Seok Park (Samsung electronics, Korea), Saewoong Bahk (Seoul National University, Korea)	. 1204
	Applications with Multiple Parallel Flows: Assessing their Unfair Advantage with Proportional Fair Sharing TCP	
	Deep Medhi (University of Missouri-Kansas City, USA)	. 1210
(On The Existence Of Optimal LEDBAT Parameters	
	Si Quoc Viet Trang (ISAE, France), Nicolas Kuhn (Telecom Bretagne, France), Emmanuel Lochin (University of Toulouse - ISAE, France), Cédric Baudoin (Thales Alenia Space, France), Emmanuel Dubois (CNES, France), Patrick Gelard (CNES, France)	. 1216
L	DAPS: Intelligent Delay-Aware Packet Scheduling For Multipath Transport	
	Nicolas Kuhn (Telecom Bretagne, France), Emmanuel Lochin (University of Toulouse - ISAE, France), Ahlem Mifdaoui (University Of Toulouse-ISAE, France), Golam Sarwar (University of New South Wales & National ICT Australia, Australia), Olivier Mehani (NICTA, Australia),	
	Roksana Boreli (National ICT Australia & University of NSW, Australia)	. 1222

	Congestion Control for Coded Transport Layers MinJi Kim (Massachusetts Institute of Technology, USA), Jason Cloud (MIT, USA), Ali ParandehGheibi (MIT, USA), Leonardo Urbina (MIT, USA), Kerim Fouli (MIT & INRS, USA), Douglas Leith (Hamilton, Ireland), Muriel Médard (MIT, USA)	1228
Resource A	Allocation and Performance	
	The Resource Optimization of Heterogeneous Network Interfaces in Wireless Mobile Devices	
	Daehyun Ban (Samsung Electronics & Software R&D Center, Korea), Jeongsik In (Samsung Electronics Co., Ltd., Korea), Honguk Woo (Samsung Electronics, Korea)	1235
	Match-Degree Based Bandwidth Allocation Scheme in Heterogeneous Networks	
	Hao Lian (Beijing University of Posts and Telecommunications, P.R. China), Xiao Yan (Beijing University of Posts and Telecommunications, P.R. China), Lina Weng (Beijing University of Posts and Telecommunications, P.R. China), Jian Yang (Beijing University of Posts and Telecommunications, P.R. China), Zhiyong Feng (Beijing University of Posts and Telecommunications, P.R. China), Qixun Zhang (Beijing University of Posts and Telecommunications, P.R. China), Yingzhao Yan (Beijing University of Posts and Telecommunications, P.R. China)	1242
	Two-tier Cellular Random Network Planning for Minimum Deployment Cost	
	Prodromos-Vasileios Mekikis (Universitat Politècnica de Catalunya (UPC), Spain), Elli Kartsakli (Universitat Politècnica de Catalunya (UPC), Spain), Angelos Antonopoulos (Telecommunications Technological Centre of Catalonia (CTTC), Spain), Aris S. Lalos (Technical University of Catalonia (UPC), Spain), Luis Alonso (Universidad Politecnica de Catalunya-BarcelonaTECH & Telecommunications and Aerospatial Engineering School of Castelldefels, Spain), Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)	1248
	On Optimal Load Setting of Load-Coupled Cells in Heterogeneous LTE Networks	
	Iana Siomina (Ericsson, Sweden), Di Yuan (Linköping University, Sweden)	1254
	Aggregate Interference Statistical Modeling and User Outage Analysis of Heterogeneous Cellular Networks	
	Tiankui Zhang (Beijing University of Posts and Telecommunications, P.R. China), Lu An (Beijing University of Posts and Telecommunications, P.R. China), Yue Chen (Queen Mary University of London, United Kingdom), Kok Keong (Michael) Chai (Queen Mary, University of London, United Kingdom)	1260
Network To	omography and Access Technologies	
	Rate-Based Path Selection for Shortest Path Bridging in Access Networks	
	Yu Nakayama (NTT Corporation, Japan)	1266
	Coding-aware MAC: Providing Channel Access Priority for Network Coding with Reverse Direction DCF in IEEE 802.11-based Wireless Networks	
	Raul Palacios (University of Trento, Italy), Fabrizio Granelli (University of Trento, Italy), Achuthan Paramanathan (Aalborg University, Denmark), Janus Heide (Steinwurf, Denmark), Frank H.P. Fitzek (Aalborg University, Denmark)	1272
	An Efficient Solution to Locate Sparsely Congested Links by Network Tomography	
	Jinbiao Chen (Institute for Interdisciplinary Information Sciences, Tsinghua University, P.R. China), Xiao Qi (Tsinghua University, P.R. China), Yongcai Wang (Tsinghua University, P.R. China)	1278
	User-Satisfaction-Based Weighted SLNR Beamforming in TD-LTE-A System	
	Xuanli Wu (Communication Research Center, Harbin Institute of Technology, P.R. China), Lukuan Sun (Harbin Institute of Technology, P.R. China), Jia Yu (Harbin Institute of Technology Shenzhen Graduate School, P.R. China), Xiaodong Lin (University of Ontario Institute of Technology, Canada), Ye Wang (University of Ontario Institute of Technology,	1204
	Canada)	1Z04

	An Adaptive Compressive Sensing Scheme for Network Tomography Based Fault Localization Vidarshana W Bandara (Colorado State University, USA), Anura P Jayasumana (Colorado State University, USA), Rick Whitner (JDSU, USA)	1290
Multimedia	a and QoS Provisioning	
	Encoded Bitstream based Video Content Type Definition for HEVC Video Quality Prediction Louis Anegekuh (University of Plymouth, United Kingdom), Lingfen Sun (University of Plymouth, United Kingdom), Emmanuel Ifeachor (University of Plymouth, United Kingdom) A Differentiated Queueing Service Based Admission Control Policy for Wireless Multimedia Mian Guo (Guangdong University of Petrochemical Technology, P.R. China), Quansheng Guan (South China University of Technology, P.R. China), Change Inc. (Changlesi Maritime)	1296
	(South China University of Technology, P.R. China), Shengming Jiang (Shanghai Maritime University, P.R. China), Mei Liu (Guangdong University of Petrochemical Technology, P.R. China)	1302
	Multi-staged Network Restoration from Massive Failures considering Transition Risks Shohei Kamamura (NTT, Japan), Daisaku Shimazaki (NTT, Japan), Yoshihiko Uematsu (NTT, Japan), Kouichi Genda (NTT, Japan), Koji Sasayama (NTT, Japan)	1308
	A Behavior-Based Incentive Mechanism for Crowd Sensing with Budget Constraints Jiajun Sun (Beijing University of Posts and Telecommunications, P.R. China), Huadong Ma	
	(Beijing University of Posts and Telecommunications, P.R. China)	
Cloud-bas	ed Services and Architectures Cellular Smartphone Traffic and User Behavior Analysis	
	Yinzhou Li (Beijing University of Posts and Telecommunications, P.R. China), Yang Jie (Beijing University of Posts and Telecommunications, P.R. China), Nirwan Ansari (NJIT, USA)	1326
	Modeling the Dropbox Client Behavior Glauber Gonçalves (Universidade Federal de Minas Gerais, Brazil), Idilio Drago (Politecnico di Torino, Italy), Ana Paula da Silva (Universidade Federal de Minas Gerais, Brazil), Alex Borges Vieira (Universidade Federal de Juiz de Fora, Brazil), Jussara M. Almeida (Federal University of Minas Gerais, Brazil)	1332
	Characterizing Cascade Dynamics in A Microblogging System Shengkai Shi (The University of Hong Kong, Hong Kong), Zhi Wang (Tsinghua University, P.R. China), Chuan Wu (The University of Hong Kong, Hong Kong), Xiaojun Lin (Purdue University, USA)	
	An OpenFlow Controller for Cloud Data Centers: Experimental Setup and Validation Davide Adami (CNIT Pisa Research Unit, University of Pisa, Italy), Andrea Sgambelluri (Scuola Superiore Sant'Anna, Italy), Lisa Donatini (University of Pisa, Italy), Molka Gharbaoui (Scuola Superiore Sant'Anna, Italy), Stefano Giordano (University of Pisa, Italy), Barbara Martini (CNIT, Italy), Alessio Del Chiaro (University of Pisa, Italy), Piero Castoldi (Scuola Superiore	

Sant'Anna, Italy)

A Markov Decision Process-based Service Migration Procedure for Follow Me Cloud

Tarik Taleb (NEC Europe Ltd., Germany), Adlen Ksentini (University of Rennes 1 / IRISA Lab,

France), Min Chen (Huazhong University of Science and Technology, P.R. China) ______ 1350

..... 1344

ICC'14 CRN: IEEE ICC 2014 - Cognitive Radio and Networks Symposium

Spectrum Sensing I

Spectrum

Fuzzy C-Means Clustering based Secure Fusion Strategy in Collaborative Spectrum Sensing	
Lei Li (University of Massachusetts Lowell, USA), Chunxiao (Tricia) Chigan (University of Massachusetts Lowell, USA)	1355
Compressive Sparsity Order Estimation for Wideband Cognitive Radio Receiver	
Shree Krishna Sharma (University of Luxembourg, Luxemburg), Symeon Chatzinotas (University of Luxembourg, Luxemburg), Björn Ottersten (KTH Royal Institute of Technology, Sweden)	. 1361
Impact of noise estimation on Energy Detection and Eigenvalue based spectrum sensing algorithms	
Pawan Dhakal (Politecnico di Torino, Italy), Daniel Rivello (Politecnico di Torino, Italy), Federico Penna (Samsung MSL, USA), Roberto Garello (Politecnico di Torino, Italy)	. 1367
Distributed Indoor Spectrum Occupancy Measurements in the UHF TV Band	
Christoph König (Leibniz Universität Hannover, Germany), Maria Dolores Perez Guirao (Leibniz Universität Hannover, Germany), Lübben Ralf (Leibniz University of Hannover, Germany)	1373
Querying Spectrum Databases and Improved Sensing for Vehicular Cognitive Radio Networks	1373
Abdulla Al-Ali (Northeastern University & Qatar University, USA), Kaushik Chowdhury (Northeastern University, USA), Marco Di Felice (University of Bologna, Italy), Jarkko Paavola (Turku University of Applied Sciences, Finland)	1379
Wideband Spectrum Sensing for Cognitive Radio: a Model Order Selection Approach	
Andrea Mariani (University of Bologna, Italy), Andrea Giorgetti (University of Bologna, Italy), Marco Chiani (University of Bologna, Italy)	1205
Joint Random Spectrum Sensing and Access Scheme for Decentralized Cognitive Radio Networks	1303
Armin Banaei (Texas A&M University, USA), Ali Eslami (Texas A&M University, USA), Costas N Georghiades (Texas A&M University, USA), Shuguang Cui (ShanghaiTech/Texas A&M Univ., USA)	1391
Spectrum Sensing with a Frequency-Hopping Primary: From Theory to Practice	
Sanjeev Gurugopinath (Indian Institute of Science, India), Raghavendra Akula (IISc, India), Chandra R Murthy (Indian Institute of Science, India), Prasanna R (Indian Institute of Science, India), Bharadwaj Amrutur, Amrutur (Indian Institute of Science, India)	1207
Efficient Channel Assignment for Cooperative Sensing based on Convex Bipartite Matching	1397
Ning Zhang (University of Waterloo, Canada), Nan Cheng (University of Waterloo, Canada), Hao Liang (University of Alberta, Canada), Yujie Tang (University of Waterloo, Canada), Jon Mark (University of Waterloo, Canada), Sherman Shen (University of Waterloo, Canada)	. 1403
A New Algorithm for Distributed Nonparametric Sequential Detection	
Shouvik Ganguly (Indian Institute of Science, India), Sahasranand R (Indian Institute of Science, India), Vinod Sharma (Indian Institute of Science, India)	. 1409

Spectrum Access Session

CRN PHY

Zhenquan Qin (Dalian University of Technology, P.R. China), Bingxian Lu (Dalian University of Technology, P.R. China), Lei Wang (Dalian University of Technology, P.R. China), Jianing Zhang (Dalian University of Technology, P.R. China), Ming Zhu (Dalian U	
Technology, P.R. China), Liang Sun (Dalian University of Technology, P.R. China), Lei Shu (Guangdong University of Petrochemical Technology, P.R. China)	. 1416
Retrospective Spectrum Access Protocol: A Payoff-based Learning Algorithm for Cognitive Radio Networks	
Stefano Iellamo (TELECOM PARISTECH, France), Lin Chen (The University of Paris-Sud, France), Marceau Coupechoux (Telecom ParisTech, France)	1422
Optimal Spectrum Access Strategy for Multi-channel Cognitive Radio Networks with Nakagami Fading and Finite-size Buffer	
Lei Zhang (Southeast University, P.R. China), Song Tiecheng (National communications research laboratory, P.R. China), Xu Bao (Jiangsu University, P.R. China), Ming Wu (University of Southeast, P.R. China), Dafei Sun (Southeast University, P.R. China), Jing Hu (Southest University, PRC, P.R. China)	1428
Analysis of a Buffered Cognitive Wireless Network with Dynamic Spectrum Assignment	
Sandeep Kannappa (Biscotti, Inc, USA), Tariq M Ali (University of Texas at Dallas, USA), Mohammad Saquib (UniversityTexas Dallas, USA)	1434
Spectrum Sharing with Limited Feedback in Poisson Cognitive Network	
Zhe Wang (University of New South Wales, Australia), Wei Zhang (The University of New South Wales, Australia)	1441
Complex Communication Systems Achieving Interference-Free Frequency Allocation Irene Macaluso (Trinity College Dublin, Ireland), Horia Cornean (Aalborg University,	
Denmark), Nicola Marchetti (CTVR Trinity College, Ireland), Linda Doyle (Trinity College Dublin, Ireland)	
	. 1447
Adaptive Modulation and Coding with Queue Awareness in Cognitive Incremental Decode-and- Forward Relay Networks	1447
Forward Relay Networks Thi My Chinh Chu (Blekinge Institute of Technology, Sweden), Hoc Phan (University of Reading, United Kingdom), Hans-Juergen Zepernick (Blekinge Institute of Technology,	
Forward Relay Networks Thi My Chinh Chu (Blekinge Institute of Technology, Sweden), Hoc Phan (University of	
Forward Relay Networks Thi My Chinh Chu (Blekinge Institute of Technology, Sweden), Hoc Phan (University of Reading, United Kingdom), Hans-Juergen Zepernick (Blekinge Institute of Technology, Sweden)	. 1453
Forward Relay Networks Thi My Chinh Chu (Blekinge Institute of Technology, Sweden), Hoc Phan (University of Reading, United Kingdom), Hans-Juergen Zepernick (Blekinge Institute of Technology, Sweden) Hybrid Overload MC-CDMA for Cognitive Radio Networks Fahimeh Jasbi (The University of Manchester, United Kingdom), Daniel K. C. So (University of	1453 1460
Forward Relay Networks Thi My Chinh Chu (Blekinge Institute of Technology, Sweden), Hoc Phan (University of Reading, United Kingdom), Hans-Juergen Zepernick (Blekinge Institute of Technology, Sweden) Hybrid Overload MC-CDMA for Cognitive Radio Networks Fahimeh Jasbi (The University of Manchester, United Kingdom), Daniel K. C. So (University of Manchester, United Kingdom) Spectrum Utilization Maximization in Energy Limited Cooperative Cognitive Radio Networks Yan Long (Xidian University, P.R. China), Hongyan Li (Xidian University, P.R. China), Hao Yue (University of Florida, USA), Miao Pan (Texas Southern University, USA), Yuguang Fang (University of Florida, USA) Generalized Selection Combining in Cognitive MIMO Relay Networks	1453 1460
Thi My Chinh Chu (Blekinge Institute of Technology, Sweden), Hoc Phan (University of Reading, United Kingdom), Hans-Juergen Zepernick (Blekinge Institute of Technology, Sweden) Hybrid Overload MC-CDMA for Cognitive Radio Networks Fahimeh Jasbi (The University of Manchester, United Kingdom), Daniel K. C. So (University of Manchester, United Kingdom) Spectrum Utilization Maximization in Energy Limited Cooperative Cognitive Radio Networks Yan Long (Xidian University, P.R. China), Hongyan Li (Xidian University, P.R. China), Hao Yue (University of Florida, USA), Miao Pan (Texas Southern University, USA), Yuguang Fang (University of Florida, USA)	1453 1460 1466

Cognitive Radio and Networks Interactive Presentations

USRP Implementation of Max-Min SNR Signal Energy based Spectrum Sensing Algorithms for	
Cognitive Radio Networks	
Tadilo Endeshaw Bogale (University du Quebec, Institute National de la Recherche Scientifique (INRS), Canada), Luc Vandendorpe (University of Louvain, Belgium)	1478
Cooperative Modulation Classification of Multiple Signals in Cognitive Radio Networks	1470
Mahi Abdelbar (Virginia Tech & Wireless@VT, USA), Bill Tranter (Virginia Tech, USA), Tamal Bose (University of Arizona, USA)	1/102
A Worst-Case Robust Distributed Power Allocation Scheme for OFDM-based Cognitive Radio	1463
Networks	
Zhengfa Zhu (Central South University, P.R. China), Jun Peng (School of Information Science & Engineering, Central South University, P.R. China), Pingping Yao (School of Information Science & Engineering, Central South University, P.R. China), Fu Jiang (Central South University, P.R. China), Kuo-Chi Lin (Institute for Simulation and Training Orlando University of Central Florida, USA)	1489
Power Allocation Game for Interference Mitigation in a Real-world Experimental Testbed	
Ciprian Anton (Technical University of Cluj-Napoca, Romania), Andrei Toma (Technical University of Cluj-Napoca, Romania), Ligia C. Cremene (Technical University of Cluj-Napoca, Romania), Mihael Mohorcic (Jozef Stefan Institute & Jozef Stefan International Postgraduate School, Slovenia), Carolina Fortuna (Jozef Stefan Institute, Slovenia)	1495
Routing as a Bayesian Coalition Game in Smart Grid Neighborhood Area Networks: Learning Automata-Based Approach	1.55
Neeraj Kumar (Thapar University, India), Sudip Misra (Indian Institute of Technology- Kharagpur, India), Mohammad S. Obaidat (Monmouth University, USA)	1502
Reinforcement Learning Approaches and Evaluation Criteria for Opportunistic Spectrum Access	
Clement Robert (Heriot Watt University, United Kingdom), Christophe Moy (SUPELEC/IETR, France), Chengxiang Wang (Heriot-Watt University, United Kingdom)	1508
Multi-Channel Management for D2D Communications in IEEE 802.22 WRANs	
Huaizhou Shi (Delft University of Technology, The Netherlands), R Venkatesha Prasad (TU Delft, India), Ignas G.M.M. Niemegeers (Delft University of Technology, The Netherlands), MD Abdur Rahim (Create-Net International Research Centre, Italy)	1514
TAS/MRC in Cognitive Relay Networks over Rayleigh Fading Channels with Correlated Antennas	
Ahmed Hassan Abd El-Malek (King Fahd University of Petroleum and Minerals, Saudi Arabia), Fawaz Al-Qahtani (Texas A&M University at Qatar & Eduncation City, Qatar), Salam A. Zummo (KFUPM, Saudi Arabia), Hussein Alnuweiri (Texas A&M University, Qatar)	1520
Time Dynamics of Random Access in Cognitive Radio Networks	1320
Tsang-Kai Chang (National Taiwan University, Taiwan), Kwang-Cheng Chen (National Taiwan University, Taiwan), Lizhong Zheng (Massachusetts Institute of Technology, USA)	1525
Spectrally-Efficient SIMO Relay-aided Underlay Communications: An Exact Outage Analysis	
Zakaria El-Moutaouakkil (Telecom Bretagne & LabSticc, France), Kamel Tourki (Texas A&M University at Qatar, Qatar), Samir Saoudi (Telecom-Bretagne, France)	
Predictive Decision-Making for Vehicular Cognitive Radio Networks through Hidden Markov Models	
Farimah Mapar (Northeastern University, USA), Kaushik Chowdhury (Northeastern University, USA)	1537
Distributed Random Sensing Order Analysis and Optimization in Cognitive Radio Systems	
Hossein Shokri-Ghadikolaei (KTH, Royal Institute of Technology, Sweden), Carlo Fischione (KTH, Sweden)	1543
Cooperative Spectrum Sensing over Correlated Rayleigh Fading Channels in Cognitive Radio using Factor Graph	
Debasish Bera (IIT Kharagpur, India), Indrajit Chakrabarti (IIT Kharagpur, India), Sant Pathak (Indian Institute of Technology, Kharagpur, India)	1549

CRN PHY II

Channel Selection in Cognitive Radio Networks with Opportunistic RF Energy Harvesting Dusit Niyato (Nanyang Technological University, Singapore), Ping Wang (Nanyang Technological University, Singapore), Dong In Kim (Sungkyunkwan University (SKKU), Korea)	1555
Mitigating Cross-Network Interference in Cognitive Spectrum Sharing with Opportunistic Relaying	
Phee Lep Yeoh (University of Melbourne, Australia), Trung Q. Duong (Queen's University Belfast, United Kingdom), Maged Elkashlan (Queen Mary, University of London, United Kingdom), Michail Matthaiou (Queen's University Belfast, United Kingdom), Nidal Nasser (Alfaisal University, Saudi Arabia)	1561
Impact of Transmit Power Control on Aggregate Interference in Underlay Cognitive Radio Networks	
Sachitha Kusaladharma (University of Alberta, Canada), Prasanna R K H Herath Mudiyanselage (University of Alberta & TRTech, Canada), Chintha Tellambura (University of Alberta, Canada)	1567
Channel-Hopping Based on Available Channel Set for Rendezvous of Cognitive Radios	
Lu Yu (Hong Kong Baptist University, Hong Kong), Hai Liu (Hong Kong Baptist University, Hong Kong), Yiu-Wing Leung (Hong Kong Baptist University, Hong Kong Baptist University, Hong Kong), Zhiyong Lin (Hong Kong Baptist University & Guangdong Plolytechnic Normal University, Hong Kong)	
Near-Optimal Power Allocation with PSO Algorithm for MIMO Cognitive Networks using Multiple AF Two-Way Relays	
Ahmad Alsharoa (King Abdullah University of Science and Technology (KAUST), Saudi Arabia), Hakim Ghazzai (King Abdullah University of Science and Technology (KAUST) & KAUST, Saudi Arabia), Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)	1580
CRN PHY/MAC Session	
On the Resource Allocation for Multi-relay Cognitive Radio Systems	
Mengyao Ge (Nanjing University, P.R. China), Shaowei Wang (Nanjing University, P.R. China)	1585
A New Analysis of the Cognitive Radio Jump-stay Algorithm Under the Asymmetric Model Michel Barbeau (Carleton University, Canada), Gimer Cervera (Universidad Tecnológica Metropolitana, Mexico), Joaquin Garcia-Alfaro (Telecom Bretagne, France), Evangelos Kranakis (Carleton University, Canada)	
Joint Spectrum and Power Allocation in Coded Cooperative Cognitive Radio Networks	
Qiong Wu (Shanghai University, Shanghai, P.R. China), Junni Zou (Shanghai University, P.R. China), Zhuo Wu (Shanghai University, P.R. China)	1596
A Dynamic Relaying Scheme for Cognitive Networks with Multipacket Reception Capability	
Sherif ElAzzouni (Nile University, Egypt), Amr El-Keyi (Nile University, Egypt), Mohammed Nafie (Cairo University & Nile University, Egypt)	1602
Robust Power Allocation in Cognitive Radio Networks with Uncertain Knowledge of Interference Inyoung Kim (Konkuk University, Korea), Hyang-Won Lee (Konkuk University, Korea)	1609

CRN Application Layer I

Energy-efficient Context-aware User Association for Outdoor Small Cell Heterogeneous Networks	
Agapi Mesodiakaki (Universitat Politècnica de Catalunya, Spain), Ferran Adelantado (Universitat Oberta de Catalunya, Spain), Luis Alonso (Universidad Politecnica de Catalunya-BarcelonaTECH & Telecommunications and Aerospatial Engineering School of Castelldefels, Spain), Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)	1614
Spectrum Investment with Uncertainty Based on Prospect Theory	
Junlin Yu (The Chinese University of Hong Kong, Hong Kong), Man Hon Cheung (The Chinese University of Hong Kong, Hong Kong), Jianwei Huang (The Chinese University of Hong Kong, Hong Kong)	1620
Combinatorial Spectrum Auction with Multiple Heterogeneous Sellers in Cognitive Radio Networks	
Changyan Yi (University of Manitoba, Canada), Jun Cai (University of Manitoba, Canada)	1626
To AND or To OR: How Shall the Fusion Center Rule in Energy-Constrained Cognitive Radio Networks?	
Sina Maleki (University of Luxembourg, Luxemburg), Geert Leus (Delft University of Technology, The Netherlands), Symeon Chatzinotas (University of Luxembourg, Luxemburg), Björn Ottersten (University of Luxembourg, Luxemburg)	1632
On the Effects of Cognitive Mobility Prediction in Wireless Multi-hop Ad Hoc Networks	
Marco Mezzavilla (University of Padova, Italy), Giorgio Quer (University of California San Diego, USA), Michele Zorzi (Università degli Studi di Padova, Italy)	1638
 Spatio-temporal Characterization for Mobile Service Usage based on Spectrum Measurement	
Sixing Yin (Beijing University of Posts and Telecommunications, P.R. China), Shufang Li (Beijing University of Posts and Telecommunications, P.R. China)	1645
Self-coexistence and Spectrum Sharing in Device-to-Device WRANs	
Huaizhou Shi (Delft University of Technology, The Netherlands), R Venkatesha Prasad (TU Delft, India), Ignas G.M.M. Niemegeers (Delft University of Technology, The Netherlands), Ming Xu (National University of Defense Technology, P.R. China), MD Abdur Rahim (Create-Net International Research Centre, Italy)	1651
Generalized Spectral Footprint Minimization for OFDMA-Based Cognitive Radio Networks	1001
Karaputugala Gamacharige Madushan Thilina (University of Manitoba, Canada), Mohammad Moghadari (University of Manitoba, Canada), Ekram Hossain (University of Manitoba, Canada)	1657
Secrecy Rate Maximization For Cooperative Overlay Cognitive Radio Networks with Artificial Noise	
Katrina He (Monash University, Australia), Jamie Evans (Monash University, Australia), Subhrakanti Dey (Uppsala University, Sweden)	1663
Routing and Spectrum Sharing in Geo-location Database Assisted Secondary Multi-Hop Networks	
Guantian Zheng (South China University of Technology, P.R. China), Quansheng Guan (South China University of Technology, P.R. China)	1669

ICC'14 CSSMA: IEEE ICC 2014 - Communications Software, Services and Multimedia Applications Symposium

Video Services and QoE/QoS Management I

A Near Optimal QoE-Driven Power Allocation Scheme for SVC-Based Video Transmissions Over MIMO Systems	
Xiang Chen (University of Washington, USA), Jenq-Neng Hwang (University of Washington, USA), Chiung-Ying Wang (TransWorld University, Taiwan), Chung-Nan Lee (University of Yatsen, Taiwan)	1675
Scheduling and Resource Allocation for Wireless Dynamic Adaptive Streaming of Scalable Videos over HTTP	
Mincheng Zhao (Beijing University of Posts and Telecommunications, P.R. China), Gong Xiangyang (Beijing University of Posts and Telecommunications P.R. China, P.R. China), Jie Liang (Simon Fraser University, Canada), Wang Wendong (Beijing University of Posts and Telecommunications, P.R. China), Xirong Que (Institute of Networking Technology, P.R. China), Shiduan Cheng (Beijing University of Posts & Telecommunications, P.R. China)	1681
Ensuring QoE in Wireless Networks with Adaptive FEC and Fuzzy Logic-based Mechanisms	
Roger Immich (University of Coimbra, Portugal), Eduardo Cerqueira (Federal University of Para & UCLA & UFPA & UCLA, Brazil), Marilia Curado (University of Coimbra, Portugal)	1687
A PID-based Quality Control Algorithm for SVC Video Streaming	. 1007
Shengbin Meng (Peking University, P.R. China), Jun Sun (Peking University & Institute of Computer Science and Technology, P.R. China), Yilei Wang (Peking University, P.R. China), Zongming Guo (Peking University, P.R. China)	1693
User Heterogeneity and Priority Adaptive Multimedia Broadcast over Wireless	
Chetna Singhal (Indian Institute of Technology Delhi, India), Swades De (Indian Institute of Technology Delhi, India), Hari Gupta (Indian Institute of Technology, Delhi, India)	1699
Video Services and QoE/QoS Management II	
Crowdsourcing Framework to Assess QoE	
Muhammad Sajid Mushtaq (University of Paris-Est Creteil (UPEC) & Image, Signal and Intelligent Systems Laboratory-LISSI, France), Brice Augustin (UPEC, University Paris-Est, France), Abdelhamid Mellouk (UPEC, University Paris-Est Creteil Val de Marne, France)	1705
Motion Energy Estimation of Group of Pictures and Its Application for Unequal Error Protection of H.264/AVC Video Bitstreams	
Huu-Dung Pham (Charles Darwin University, Australia), Sina Vafi (Charles Darwin University, Australia)	1711
Autonomous Adaptation Strategies for Multiuser Multimedia Transmissions in the LTE Uplink	
Jose Oscar Fajardo (University of the Basque Country, Spain), Fidel Liberal (University of the Basque Country, Spain), Is-Haka Mkwawa (University of Plymouth, United Kingdom), Lingfen Sun (University of Plymouth, United Kingdom)	1717
Context-Adaptive Cross-Layer TCP Optimization for Internet Video Streaming	
Zheng Lu (The University of Texas at Austin, USA), V S Somayazulu (Intel Labs, USA),	
Hassnaa Moustafa (Intel, USA)	. 1723
Software Defined Network-Enabled Multicast for Multi-Party Video Conferencing Systems	. 1723

Mobile/Web Services and Network Management

	Analysis of Vehicular Wireless Channel Communication via Queueing Theory Model	
	Scott Fowler (Linköping University, Sweden), Carl Häll (Linköping University, Sweden), Di Yuan (Linköping University, Sweden), George Baravdish (Linköping University, Sweden),	1726
	Abdelhamid Mellouk (UPEC, University Paris-Est Creteil Val de Marne, France)	1/36
	POMDP Game Framework for Service Providers Inciting Mobile Users Mohammed Raiss-el-fenni (LIA, University of Avignon, France), Mohammed El Kamili (LIM, Sidi Mohammed Ben Abdellah University, Fez, Morocco), Jalel Ben-Othman (University of Paris 13, France), Abdellatif Kobbane (ENSIAS, University Mohammed V-Souissi & ENSIAS, Morocco)	1742
	Numerical Analysis of an Industrial Power Saving Mechanism in LTE	
	Scott Fowler (Linköping University, Sweden), George Baravdish (Linköping University, Sweden), Di Yuan (Linköping University, Sweden)	1748
	Seamless Session Mobility Using Short Range Communication Technologies	
	Anjur S Krishnakumar (Avaya Labs, USA), Shalini Yajnik (Avaya Labs, USA)	1754
	Web Scaling Frameworks: A novel class of frameworks for scalable web services in cloud environments	
	Thomas Fankhauser (University of the West of Scotland, Germany), Qi Wang (University of the West of Scotland, United Kingdom), Ansgar Gerlicher (Media University Stuttgart, Germany), Christos Grecos (Independent Consultant, United Kingdom), Xinheng Wang (University of the West of Scotland, United Kingdom)	1760
Congestio	on Control and Optimized Routing Schemes	
	Evaluating the Impact of Next Node Selection Criteria on Quality of Service Dynamic Routing Petros Spachos (University of Toronto, Canada), Periklis Chatzimisios (Alexander TEI of Thessaloniki, Greece), Dimitrios Hatzinakos (University of Toronto, Canada) An Improved Congestion Control Algorithm based on Social Awareness in Delay Tolerant Networks	1767
	Kun Wang (Nanjing University of Posts and Telecommunications, P.R. China), Guo Huang (Nanjing University of Posts and Telecommunications, P.R. China), Lei Shu (Guangdong University of Petrochemical Technology, P.R. China), Bo Liu (Shanghai Jiao Tong University, P.R. China)	1773
	Responsive User Datagram Protocol-based System for Multimedia Transmission Mohammed M. Kadhum (Queen's University & Universiti Sains Malaysia, Canada), Hossam S. Hassanein (Queen's University, Canada)	1778
	`A 7997. `A i `h]!\cd`7YbhfU`]nYX`9bYf[m'9ZZ]V]Ybh'7`i ghYf]b[`Fci h]b[`DfchcWt``Zcf`K GBg `B"`>Uj U]Xž`A"`5g`Ua ž`5"`5\a UX`ff7CA G5HGž`DU_]ghUb\ž`N"`5"`?\Ubž`fBU`\ci g]Y`I b]j Yfg]lmž`7UbUXU `H"5"`5`[\Ua X]ž`fI a a '5`Ei fU`I b]j Yfg]lmž`GUi X]`5fUV]U\SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	比 ·‰+, (
	Joint Optimization of Cache Server Deployment and Request Routing With Cooperative Content Replication	
	Kyongchun Lim (KAIST, Korea), Yonghwan Bang (KAIST, Korea), Jihoon Sung (KAIST, Korea), June-Koo Kevin Rhee (KAIST, Korea)	1790
Service Se	ecurity, Privacy and Authentication	
	Policy and Network-based Intrusion Detection System for IPv6-enabled Wireless Sensor Networks	
	João Amaral (Instituto de Telecomunicações, University of Beira Interior, Portugal), Luís Oliveira (IT, UBI and Polytechnic Institute of Tomar & Instituto de Telecomunicações, Portugal), Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal), Guangjie Han (Hohai University, P.R. China), Lei Shu (Guangdong University of Petrochemical Technology, P.R. China)	1796
	Empirical Analysis of Android Logs Using Self-Organizing Maps	
	Eric Finickel (LORIA, France), Abdelkader Lahmadi (LORIA, France), Frederic Beck (Inria,	
	France), Olivier Festor (INRIA Nancy - Grand Est, France)	1802

Performance Evaluation of Security Mechanisms in RAOLSR protocol for Wireless Mesh Networks	
Jalel Ben-Othman (University of Paris 13, France), Yesica Imelda Saavedra Benitez (Technological Institute of Toluca, Mexico), Jean Pierre Claude (University of Versailles St Quentin en Yvelines, France)	1808
Characterizing the Impact of Dynamic Resource Management on Message Authentication in Mobiles	
Abdulmonem Mohammad Rashwan (Queen's University, Canada), Abd-Elhamid M. Taha (Alfaisal University, Saudi Arabia), Hossam S. Hassanein (Queen's University, Canada)	1813
Connections Ioannis Koniaris (Aristotle University of Thessaloniki, Greece), Georgios Papadimitriou (Aristotle University, Greece), Petros Nicopolitidis (Aristotle University, Greece), Mohammad S. Obaidat (Monmouth University, USA)	1819
Communication Services and Video Applications	
On Distribution of User Movie Watching Time in a Large-scale Video Streaming System Yishuai Chen (Beijing Jiaotong University, P.R. China), Baoxian Zhang (University of the Chinese Academy of Sciences, P.R. China), Yong Liu (Polytechnic Institute of NYU, USA), Wei Zhu (PPLive Inc. China, P.R. China)	1825
Evolutionary Multi-Objective Based Approach for Wireless Sensor Network Deployment	1025
Abdusy Syarif (University of Haute Alsace & IUT - Colmar, France), Imene Benyahia (University of Haute Alsace, France), Abdelhafid Abouaissa (University of Haute Alsace, France), Lhassane Idoumghar (University of Haute Alsace, France), Riri Fitri Sari (University of Indonesia, Indonesia), Pascal Lorenz (University of Haute Alsace, France)	1831
Tags and Titles of Videos You Watched Tell Your Gender	
Tingting Feng (Beijing Jiaotong University, P.R. China), Yuchun Guo (Beijing Jiaotong University, P.R. China), Yishuai Chen (Beijing Jiaotong University, P.R. China), Xiaoying Tan (School of Electonics and Information Engineering, Beijing Jiaotong University, Beijing, P.R. China), Ting Xu (PPLive R&D, Shanghai Synacast Media Tech, Shanghai, P.R. China), Baijun Shen (PPLive R&D, Shanghai Synacast Media Tech, Shanghai, P.R. China), Zhu Wei (PPLive R&D, Shanghai Synacast Media Tech, Shanghai, P.R. China)	1837
Performance analysis of optimized Trust AODV using ant Algorithm	
Harris Simaremare (Universitas Islam Negri SUSKA Riau & Universitas Islam Negri SUSKA Riau, Indonesia), Abdelhafid Abouaissa (University of Haute Alsace, France), Riri Fitri Sari (University of Indonesia, Indonesia), Pascal Lorenz (University of Haute Alsace, France)	1843
A Model-Matching Algorithm based on Improved BP over Out-of-order Streams	
Kun Wang (Nanjing University of Posts and Telecommunications, P.R. China), Linchao Zhuo (Nanjing University of Posts and Telecommunications, P.R. China), Lei Shu (Guangdong University of Petrochemical Technology, P.R. China), Yanfei Sun (Nanjing University of Posts and Telecommunications, P.R. China)	1849
An Efficient Animal Detection System for Smart Cars using Cascaded Classifiers	
Abdelhamid Mammeri (University of Ottawa, Canada), Depu Zhou (University of Ottawa, Canada), Azzedine Boukerche (University of Ottawa, Canada), Mohammed Almulla (Kuwait University, Kuwait)	1854

ICC'14 CT: IEEE ICC 2014 - Communications Theory

Network Information Theory, Network Coding I

Achievable Degrees of Freedom Region of MIMO Relay Networks using Detour Schemes	
Ahmed A Zewail (Nile University, USA), Mohammed Nafie (Cairo University & Nile University,	
Egypt), Yahya Mohasseb (Nile University, Egypt), Hesham El Gamal (Ohio State University,	
USA)	1860
Optimal Coding Functions for Pairwise Message Sharing on Finite-Field Multi-Way Relay Channels	
Lawrence Ong (The University of Newcastle, Australia), Sarah J Johnson (University of Newcastle, Australia), Christopher Kellett (University of Newcastle, Australia)	1866
How Much Coordination is Needed for Robust Broadcasting over Arbitrarily Varying Bidirectional Broadcast Channels	
Rafael F. Schaefer (Princeton University, USA), Holger Boche (Technical University Munich, Germany)	1872
Online Coded Caching	
Ramtin Pedarsani (UC Berkeley, USA), Mohammad Ali Maddah-Ali (Bell Labs, Alcatel Lucent, USA), Urs Niesen (Bell Labs, Alcatel-Lucent, USA)	1878
Upper Bounds and Duality Relations of the Linear Deterministic Sum Capacity for Cellular Systems	
Rick Fritschek (Berlin Institute of Technology, Germany), Gerhard Wunder (Heinrich-Hertz- Institut, Germany)	1884
Radio Resource Management	
Outage-Optimal Power Adaptation and Allocation for Truncated HARQ	
Mohammed Jabi (INRS-EMT, Canada), Leszek Szczecinski (INRS-EMT, Canada), Mustapha	
Benjillali (INPT, Morocco), Fabrice Labeau (McGill University, Canada)	1890
Learning-Based Optimization of Cache Content in a Small Cell Base Station	
Pol Blasco (Imperial College London, United Kingdom), Deniz Gündüz (Imperial College London, United Kingdom)	1897
Transmission Rank Selection for Opportunistic Beamforming with Quality of Service Constraints	
Meng Wang (University of Melbourne, Australia), Tharaka Samarasinghe (Monash University, Australia), Jamie Evans (Monash University, Australia)	1904
Cost Minimization for Fading Channels with Energy Harvesting and Conventional Energy	
Xin Kang (Institute for Infocomm Research, Singapore), Yeow Khiang Chia (Researcher,	
Singapore), Chin Keong Ho (Institute for Infocomm Research, A*STAR, Singapore), Sumei Sun (Institute for Infocomm Research, Singapore)	1910
Exploiting Cell dormancy and Load Balancing in LTE HetNets: Optimizing the proportional fairness utility	
Narayan Prasad (NEC Labs America, Princeton, USA), Mustafa Y. Arslan (NEC Laboratories America, Inc., USA), Sampath Rangarajan (NEC Labs America, USA)	1916
Network Information Theory, Network Coding II	
Compound Multiple Access Channel with Confidential Messages	
Hassan Zivari (K. N. Toosi University of Technology, Iran), Bahareh Akhbari (K. N. Toosi	
University of Technology, Iran), Mahmoud Ahmadian (K N Toosi University of Technology, Iran), Mohammad Reza Aref (Sharif University of Tech., Iran)	1922
Traity, Promaininau Neza Arei (Sharii Oniversity on Techt., Itali)	. エフとと

	ush (University of Porto & Instituto de Telecommunicacoes, Portugal), Peymar
Martin Hundebo	oorg University, Denmark), Daniel E. Lucani (Aalborg University, Denmark), øll (Aalborg University, Denmark), Frank H.P. Fitzek (Aalborg University,
	Arbitrarily Varying Multiple Access Channels with Conferencing Encoders
	Technical University Munich, Germany), Rafael F. Schaefer (Princeton
`@]Ub[`7\YbSS\$	7cX]b['Zcf'K]fY`Ygg'Fci h]b[SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS
	<i>el with Transmitter Noncausal Interference and Receiver Side Information</i> he Chinese University of Hong Kong, Hong Kong), Xiaojun Yuan (ShanghaiTeo
University, P.R.	. China), Soung Chang Liew (The Chinese University of Hong Kong, Hong
formation Theo	ry, Network Coding III
Optimum Transm	nission Strategies for the Gaussian Many-to-One Interference Network
Ranga Prasad (Indian Institute of Science, India), Srikrishna Bhashyam (Indian Institute of dras, India), A. Chockalingam (Indian Institute of Science, India)
	MO Rayleigh Block Fading Wiretap Channels with No CSI Anywhere
Maryland, USA) Taiwan Univers	ational Tsing Hua University, Taiwan), Pritam Mukherjee (University of), Sennur Ulukus (University of Maryland, USA), Shih-Chun Lin (National sity of Science and Technology, Taiwan), Yao-Win Peter Hong (National Tsing
•	, Taiwan)of full-duplex causal cognitive interference channels to within a constant gap
Martina Cardon Raymond Knop	ne (Eurecom, France), Daniela Tuninetti (University of Illinois at Chicago, USA p (Institut Eurecom, France), Umer Salim (Intel Mobile Communications,
	of Freedom of Asymmetric MIMO Interference Broadcast Channels
	eihang University, P.R. China), Chenyang Yang (Beihang University, P.R.
•	of Effective Capacity over Generalized Fading Channels
Youzheng Wang	ia University, P.R. China), Chao Dong (Tsinghua University, P.R. China), g (Tsinghua University, P.R. China), Jianhua Lu (Tsinghua University, P.R.
China)	Ad-Hoc and Sensor Networks
Peak Power Limit	red Channels: Analysis of Capacity Achieving Probability Measures
Peak Power Limit Vincenzo Zamb Italy), Davide [oianchi (University of Bologna, Italy), Enrico Paolini (University of Bologna, Dardari (University of Bologna, Italy)
Peak Power Limit Vincenzo Zamb Italy), Davide [Quick, Decentrali	pianchi (University of Bologna, Italy), Enrico Paolini (University of Bologna, Dardari (University of Bologna, Italy) Ezed, One-Shot Max Function Computation Using Timer-Based Selection
Peak Power Limit Vincenzo Zamb Italy), Davide [Quick, Decentrali Arjun Anand (II Science, India)	pianchi (University of Bologna, Italy), Enrico Paolini (University of Bologna, Dardari (University of Bologna, Italy) Ezed, One-Shot Max Function Computation Using Timer-Based Selection Indian Institute of Science, India), Neelesh B. Mehta (Indian Institute of
Peak Power Limit Vincenzo Zamb Italy), Davide [Quick, Decentrali Arjun Anand (In Science, India) Stochastic Analys	Dardari (University of Bologna, Italy), Enrico Paolini (University of Bologna, Dardari (University of Bologna, Italy) Jized, One-Shot Max Function Computation Using Timer-Based Selection Indian Institute of Science, India), Neelesh B. Mehta (Indian Institute of Science) Jises of the Mean Interference for the RTS/CTS Mechanism
Peak Power Limit Vincenzo Zamb Italy), Davide [Quick, Decentrali Arjun Anand (II Science, India) Stochastic Analys Yi Zhong (Unive	Dianchi (University of Bologna, Italy), Enrico Paolini (University of Bologna, Dardari (University of Bologna, Italy) Jized, One-Shot Max Function Computation Using Timer-Based Selection Indian Institute of Science, India), Neelesh B. Mehta (Indian Institute of Sis of the Mean Interference for the RTS/CTS Mechanism Jiserity of Science and Technology of China, P.R. China), Wenyi Zhang Jiserity of Science and Technology of China, P.R. China), Martin Haenggi (University of Science and Technology of China, P.R. China), Martin Haenggi (University of Science and Technology of China, P.R. China), Martin Haenggi (University of Science and Technology of China, P.R. China)
Peak Power Limit Vincenzo Zamb Italy), Davide [Quick, Decentrali Arjun Anand (In Science, India) Stochastic Analys Yi Zhong (University of S Notre Dame, Use	Dardari (University of Bologna, Italy), Enrico Paolini (University of Bologna, Dardari (University of Bologna, Italy) Jized, One-Shot Max Function Computation Using Timer-Based Selection Indian Institute of Science, India), Neelesh B. Mehta (Indian Institute of Sis of the Mean Interference for the RTS/CTS Mechanism Jise of Science and Technology of China, P.R. China), Wenyi Zhang

An Analysis into the Loopy Belief Propagation Algorithm over Short cycles Nithin Raveendran (Indian Institute of Science, India), Shayan Garani Srinivasa (Indian Institute of Science, India)	2009
Iterative Techniques, Detection and Decoding I	
Algebraic and linear programming decoding of the (73, 37, 13) Quadratic Residue Code Yong Li (Chongqing University of Posts and Telecommunications, P.R. China), Liu Hongqing (Chongqing University of Posts and Telecommunications, P.R. China), Qianbin Chen (Chongqing University of Posts and Telecommunications, P.R. China), Trieu-Kien Truong (I-Shou University, Taiwan)	2015
Iterative Multistage Decoding of Polar Code Based Multilevel Codes Liang Zhang (Zhejiang University, P.R. China), Zhaoyang Zhang (Zhejiang University, P.R. China), Xianbin Wang (Zhejiang University, P.R. China)	2021
Spatially-Coupled Nearly-Regular LDPC Code Ensembles for Rate-flexible Code Design Walter Nitzold (Technische Universität Dresden, Germany), Michael Lentmaier (Lund	
University, Sweden), Gerhard Fettweis (Technische Universität Dresden, Germany)	
Sydney, Australia), Branka Vucetic (The University of Sydney, Australia)	2033
Qiaoyang Ye (The University of Texas at Austin, USA), Mazin Al-Shalash (Huawei, USA), Constantine Caramanis (The University of Texas at Austin, USA), Jeffrey Andrews (The University of Texas at Austin, USA)	2039
Communication Theory Interactive Presentations	
Delayed Channel State Information: Incremental Redundancy with Backtrack Retransmission Petar Popovski (Aalborg University, Denmark)	2045
On the Secrecy Outage Capacity of Physical Layer Security in Large-Scale MIMO Relaying Systems with Imperfect CSI Xiaoming Chen (Nanjing University of Aeronautics and Astronautics, P.R. China), Lei Lei (Nanjing University of Aeronautics and Astronautics, P.R. China), Huazi Zhang (Zhejiang	
University, P.R. China), Chau Yuen (Singapore University of Technology and Design, Singapore)	2052
K-User Nonbinary Parallel Concatenated Code for Gaussian Multiple-Access Channel Haifeng Han (Doshisha University, Japan), Guanghui Song (Doshisha University, Japan), Masakazu Yoshida (Doshisha University, Japan), Jun Cheng (Doshisha University, Japan)	2058
Optimized Bit Mappings for Spatially Coupled LDPC Codes over Parallel Binary Erasure Channels Christian Häger (Chalmers University of Technology, Sweden), Alexandre Graell i Amat (Chalmers University of Technology, Sweden), Alex Alvarado (University of Cambridge, United Kingdom), Fredrik Brännström (Chalmers University of Technology, Sweden), Erik Agrell (Chalmers University of Technology, Sweden)	2064
Optimization of Limited Feedback in Two-way Communication Tian Li (Purdue University Calumet, USA), Besma Smida (Purdue University Calumet, USA)	
Efficiency of Energy Detectors under Multiple Access Coexistence Schemes Abubakar Umar Makarfi (Nigerian Navy, Nigeria), Khairi A. Hamdi (University of Manchester, United Kingdom)	2075
Communication Strategies for Two Models of Discrete Energy Harvesting Kasper F Trillingsgaard (Aalborg University, Denmark), Petar Popovski (Aalborg University,	
Denmark)	2081

	Secrecy Outage of TAS/GSC in Nakagami-m Fading Channels	
	Lifeng Wang (Queen Mary, University of London, United Kingdom), Maged Elkashlan (Queen Mary, University of London, United Kingdom), Jing Huang (Qualcomm Inc., USA), Robert Schober (University of British Columbia, Canada), Ranjan K. Mallik (Indian Institute of	
	Technology - Delhi, India)	2087
	Asymptotic Deployment Gain: A New Approach to Characterize Coverage Probability	
	Anjin Guo (University of Notre Dame, USA), Martin Haenggi (University of Notre Dame, USA)	2093
	Rate optimization for repeat-accumulate interleave-division system by fixed-point analysis	
	Meilin He (Doshisha University, Japan), Guanghui Song (Doshisha University, Japan), Jun Cheng (Doshisha University, Japan)	2099
	Precoding Optimization for the Sparse MC-CDMA Downlink Communication	
	Min Li (Macquarie University, Australia), Stephen Hanly (Macquarie University, Australia)	2106
terativ	ve Techniques, Detection and Decoding II	
	Rate-adaptive Constellation Shaping for Near-capacity Achieving Turbo Coded BICM	
	Metodi Yankov (Technical University of Denmark, Denmark), Lars P. B. Christensen (Fingerprint Cards, Denmark), Knud Larsen (Technical University of Denmark, Denmark, Denmark), Soren Forchhammer (Technical University of Denmark, Denmark)	2112
	A Robust Pulse Position Coded Modulation Scheme for the Poisson Channel	2112
	Balazs Matuz (German Aerospace Center (DLR), Germany), Giuseppe Toscano (University of	
	Bologna, Italy), Gianluigi Liva (DLR - German Aerospace Center, Germany), Enrico Paolini (University of Bologna, Italy), Marco Chiani (University of Bologna, Italy)	2118
	Space-time Slicer Architectures for Analog-to-Information Conversion in Channel Equalizers	
	Aseem Wadhwa (UC Santa Barbara, USA), Upamanyu Madhow (University of California, Santa Barbara, USA), Naresh Shanbhag (UIUC, USA)	2124
	Low-Rate Turbo-Hadamard Coding Approach for Narrow-Band Interference Suppression	
	Xiaofu Wu (Nanjing University of Posts and Telecommunications, P.R. China), Zhen Yang (Nanjing University of Posts and Telecommunications, P.R. China), Jun Yan (Nanjing University of Posts and Telecommunications, P.R. China), JingWu Cui (Nanjing University of Posts And Telecomm, P.R. China)	2120
	Achievable Rates and Forward-Backward Decoding Algorithms for the Gaussian Relay Channels under the One-Code Constraint	2130
	Xiujie Huang (Jinan University, P.R. China), Haiqiang Chen (Guangxi University, P.R. China), Xiao Ma (Sun Yat-sen University, P.R. China)	2135
Multipl	le-Input Multiple-Output (MIMO) Communications	
	Closed-form Capacity Formula for Multi-antenna Cognitive Radio Networks with Asymmetric Fading	
	Efthymios Stathakis (Royal Institute of Technology, Sweden), Lars K. Rasmussen (KTH Royal Institute of Technology, Sweden), Mikael Skoglund (KTH Royal Institute of Technology, Sweden)	2141
	A New Model for Physical Layer Security in Cellular Networks	- · -
	Giovanni Geraci (Singapore University of Technology and Design, Singapore), Harpreet S Dhillon (University of Southern California, USA), Jeffrey Andrews (The University of Texas at Australia), Jinhong Yuan (University of New South Wales, Australia), Iain B. Collings	
	(CSIRO, Australia)	2147
	On the Capacity of the AWGN MIMO Channel Under Per-Antenna Power Constraints	2152
	Daniela Tuninetti (University of Illinois at Chicago, USA) Uplink Performance of Large Optimum-Combining Antenna Arrays in Poisson-Cell Networks	2153
	Siddhartan Govindasamy (F. W. Olin College of Engineering, USA)	2150
	Siddhartan Govindasaniy (1. vv. Olin College of Engineering, USA)	ZIJO

	Coordinated Beamforming with Dynamic Clustering: A Stochastic Geometry Approach	
	Namyoon Lee (The University of Texas at Austin, USA), Robert Heath (The University of Texas at Austin, USA), David Morales (Hong Kong University of Science and Technology, Hong Kong), Angel Lozano (Universitat Pompeu Fabra (UPF), Spain)	2165
Physical-I	Layer Security	
	Secret Key Generation in Correlated Multi-Dimensional Gaussian Channels	
	Gianni Pasolini (University of Bologna, Italy), Davide Dardari (University of Bologna, Italy) Parallel Distributed Bayesian Detection with Privacy Constraints	2171
	Zuxing Li (KTH Royal Institute of Technology & Communication Theory Lab., Sweden), Tobias J. Oechtering (KTH Royal Institute of Technology & School of Electrical Engineering, EE, Sweden), Kittipong Kittichokechai (KTH Royal Institute of Technology, Sweden)	2178
	Artificial Noise with Optimal Power Allocation in Multi-Input Single-Output Wiretap Channels	2170
	Nan Yang (Australian National University, Australia), Jinhong Yuan (University of New South Wales, Australia), Robert Malaney (University of New South Wales, Australia), Ramanan Subramanian (University of South Australia & Institute of Telecommunications Research,	
	Australia), Ingmar Land (University of South Australia, Australia)	2184
	Secret Message Transmission by HARQ with Multiple Encoding	
	Stefano Tomasin (University of Padova, Italy), Nicola Laurenti (University of Padova & CNIT, Italy)	2191
	Secure Transmission for Relay-Eavesdropper Channels Using Polar Coding	
	Bin Duo (University of Sydney, P.R. China), Peng Wang (The University of Sydney, Australia), Yonghui Li (University of Sydney, Australia), Branka Vucetic (The University of Sydney,	2107
	Australia)	2197
OFDM		
	On the Impact of Unsynchronized Interferers on Multi-antenna OFDM Systems	
	Junjie Zhu (F. W. Olin College of Engineering, USA), Raymond Hall Yip Louie (Hong Kong University of Science and Technology, Hong Kong), Matthew R McKay (Hong Kong University of Science and Technology, Hong Kong), Siddhartan Govindasamy (F. W. Olin College of Engineering, USA)	2203
	Resource Allocation for Secret Transmissions on Parallel Rayleigh Channels	
	Nicola Laurenti (University of Padova & CNIT, Italy), Stefano Tomasin (University of Padova, Italy), Francesco Renna (Universidade do Porto, Portugal)	2209
	The Impact of Frequency-Selective Matching on the Capacity of Compact MIMO Systems	
	Lopamudra Kundu (North Carolina State University, USA), Brian L Hughes (North Carolina State University, USA)	2215
	The Closed-form BER Expressions of PSK Modulation for OFDM and SC-FDMA under Jamming and Imperfect Channel Estimation	
	Jasmin A Mahal (Virginia Tech, USA), T. Charles Clancy (Virginia Tech, USA)	2221
	Sharpening Timing-Metrics for Auto-Correlation Based Coarse Symbol Synchronization in OFDM Systems	
	Fan Yang (University of Electronic Science and Technology of China, P.R. China), Xi Zhang (Texas A&M University, ECE Department, USA)	2227

ICC'14 MWN: IEEE ICC 2014 - Mobile and Wireless Networking Symposium

Device-to-Device Communications

Capacity Oriented Cellular Networks	Resource Allocation Algorithm for Device-to-Device Communication in Mobile	
Xuejia Cai (South Yuan Zhang (Sou	heast University, P.R. China), Jun Zheng (Southeast University, P.R. China), utheast University, P.R. China), Hidekazu Murata (Kyoto University, Japan)	2233
Yujin Li (North C	o-Device Communication for Mobile Cloud Computing arolina State University, USA), Lei Sun (NC State University, USA), Wenye University, USA)	2239
Joint Optimization	for Resource Allocation and Mode Selection in Device-to-Device aderlaying Cellular Networks	
Gao (Tsinghua U Stochastic Geomet	a University, P.R. China), Depeng Jin (Tsinghua University, P.R. China), Feifei niversity, P.R. China), Lieguang Zeng (Tsinghua University, P.R. China) ry Analysis of Achievable Transmission Capacity for Relay-assisted Device-to-	2245
(Beijing Üniversit of Posts and Tele Telecommunicati Telecommunicati	eijing University of Posts and Telecommunications, P.R. China), Yuancao Li ty of Posts and Telecommunications, P.R. China), Si Wen (Beijing University ecommunication, P.R. China), Yuehong Gao (Beijing University of Posts and ions, P.R. China), Xin Zhang (Beijing University of Posts and ions, P.R. China), Dacheng Yang (Beijing University of Posts and ions, P.R. China)	2251
	Selection for Cooperative Networking: An Optimal Stopping Approach	2231
Mengyuan Zhang	g (Arizona State University, USA), Xu Chen (University of Goettingen, nan Zhang (Arizona State University, USA)	2257
	Wireless Streaming with HOL Packet Deadlines Inford University, USA), Nicholas Bambos (Stanford University, USA)	2263
Neal Master (Sta	nford University, USA), Nicholas Bambos (Stanford University, USA)	2263
Computing Networ		
	ng University of Technology, P.R. China), F. Richard Yu (Carleton University, a Zhang (Beijing University of Technology, P.R. China)	2270
	ole Streaming Performance in Mobile Video Streaming	
	nese University of Hong Kong, Hong Kong), Jack Y. B. Lee (The Chinese ng Kong, Hong Kong)	2276
•	n for Wireless Media Streaming with Handoff and Rebuffering Control	
	(Stanford University, USA), Nicholas Bambos (Stanford University, USA), h (Stanford University, USA)	2282
QoE: User Profile A	Analysis for Multimedia Services	
Intelligent Syster	d Mushtaq (University of Paris-Est Creteil (UPEC) & Image, Signal and ms Laboratory-LISSI, France), Brice Augustin (UPEC, University Paris-Est, amid Mellouk (UPEC, University Paris-Est Creteil Val de Marne, France)	2289
	mila Picilouk (of Ec, offiversity Fairs Est cretch variate Plattic, France)	. 2203
Security, Privacy and Trust		
Dejun Yang (Colo	ving-based Spectrum Auction Design for Cognitive Radio Networks orado School of Mines, USA), Guoliang Xue (Arizona State University, USA), izona State University, USA)	2295
Permission-Combin	nation-based Scheme for Android Mobile Malware Detection	
Shuang Liang (Te	emple University, USA), Xiaojiang Du (Temple University, USA)	2301

Using Dynamic Pseu	Ido-IDs to Protect Privacy in Location-Based Services	
Shunrong Jiang (>	an University, P.R. China), Haotian Chi (Xidian University, P.R. China), Kidian University, P.R. China), Xiaosan Lei (Xidian University, P.R. China), versity, P.R. China)	2307
	nimum Energy Routing in Wireless Networks	2007
Azadeh Sheikhole (University of Cal	slami (University of Massachusetts at Amherst, USA), Majid Ghaderi gary, Canada), Hossein Pishro-Nik (University of Massachusetts, Amherst, eckel (University of Massachusetts, USA)	2313
	cation for Physical-Layer Security in D2D Underlay Communications	
Hang Zhang (Peki	ing University, P.R. China), Tianyu Wang (Peking University, P.R. China), eking University, P.R. China), Zhu Han (University of Houston, USA)	2319
LTE Networks I		
	g Area List-Based Location Update Scheme in Long Term Evolution	
Technology, P.R. (nwest Jiaotong University & National Taiwan University of Science and China), Xianfu Lei (Utah State University, USA), Rose Qingyang Hu (Utah USA), Yi Qian (University of Nebraska-Lincoln, USA)	2325
	ource Allocation with Carrier Aggregation in MIMO LTE-Advanced Systems	
	ional Tsing Hua University, Taiwan), Kate Ching-Ju Lin (Academia Sinica, ıen Chen (Academia Sinica, Taiwan)	2332
•	y Reuse through Sector Offset Configuration in LTE Heterogeneous Networks	
Lucent, Ireland)	z (Bell Labs Alcatel-Lucent, Ireland), Holger Claussen (Bell Labs, Alcatel-	2338
	rty Relaying for LTE-A: A Realistic Simulation Approach	
de Vigo, Spain)	oa (University of Vigo, Spain), Francisco J. González-Castaño (Universidad	2344
Networks	evel Scheduler to Increase Multimedia Services Performance in LTE	
Abdennebi (L2TI L	hen Avocanh (L2TI Laboratory, University of Paris 13 Nord, France), Marwen Laboratory, University of Paris Nord, France), Jalel Ben-Othman (University e)	2351
Access Control		
Joint Access Class B	Barring and Timing Advance Model for Machine-Type Communications	
British Columbia,	versity of British Columbia, Canada), Vincent W.S. Wong (University of Canada)	2357
Quality of Experience		
Joel J. P. C. Rodri	ersity of Guelph, Canada), Stefan Kremer (University of Guelph, Canada), gues (Instituto de Telecomunicações, University of Beira Interior, Portugal)	2363
	tocol for Collision Avoidance in Cellular Device-to-Device Communication	
(Seoul National U	oul National University of Science and Technology, Korea), Kae Won Choi niversity of Science and Technology, Korea)	2369
Optimization Tool Se		
Universität Dresde	echnische Universität Dresden, Germany), Gerhard Fettweis (Technische en, Germany)	2375
	ission Policy for Time Varying Channels with Delay Constraint	
(China Academy o Group, P.R. China	University of Posts and Telecommunications, P.R. China), Shanzhi Chen of Telecommunication Technology & Datang Telecom Technology & Industry), Xi Li (Beijing University of Posts and Telecommunications, P.R. China), priversity of Posts and Telecommunications, P.R. China)	2381

Energy Efficiency

TEEE 802.11an: Energy Efficient MAC Protocols for Long Range Wireless LAN	
Minyoung Park (Intel Corporation, USA)	2388
Towards Energy Efficient Smart Phone Applications: Energy Models for Offloading Tasks into the Cloud	
Michele Segata (University of Innsbruck, Italy), Bastian Bloessl (University of Paderborn, Germany), Christoph Sommer (University of Paderborn, Germany), Falko Dressler (University of Paderborn, Germany)	2394
Energy-Efficient Resource Allocation in Full-Duplex Relaying Networks	
Gang Liu (Beijing University of Posts and Telecommunications, P.R. China), Hong Ji (Beijing University of Posts and Telecommunications, P.R. China), F. Richard Yu (Carleton University, Canada), Yi Li (Beijing University of Posts and Telecommunications, P.R. China), Renchao Xie (China Unicom, P.R. China)	2400
Coordinated Caching Model for Minimizing Energy Consumption in Radio Access Network	
Yuemei Xu (Institute of Acoustics, Chinese Academy of Sciences, High Performance Network Laboratory, P.R. China), Yang Li (Institute of Acoustics, Chinese Academy of Sciences, P.R. China), Zihou Wang (National Computer Network Emergency Response Technical Team/ Coordination Center of China, P.R. China), Tao Lin (Institute of Acoustics, Chinese Academy of Sciences, P.R. China), Guoqiang Zhang (Institute of Computing Technonlogy, Chinese	
Academy of Sciences, P.R. China), Song Ci (University of Nebraska-Lincoln, USA)	2406
Optimal Energy Minimization in Load-Coupled Wireless Networks: Computation and Properties	
Chin Keong Ho (Institute for Infocomm Research, A*STAR, Singapore), Di Yuan (Linköping University, Sweden), Lei Lei (Linköping University, Sweden), Sumei Sun (Institute for	2412
Infocomm Research, Singapore)	2412
Measurement of Long-distance Wi-Fi Connections: An Empirical Study	
Ching-Hsiang Chu (Academia Sinica, Taiwan), You-Ming Chen (National Taiwan University of Science and Technology, Taiwan), Yu-Te Huang (Academia Sinica, Taiwan), Roberto Carvalho (Academia Sinica, Taiwan), Chiun-Chieh Hsu (National Taiwan University of Science and Tachnology, Taiwan), Ling Jub Chen (Academia Sinica, Taiwan)	2410
Technology, Taiwan), Ling-Jyh Chen (Academia Sinica, Taiwan) Optimal MIMO Broadcasting for Energy Harvesting Transmitter with Non-Ideal Circuit Power	2418
Xin Wang (Fudan University, P.R. China), Zheng Nan (Fudan University, P.R. China)	2424
Throughput Maximization with Channel Acquisition in Energy Harvesting Systems	2727
Subhash Lakshminarayana (Singapore University of Technology and Design (SUTD), Singapore), Tony Q. S. Quek (Singapore University of Technology and Design (SUTD) &	
Institute for Infocomm Research, Singapore)	2430
Achieving energy-efficient distributed consensus in wireless Scale Free Networks	
César Asensio-Marco (Universidad de Valencia, Spain), Daniel Alonso-Román (Universidad de Valencia, Spain), Baltasar Beferull-Lozano (Universidad de Valencia, Spain)	2436
Error Probability Analysis of Joint Signal Detection with Base Station Sleeping and Cooperation	
, , ,	
Zhenyu Zhou (North China Electric Power University & Waseda University, P.R. China), Mianxiong Dong (National Institute of Information and Communications Technology, Japan), Kaoru Ota (Muroran Institute of Technology, Japan), Zhiheng Liu (China Mobile Research Institute & China Mobile Communication Corporation, P.R. China), Jun Wu (Shanghai Jiao Tong University, P.R. China), Takuro Sato (Waseda University, Japan)	2443
Zhenyu Zhou (North China Electric Power University & Waseda University, P.R. China), Mianxiong Dong (National Institute of Information and Communications Technology, Japan), Kaoru Ota (Muroran Institute of Technology, Japan), Zhiheng Liu (China Mobile Research Institute & China Mobile Communication Corporation, P.R. China), Jun Wu (Shanghai Jiao	2443

Creating Personal Bandwidth Maps using Opportunistic Inrougnput Measurements	
Ghulam Murtaza (University of New South Wales & Network Research Lab, Australia), Andreas Reinhardt (The University of New South Wales, Australia), Mahbub Hassan (University of New South Wales, Australia), Salil S Kanhere (The University of New South	
Wales, Australia)	2454
A Method of Efficient Data Transmission over Evolved Packet System	
Rajavelsamy R (Samsung R&D Institute India – Bangalore (SRI-B) Private Limited, India), Mangesh Ingale (Samsung India Software Operation, India), Venkateswara Manepalli (Ex- Employee Samsung India Software Operation, India), Sudhir Baghel (Ex-SISO, India)	2460
Efficient Resource Allocation for Mobile Social Networks in D2D Communication Underlaying Cellular Networks	
Yue Sun (Peking University, P.R. China), Tianyu Wang (Peking University, P.R. China), Lingyang Song (Peking University, P.R. China), Zhu Han (University of Houston, USA)	2466
Mobile Social Networks	
Social Based Throwbox Placement in Large-Scale Throwbox-Assisted Delay Tolerant Networks	
Ying Zhu (Samsung, USA), Chao Zhang (University of North Carolina at Charlotte, USA), Yu Wang (University of North Carolina at Charlotte, USA)	2472
Network Dynamics of Mobile Social Networks	
Guofeng Zhao (ChongQing University of Posts and Telecommunications & Network and Computation Research Center, P.R. China), Dan Li (Co-authors, P.R. China), Chuan Xu (Chongqing University of Posts and Telecommunications, P.R. China), Tang Hong (Chongqing University of Posts and Telecommunications, P.R. China), Shui Yu (Deakin University, Australia)	2478
Fairness-Aware Cooperative Caching Scheme for Mobile Social Networks	2470
Dongsheng Wei (Fudan University, P.R. China), Konglin Zhu (University of Goettingen, Germany), Xin Wang (Fudan University, P.R. China)	2484
Minimizing Content Download Time in Mobile Collaborative Community	
Insun Jang (Korea University, Korea), DongEun Suh (Korea University, Korea), Sangheon Pack (Korea University, Korea)	2490
IROL: A Humanoid Mobility Model for Mobile Ad Hoc Network	
Shyh-En Lin (National Taiwan University, Taiwan), Wan-Ping Tsai (National Cheng Kung University, Taiwan), Meng-Hsun Tsai (National Cheng Kung University, Taiwan), Ai-Chun Pang (National Taiwan University, Taiwan)	2496
LTE Networks II	
Optimized and Distributed Data Packet Forwarding in LTE/LTE-A Networks	
Haneul Ko (Korea University, Korea), Giwon Lee (Korea University, Korea), Sangheon Pack (Korea University, Korea)	2502
Field Trial Results for Vertical Sectorization in LTE Network using Active Antenna System	
Fengyi Yang (Technology Innovation Center, China Telecom Corp. Ltd, P.R. China), Jianmin Zhang (China Telecom Technology Innovation Center, P.R. China), Weiliang Xie (China Telecom Technology Innovation Center, P.R. China), Xuetian Zhu (China Telecommunication Beijing Research Institute, P.R. China)	2508
On the Interference As Noise Approximation in OFDMA/LTE Networks	2300
Donald Parruca (RWTH Aachen University, Germany), James Gross (Royal Institute of Technology (KTH), Sweden)	2513
Macro-Small Cell Grouping in Dual Connectivity LTE-B Networks with Non-ideal Backhaul	
Amitay Mukhariga (Hitachi America Ltd. USA)	2520

	Energy Efficient IP Reachability for Push Service in NATted LTE Systems	
	Kisuk Kweon (Samsung Electronics, Korea), Jungshin Park (Samsung Electronics, Korea), Jinsung Lee (Samsung Electronics, Korea), Sangkyu Baek (Samsung Electronics & DMC R&D	2526
	Center, Korea), Alper Yegin (Samsung Electronics, Korea)	2526
Game Th	neory	
	A Bayesian Game Model for Joint Pricing and Spectrum Allocation Strategy of Femtocell Service Providers	
	Yanjiao Chen (Hong Kong University of Science and Technology, Hong Kong), Jin Zhang (Hong Kong University of Science and Technology, P.R. China), Qian Zhang (Hong Kong University of Science and Technology, Hong Kong), Kaishun Wu (HKUST & Shenzhen University, Hong Kong)	2532
	Partner-Recruitment:Incentive Mechanism for Content Offloading	
	Xiao Chen (Institute of Computing Technology Chinese Academy of Sciences, P.R. China), Shengling Wang (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China), Min Liu (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China), Chao Huang (Chinese Academy of Sciences & Institute of Computing Technology, P.R. China), Yaqin Zhou (Institute of Computing Technology Chinese Academy of Sciences, P.R. China), Zhongcheng Li (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)	2538
	Crowdsensing Incentive Mechanisms for Mobile Systems with Finite Precisions	
	Shiyu Ji (Oklahoma State University, USA), Tingting Chen (Oklahoma State University, USA)	2544
	Competition vs. Cooperation: A Game-Theoretic Decision Analysis for MIMO HetNets	
	Mathew Pradeep Goonewardena (Université du Québec à Montréal, Canada), Xin Jin (Institut Mines-Telecom, Telecom SudParis, France), Wessam Ajib (Université du Québec à Montréal, Canada), Halima Elbiaze (University of Quebec at Montreal, Canada)	2550
	Auction-Based Bandwidth Allocation and Scheduling in Noncooperative Wireless Networks	
	Haojie Zhou (The University of Hong Kong, P.R. China), Ka-Cheong Leung (The University of Hong Kong, Hong Kong), Victor O. K. Li (University of Hong Kong, P.R. China)	2556
Vehicula	r Networks I	
	Cooperative Multi-agent Traffic Signal Control System Using Fast Gradient-descent Function Approximation For V2I Networks	
	Weirong Liu (Central South University, P.R. China), Jing Liu (Central South University, P.R. China), Jun Peng (School of Information Science & Engineering, Central South University, P.R. China), Zhengfa Zhu (Central South University, P.R. China)	2562
	Parameters that Affect Safety Message Delay in Sparse Infrastructure-less Vehicular Networks	
	Andre B. Reis (Carnegie Mellon University, USA), Susana Sargento (Instituto de Telecomunicações, Universidade de Aveiro, Portugal), Ozan Tonguz (Carnegie Mellon University, USA)	2568
	Performance Modeling of IEEE 802.11 DCF Based Fair Channel Access for Vehicular-to-Roadside Communication in a Non-Saturated State	
	Qiong Wu (Southeast University, P.R. China), Jun Zheng (Southeast University, P.R. China)	2575
	A New Analytical Model for Highway Inter-vehicle Communication Systems	
	Huixian Wang (Wuhan University of Technology, P.R. China), Ren Ping Liu (CSIRO, Australia), Wei Ni (CSIRO, Australia), Wei Chen (Wuhan University of Technology, P.R. China), Iain B. Collings (CSIRO, Australia)	2581
	ExTra: Expediting File Transfers through Optimized Inter-vehicle Communication	

Panayiotis Kolios (University of Cyprus, Cyprus), Christos Panayiotou (University of Cyprus,

Cyprus), Georgios Ellinas (University of Cyprus, Cyprus) ______ 2587

Localization

Prediction Based Energy Efficient Mobile Positioning	
Xuejun Cai (Ericsson, Sweden), Lars Westberg (Ericsson Research, Sweden), Attila Mihály (Ericsson Research, Hungary), Jan Christoffersson (Ericsson Research, Sweden)	2593
Smartphone Indoor Localization by Photo-taking of the Environment	
Ruipeng Gao (Peking University, P.R. China), Tao Wang (Peking University, P.R. China), Fan Ye (Peking University, P.R. China)	2599
Sectjunction: Wi-Fi Indoor Localization based on Junction of Signal Sectors	
Suining He (Hong Kong University of Science and Technology, P.R. China), Gary Chan (The Hong Kong University of Science and Technology, P.R. China)	2605
Joint Power and Bandwidth Allocation in Cooperative Wireless Localization Networks	
Tingting Zhang (Harbin Institute of Technology, Shenzhen Graduate School, P.R. China), Andreas Molisch (University of Southern California, USA), Yuan Shen (Massachusetts Institute of Technology, USA), Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, P.R. China), Moe Win (Massachusetts Institute of Technology, USA)	2611
Signal Strength Based Wireless Location Verification Under Spatially Correlated Shadowing	2011
Shihao Yan (The University of New South Wales, Australia), Robert Malaney (University of New South Wales, Australia), Ido Nevat (Institute for Infocomm Research, Singapore),	
Gareth Peters (Australia & University of NSW, Australia)	2617
Cellular Networks	
Smart Grid Enabled Mobile Networks: Jointly Optimizing BS Operation and Power Distribution Tao Han (New Jersey Institute of Tech, USA), Nirwan Ansari (NJIT, USA)	2624
	2024
Profit-Aware Base Station Operation for Green Cellular Networks	
Te-Chuan Chiu (National Taiwan University, Taiwan), Ya-Ju Yu (Institute for Information Industry, Taiwan), Ai-Chun Pang (National Taiwan University, Taiwan), Tei-Wei Kuo (National Taiwan University, Taiwan)	2630
Congestion Aware Dynamic User Association in Heterogeneous Cellular Network: A Stochastic Decision Approach	
Longwei Wang (Shanghai Jiao Tong University, P.R. China), Wen Chen (Shanghai Jiao Tong University, P.R. China), Jun Li (University of Sydney, Australia)	2636
A Novel Multiobjective Framework for Cell Switch-Off in Dense Cellular Networks	
David González G (Universitat Politecnica de Catalunya, Spain), Halim Yanikomeroglu (Carleton University, Canada), Mario Garcia-Lozano (Universitat Politècnica de Catalunya, Spain), Silvia Ruiz Boqué (UPC, Spain)	2641
Distributed Cache Replacement for Caching-Enable Base Stations in Cellular Networks	
Jingxiong Gu (Zhejiang University, P.R. China), Wei Wang (Zhejiang University, P.R. China), Aiping Huang (Zhejiang University, P.R. China), Hangguan Shan (Zhejiang University, P.R. China), Zhaoyang Zhang (Zhejiang University, P.R. China)	2648
Wireless Relay Networks	
Link Availability Prediction Enhanced IEEE 802.11-Based Cooperative MAC with Mobile Relays	
Peijian Ju (University of New Brunswick, Canada), Wei Song (University of New Brunswick, Canada), Dizhi Zhou (University of New Brunswick, Canada)	2654
On Optimal Relay Selection and Subcarrier Assignment in OFDMA Relay Networks with QoS Guarantees	
Xiao Zhang (Tsinghua University, P.R. China), Xiaoming Tao (Tsinghua University, P.R. China), China), Yang Li (Tsinghua University, P.R. China), Jianhua Lu (Tsinghua University, P.R. China)	2660

	Opportunistic Network Decoupling in Multi-Source Interfering Relay Networks	
	Won-Yong Shin (Dankook University, Korea), Hyun Jong Yang (UNIST, Korea), Bang Chul Jung (Gyeongsang National University, Korea)	2665
	Joint Coverage and Backhaul Self-Optimization in Emerging Relay Enhanced Heterogeneous Networks	
	Ali Imran (University of Oklahoma, USA), Lorenza Giupponi (Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Spain), Muhammad Ali Imran (University of Surrey, United Kingdom), Adnan Abu-Dayya (QMIC, Qatar)	2671
	Contract-Theoretic Modeling for Content Delivery in Relay-Based Publish-Subscribe Networks	
	Yifan Li (Nanyang Technological University, Singapore), Ping Wang (Nanyang Technological University, Singapore), Dusit Niyato (Nanyang Technological University, Singapore), Yang Zhang (Nanyang Technological University, Singapore)	2678
Small Cell	Networks	
	Load-Aware Dynamic Biasing Cell Association in Small Cell Networks	
	Yongbin Wang (Beijing University of Posts and Telecommunications, P.R. China), Shanzhi Chen (China Academy of Telecommunication Technology & Datang Telecom Technology & Industry Group, P.R. China), Hong Ji (Beijing University of Posts and Telecommunications, P.R. China), Heli Zhang (Beijing University of Posts and Telecommunications, P.R. China)	2684
	Capacity Maximization of Energy-Harvesting Small Cells with Dynamic Sleep Mode Operation in Heterogeneous Networks	
	Chen-Yi Chang (National Taiwan University, Taiwan), Kun-Lin Ho (National Taiwan University, Taiwan), Wanjiun Liao (National Taiwan University, Taiwan), Da-shan Shiu (National Taiwan University, Taiwan)	2690
	Coalition based Interference Mitigation in Femtocell Networks with Multi-Resource Allocation	
	Dong Yanjie (Xidian University, P.R. China), Min Sheng (Xidian University, P.R. China), Shun Zhang (Xidian University, P.R. China), Chungang Yang (Xidian University, P.R. China)	2695
	Dongmyoung Kim (Samsung Electronics, Korea), Seongwon Kim (Seoul National University, Korea), Hyoil Kim (Ulsan National Institute of Science and Technology (UNIST), Korea), Sunghyun Choi (Seoul National University, Korea)	2701
	Opportunistic Sleep Mode Strategies in Wireless Small Cell Networks	=: -
	Sumudu Samarakoon (Centre for Wireless Communications, University of Oulu, Finland), Mehdi Bennis (Centre of Wireless Communications, University of Oulu, Finland), Walid Saad (Virginia Tech, USA), Matti Latva-aho (UoOulu, Finland)	2707
Vehicular	Networks II	
	Advanced Real-Time Traffic Monitoring System based on V2X Communications	
	Raik Aissaoui (Qatar Mobility Innovations Center, Qatar), Hamid Menouar (Qatar Mobility Innovations Center, Qatar), Amine Dhraief (University of Manouba, Tunisia), Fethi Filali (QMIC, Qatar), Abdelfettah Belghith (University of Manouba & National School of Computer Sciences ENSI, Tunisia), Adnan Abu-Dayya (QMIC, Qatar)	2713
	A Hovering-based Warning Information Dissemination Approach in Highway Entrances	
	Yanbin Liu (Shanghai Jiao Tong University, P.R. China), Cailian Chen (Shanghai Jiao Tong University, P.R. China), Xinping Guan (Shanghai Jiao Tong University, P.R. China)	2719
	Probabilistic relay selection in timer-based dissemination protocols for VANETs	
	Pierpaolo Salvo (University of Rome Sapienza, Italy), Francesca Cuomo (University of Rome Sapienza, Italy), Andrea Baiocchi (University of Roma Sapienza, Italy), Izhak Rubin (University of California at Los Angeles, USA)	777 F
	iCARII: Intersection-based Connectivity Aware Routing in Vehicular Networks	2/23
	Nizar Alsharif (University of Waterloo, Canada), Sherman Shen (University of Waterloo, Canada)	7721
	Curiada j	∠/JI

Congestion Control in Vehicular Networks Using Network Coding Pratap Kumar Sahu (University of Montreal, Canada), Abdelhakim Hafid (University of Montreal, Canada), Soumaya Cherkaoui (Université de Sherbrooke, Canada)	2736
Modeling and Performance Analysis	
A Multi-Attribute Decision Making Approach to Congestion Control in Delay Tolerant Networks Kaimin Wei (Beihang University, P.R. China), Song Guo (The University of Aizu, Japan), Deze Zeng (China University of Geosciences, P.R. China), Ke Xu (State Key Lab. of Software Develop Environment Beihang University, P.R. China)	
Boundary Matters: Impact of Finite Boundary to Packet Delay Performance in Mobile Data Networks	27 12
Sigit Pambudi (North Carolina State University, USA), Wenye Wang (NC State University, USA)	2748
Fairness Evaluation of Pipeline Coded and non Coded TCP Flows	27 10
Paul-Louis Ageneau (Telecom ParisTech, France), Nadia Boukhatem (Telecom ParisTech, France), Mario Gerla (University of California at Los Angeles, USA)	2754
Performance Analysis of Spectrum Sensing with Mobile SUs in Cognitive Radio Networks	
Yanxiao Zhao (South Dakota School of Mines and Technology, USA), Prosanta Paul (South Dakota School of Mines and Technology, USA), ChunSheng Xin (Old Dominion University, USA), Min Song (The University of Toledo, USA)	2761
Distributed Massive Wireless Access for Cellular Machine-to-Machine Communication	
Siavash Bayat (University of Sydney, Australia), Yonghui Li (University of Sydney, Australia), Zhu Han (University of Houston, USA), Mischa Dohler (King's College London, United Kingdom), Branka Vucetic (The University of Sydney, Australia)	
Wireless Mesh Networks	
Delay Aware Joint Routing and Scheduling for Multi-Tx-Rx Wireless Mesh Networks	
Luyao Wang (University of Wollongong, Australia), Kwan-Wu Chin (University of Wollongong, Australia), Raad Raad (University of Wollongong, Australia), Sieteng Soh (Curtin University of Technology, Australia)	=
A Distributed Maximal Link Scheduler for Multi Tx/Rx Wireless Mesh Networks	2773
He Wang (University of Wollongong, Australia), Kwan-Wu Chin (University of Wollongong, Australia), Raad Raad (University of Wollongong, Australia), Sieteng Soh (Curtin University of	: 2779
An Energy Efficient Upload Transmission Method in Storage-Embedded Wireless Mesh Networks	
Shintaro Arai (Tohoku University, Japan), Katsuya Suto (Tohoku University, Japan), Hiroki Nishiyama (Tohoku University, Japan)	2785
Topology Optimization for Wireless Mesh with Directional Antennas	
Wangkit Wong (The Hong Kong University of Science and Technology, Hong Kong), Gary Chan (The Hong Kong University of Science and Technology, P.R. China)	2791
Optimizing Router Placement for Wireless Mesh Deployment	
Wangkit Wong (The Hong Kong University of Science and Technology, Hong Kong), Simbarashe Dzinamarira (The Hong Kong University of Science and Technology, Hong Kong), Gary Chan (The Hong Kong University of Science and Technology, P.R. China)	

Routing in Wireless Networks

Near-Optimal Online Algorithm for Data Collection by Multiple Sinks in Wireless Sensor Networks	
Ruilong Deng (Nanyang Technological Universtiy, Singapore), Shibo He (Zhejiang University, P.R. China), Jiming Chen (Zhejiang University, P.R. China)	2803
A Distributed Gradient-assisted Anycast-based Back-pressure Framework for Wireless Sensor Networks	
Cheng Li (Memorial University of Newfoundland, Canada), Zhenzhen Jiao (University of Chinese Academy of Sciences, P.R. China), Zheng Yao (Graduate University of the Chinese Academy of Sciences, P.R. China), Baoxian Zhang (University of the Chinese Academy of Sciences, P.R. China)	2809
Information Dissemination with Epidemic Routing in Energy Harvesting Wireless Sensor Networks	
Ching-Min Lien (National Tsing Hua University, Taiwan), Shi-Yong Lee (Academia Sinica, Taiwan), Ting-Yu Ho (Academia Sinica, Taiwan), De-Nian Yang (Academia Sinica, Taiwan), Yao-Win Peter Hong (National Tsing Hua University, Taiwan)	2815
An Application-Driven Path Discovery Mechanism for MANET Routing Protocols	
Seon Yeong Han (KAIST, Korea), Byoungheon Shin (Korea Advanced Institute of Science and Technology, Korea), Dongman Lee (KAIST, Korea)	2822
On the Efficiency of Dynamic Multicast Mobility Anchor Selection in DMM: Use Cases and Analysis	
Tien-Thinh Nguyen (EURECOM, France), Christian Bonnet (Institut Eurecom, France)	2828
/ireless Scheduling	
Optimal Decentralized Control Policy for Wireless Communication Systems with Wireless Energy Transfer	
Hoang Thai Dinh (Nanyang Technological University, Singapore), Dusit Niyato (Nanyang Technological University, Singapore), Ping Wang (Nanyang Technological University, Singapore), Dong In Kim (Sungkyunkwan University (SKKU), Korea)	2835
Queue-Based Rate Control for Low Feedback RLNC	
Amy Fu (Australian National University, Australia), Parastoo Sadeghi (The Australian National University, Australia)	2841
Proactive Scheduling for Content Pre-fetching in Mobile Networks	
Omar K. Shoukry (Cairo University & Smartec-group Company, Egypt), Mohamed A. Abd ElMohsen (Cairo University & Smartec-group Company, Egypt), John Tadrous (Ohio State University, USA), Hesham El Gamal (Ohio State University, USA), Tamer ElBatt (Faculty of Engineering, Cairo University & WINC, Nile University, Egypt), Nayer M. Wanas (Electronics Research Institute, Egypt), Yaser A. Elnakieb (Nile University, Egypt), Mohamed Khairy (Elec. and Comm. Dept., Faculty of Eng., Cairo Univ, Egypt)	2848
A QoS-Aware Scheduling Algorithm for High-Speed Railway Communication System	
Shengfeng Xu (Beijing Jiaotong University, P.R. China), Gang Zhu (Beijing Jiaotong University, P.R. China), Chao Shen (Beijing Jiaotong University, P.R. China), Ai Bo (Beijing Jiaotong University, P.R. China)	2855
An Adaptive Multiuser Scheduling and Chunk Allocation Algorithm for Uplink SIMO SC-FDMA Abolfazl Mehbodniya (Tohoku University, Japan), Wei Peng (Huazhong University of Science and Technology, P.R. China), Fumiyuki Adachi (Tohoku University, Japan)	
lobile Wireless Networking Interactive Presentations II	
Coordinated Channel Selection in Cognitive Macro-Femto Networks Binglai Niu (University of British Columbia, Canada), Vincent W.S. Wong (University of British Columbia, Canada)	2867

An Ef	ficient Network Coding based Broadcast Scheme with Reliability Guarantee	
Per Syd	ng Wang (University of Sydney, Australia), Guoqiang Mao (The University of Technology, dney, Australia), Zihuai Lin (University of Sydney, Australia), Ge Xiaohu (Huazhong versity of Science & Technology, P.R. China)	2873
	nized MIH-Assisted P-NEMO Design	2075
No. Mol	uri Omheni (University of Sfax, Tunisia), Faouzi Zarai (Sfax University, Tunisia), hammad S. Obaidat (Monmouth University, USA), Lotfi Kamoun (LETI Laboratory versity of Sfax Tunisia, Tunisia)	2879
InFRA	A: In-Frame Rate Adaptation in Fast Fading Channel Environments	
	unjoong Lee (Seoul National University, Korea), Hyung-Sin Kim (Seoul National University, rea), Saewoong Bahk (Seoul National University, Korea)	2885
Archi	bility Study on the Implementation of IEEE 802.11 on Cloud-Based Radio over Fibre tecture	
Syc	n Zhang (University of Wollongong, Australia), Daniel R Franklin (University of Technology, Iney, Australia)	2891
	rmance evaluation of RFID Tag-based "Virtual" Communication Channels	
Med Cal	n Farris (University Mediterranea of Reggio Calabria, Italy), Antonio Iera (University diterranea of Reggio Calabria, Italy), Leonardo Militano (Mediterranea University of Reggio abria, Italy), Silverio Carlo Spinella (University Mediterranea of Reggio Calabria, Italy)	2897
_	gy-Aware Activation of Nomadic Relays for Performance Enhancement in Cellular Networks	
Hei	e Ren (BMW Group Research and Technology, Germany), Slawomir Stanczak (Fraunhofer nrich Hertz Institute & Technische Universität Berlin, Germany), Peter Fertl (BMW Group search and Technology, Germany), Federico Penna (Samsung MSL, USA)	2903
Cross	s Layer Handoff Mechanism Based on mSCTP in Wireless Networks	
of 7	-huang Chang (National Taichung University, Taiwan), Huan-Jie Lin (Chaoyang University Fechnology, Taiwan), Hsiao-Hwa Chen (National Cheng Kung University, Taiwan)	2909
•	eration Versus Competition Towards An Efficient Parking Assignment Solution	
Maı Uni (Ur	ourez Mejri (ENSI, UNiversity of Manouba, Tunisia), Mouna Ayari (University of La nouba - Tunisia & LIP6 - UPMC- Paris Universitas - France, Tunisia), Rami Langar (UPMC - versity of Paris 6, France), Farouk Kamoun (SESAME University, Tunisia), Guy Pujolle niversity Pierre et Marie Curie - Paris 6, France), Leila Azouz Saidane (ENSI, University of nouba, Tunisia)	2915
	ster-Based Load Balancing Algorithm in Cloud Computing	2313
Sar Uni of I	njay Dhurandher (NSIT, University of Delhi, India), Mohammad S. Obaidat (Monmouth versity, USA), Isaac Woungang (Ryerson University, Canada), Pragya Agarwal (University Delhi, India), Abhishek Gupta (Netaji Subhas Institute of Technology, India), Prateek	2024
Guj	pta (University of Delhi, India)	2921
ICC'14 NGN:	IEEE ICC 2014 - Next-Generation Networking Symposium	
A Clo	ud-based Content Replication Framework Over Multi-Domain Environments	
Kos The	stas Katsalis (University of Thessaly & CERTH, Greece), Vasilis Sourlas (University of essaly & CERTH-ITI, Greece), Thanasis Korakis (Polytechnic Institute of New York versity, USA), Leandros Tassiulas (Yale University, USA)	2926
SEA:	Stable Resource Allocation in Geographically Distributed Clouds	
Chi	eng Zhang (Nanjing University, P.R. China), Zhuzhong Qian (Nanjing University, P.R. na), Jie Wu (Temple University, USA), Sanglu Lu (Nanjing University, P.R. China)	2932
	ing and Online Resource Allocation for the Multi-Resource Cloud Infrastructure	
Dal	e Wang (The University of Texas at Dallas, USA), Miguel Razo (University of Texas at las & Computer Science, USA), Marco Tacca (The University of Texas at Dallas, USA), drea Fumagalli (UTD, USA)	2938
	- • •	

Uniform Price Auction for Allocation of Dynamic Cloud Bandwidth Wee Kim Tan (National University of Singapore, Singapore), Dinil Mon Divakaran (Institu for Infocomm Research, Singapore), Mohan Gurusamy (National University of Singapore, Singapore)	
On the Economic Impact of Telco CDNs and their Alliance on the CDN Market	
Hyojung Lee (KAIST, Korea), Dongmyung Lee (KAIST, Korea), Yung Yi (KAIST, Korea)	2950
Network Virtualization	
Topology-aware Virtual Network Embedding based on Multiple Characteristics	
Min Feng (Beijing University of Posts and Telecommunications, P.R. China), Jianxin Liao (Beijing University of Posts and Telecommunications, P.R. China), Jingyu Wang (Beijing University of Posts and Telecommunications, P.R. China), Sude Qing (Beijing University of Posts and Telecommunications & EBUPT Information Technology Co., Ltd., P.R. China), (Beijing University of Posts and Telecommunications, P.R. China)	įi Qi
Live Migration of Virtual Network Functions in Cloud-Based Edge Networks	
Walter Cerroni (University of Bologna, Italy), Franco Callegati (Universita` di Bologna, Italy)	aly) 2963
Joint Virtual Machine and Bandwidth Allocation in Software Defined Network (SDN) and Clo Computing Environments	ud
Jonathan Chase (Nanyang Technological University, Singapore), Rakpong Kaewpuang (University of Manitoba, Canada), Yonggang Wen (Nanyang Technological University, Singapore), Dusit Niyato (Nanyang Technological University, Singapore)	2969
A Reliable Virtual Network Embedding Algorithm based on Game Theory within Cloud's backbone	
Oussama Soualah (UPEC, France), Ilhem Fajjari (Virtuor & University Pierre et Marie Curi France), Nadjib Aitsaadi (LiSSi - University of Paris-Est Creteil (UPEC), France), Abdelhar Mellouk (UPEC, University Paris-Est Creteil Val de Marne, France)	nid
A Novel Distributed Spanning Tree Protocol for Provider Provisioned VPLS Networks	
Madhusanka Liyanage (University of Oulu, Finland), Mika Ylianttila (University of Oulu, Finland), Andrei Gurtov (Aalto University, Finland)	2982
NGN Interactive Presentations	
DAQ: Deadline-Aware Queue Scheme for Scheduling Service Flows in Data Centers	
Cong Ding (NJIT, USA), Roberto Rojas-Cessa (New Jersey Institute of Technology, USA) Enhancing OpenFlow with Media Independent Management Capabilities	2989
Carlos Eduardo Magalhães Guimarães (Instituto de Telecomunicações - Pólo de Aveiro, Portugal), Daniel Corujo (Instituto de Telecomunicações Aveiro & Universidade de Aveiro Portugal), Rui L Aguiar (University of Aveiro & Instituto de Telecomunicações, Portugal)	
OpenFlow Driven Ethernet Traffic Analysis Andrea Bianco (Politecnico di Torino, Italy), Vengatanathan Krishnamoorthi (Linköping	
University, Sweden), Nanfang Li (Embrane, Inc., USA), Luca Giraudo (Politecnico di Torir Italy)	
Convergence Performance of the OFEX Controller for High-Speed Networks	
Jungang Liu (University of Ottawa, Canada), Oliver Yang (University of Ottawa, Canada)	3007
Dynamic Voltage and Frequency Scaling Control for Crossbars in Input-Queued Switches	
Andrea Bianco (Politecnico di Torino, Italy), Paolo Giaccone (Politecnico di Torino, Italy), Marco Ricca (Politecnico di Torino, Italy)	3013
Performance-driven Evaluation for Deploying IMS-based Interoperability Scenarios	
Jose Oscar Fajardo (University of the Basque Country, Spain), Fidel Liberal (University of Basque Country, Spain), Fudong Li (Plymouth University, United Kingdom), Nathan Clark (University of Plymouth, United Kingdom), Is-Haka Mkwawa (University of Plymouth, Uni	e ted
Kingdom), Lingfen Sun (University of Plymouth, United Kingdom)	3019

Coding-aware Virtual Network Mapping for Surviving Single Link Failure Zhiming Wang (National Digital Switching System Engineering & Technological Research Center & Individual Purchaser, P.R. China), Jiangxing Wu (National Digital Switching System Engineering & Technological Research Center, P.R. China), Dongnian Cheng (National Digital	
Switching System Engineering & Technological Research Center, P.R. China)	3025
The Optimal Joint Sequence Design in the Feedback-based Two-stage Switch	
An Huang (Zhejiang University, P.R. China), Bing Hu (Zhejiang University, P.R. China)	3031
Efficient Selection of Optimally Designed Ethernet Ring Instances	
Mohammad Nurujjaman (Ciena Corporation, Canada), Samir Sebbah (Concordia University, Canada), Ahmad Khalil (TATA Communications, USA), Chadi Assi (Concordia University, Canada)	3037
SDN based Testbeds for Evaluating and Promoting Multipath TCP	
Balázs Sonkoly (Budapest University of Technology and Economics, Hungary), Felicián Németh (Budapest University of Technology and Economics, Hungary), Levente Csikor (Budapest University of Technology and Economics, Hungary), László Gulyás (College of Szolnok, Hungary), András Gulyás (Budapest University of Technology and Economics,	
Hungary) Software Defined Networks	3044
Programming Network via Distributed Control in Software-Defined Networks	
Boyang Zhou (Zhejiang University, P.R. China), Chunming Wu (College of Computer Science, Zhejiang University, P.R. China), Xiaoyan Hong (University of Alabama, USA), Ming Jiang (Hangzhou Dianzi University, P.R. China)	3051
SDN Framework for Connectivity Services	
Rafael Gouveia (Instituto de Telecomunicações, Universidade de Aveiro, Portugal), João Aparício (Instituto de Telecomunicações, Universidade de Aveiro, Portugal), João Soares (Portugal Telecom Inovação e Sistemas, Portugal), Bruno Parreira (Instituto de Telecomunicações, Universidade de Aveiro, Portugal), Susana Sargento (Instituto de Telecomunicações, Universidade de Aveiro, Portugal), Jorge Carapinha (PT Inovação S.A. Telecom Group, Portugal)	3058
Fostering Rapid, Cross-domain Service Innovation in Operator Networks through Service Provider SDN	
James Kempf (Ericsson Research, USA), Martin Korling (Ericsson, USA), Stephan Baucke (Ericsson Research, USA), Samy Touati (Ericsson, USA), Victa McClelland (Ericsson, USA), Ignacio Más (Ericsson, Sweden), Olof Bäckman (Ericsson, USA)	3064
Exploring Source Routed Forwarding in SDN-Based WANs	
Mourad Soliman (Carleton University, Canada), Biswajit Nandy (Solana Networks & Carleton University, Canada), Ioannis Lambadaris (Carleton University, Canada), Peter Ashwood Smith (Huawei, Canada)	3070
CheetahFlow: Towards Low Latency Software-Defined Network	
Zhiyang Su (Hong Kong University of Science and Technology, Hong Kong), Ting Wang (Hong Kong University of Science and Technology, Hong Kong), Yu Xia (Hong Kong University of Science and Technology, P.R. China), Mounir Hamdi (Hong Kong University of Science and Technology, P.R. China)	3076
Cloud Architectures	
DDSS: Dynamic Dedicated Servers Scheduling for Multi Priority Level Classes in Cloud Computing	
Husnu S Narman (University of Oklahoma, USA), Md Shohrab Hossain (Bangladesh University of Engineering and Technology, Bangladesh), Mohammed Atiquzzaman (University of Oklahoma, USA)	3082

	Improving the Efficiency of Server-centric Data Center Network Architectures	
	Ting Wang (Hong Kong University of Science and Technology, Hong Kong), Yu Xia (Hong Kong University of Science and Technology, P.R. China), Dong Lin (Hong Kong University of Science & Technology, Hong Kong), Mounir Hamdi (Hong Kong University of Science and	
	Technology, P.R. China)	3088
	On the Placement of Web Content Replicas in WMNs	
	Zakwan Al-Arnaout (Victoria University of Wellington, New Zealand), Qiang Fu (Victoria University of Wellington, New Zealand), Marcus Frean (Victoria University of Wellington, New Zealand)	3094
	Cooperative Overlay Routing in a Multiple Overlay Environment	
	Ziteng Cui (Beijing University of Posts and Telecommunications, P.R. China), Jianxin Liao (Beijing University of Posts and Telecommunications, P.R. China), Jingyu Wang (Beijing University of Posts and Telecommunications, P.R. China), Qi Qi (Beijing University of Posts and Telecommunications, P.R. China), Jing Wang (Beijing University of Posts and Telecommunications, P.R. China)	3100
	A Comparative Analysis of Data Center Network Architectures	
	Fan Yao (George Washington University, USA), Jingxin Wu (George Washington University, USA), Guru Venkataramani (George Washington Univ, USA), Suresh Subramaniam (The George Washington University, USA)	3106
P2P Ne	tworks and Applications	
	Minimal Network Coding Redundancy for Peer-to-Peer Content Distribution	
	Dinh Nguyen (KDDI R&D Laboratories & Waseda University, Japan), Hidenori Nakazato (Waseda University, Japan)	3112
	Content multi-homing: an alternative approach	
	Jason Min Wang (The Hong Kong University of Science and Technology, Hong Kong), Jun Zhang (Telecom ParisTech, France), Brahim Bensaou (The Hong Kong University of Science and Technology, Hong Kong)	3118
	On using P2P Technology to Enable Opportunistic Management in DTNs through Statistical Estimation	
	Jéferson Nobre (Federal University of Rio Grande do Sul, Brazil), Fábio Bertinatto (Universidade do Vale do Rio dos Sinos, Brazil), Pedro Arthur Duarte (Federal University of Rio Grande do Sul, Brazil), Lisandro Z Granville (Federal University of Rio Grande do Sul, Brazil), Liane Margarida Rockenbach Tarouco (Federal University of Rio Grande do Sul, Brazil)	3124
	Allowing Applications To Evolve With The Internet: The Case For Internet Resource Descriptors	3124
	Spencer Sevilla (University of California, Santa Cruz, USA), JJ Garcia-Luna-Aceves (University of California at Santa Cruz, USA)	3130
	A Hierarchical P2P Traffic Localization Method with Bandwidth Limitation	
	Hiep Hoang-Van (Shibaura Institute of Technology, Japan), Takumi Miyoshi (Shibaura Institute of Technology, Japan), Olivier Fourmaux (UPMC Sorbonne Universités, France)	3136
LTE and	d Virtualization	
	Resources Negotiation for Network Virtualization in LTE-A Networks	
	Georgia Tseliou (Open University of Catalonia (UOC), Spain), Ferran Adelantado (Universitat Oberta de Catalunya, Spain), Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)	3142
	OpeNB: A framework for Virtualizing Base Stations in LTE Networks	>- !-
	Salvatore Costanzo (University of Athens, Greece), Dionysis Xenakis (University of Athens & Green Adaptive Intelligent Networking (GAIN) group, Greece), Nikos Passas (University of	
	Athens, Greece), Lazaros Merakos (University of Athens, Greece)	3148

Programmable Policies for Data Offloading in LTE Network	
Mojdeh Amani (King's College London, United Kingdom), Toktam Mahmoodi (King's College London, United Kingdom), Malikarjun Tatipamula (F5 Networks, USA), Hamid Aghvami (King's College London, United Kingdom)	3154
Network-Assisted Device Discovery for LTE-based D2D Communication Systems	3131
Phong Nguyen (NEC Australia Ltd., Australia), Pushpika Wijesinghe (NEC Australia Ltd, Australia), Rajitha Palipana (NEC Australia Ltd., Australia), Kevin H. Lin (NEC Australia Ltd., Australia), Dobrica Vasic (NEC Australia Ltd., Australia)	3160
ARCHON: An ANDSF-Assisted Energy-Efficient Vertical Handover Decision Algorithm for the Heterogeneous IEEE 802.11/LTE-Advanced Network	
Dionysis Xenakis (University of Athens & Green Adaptive Intelligent Networking (GAIN) group, Greece), Nikos Passas (University of Athens, Greece), Lazaros Merakos (University of Athens, Greece), Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)	3166
Information Centric Networks	
Content Hunting for In-Network Cache: Design and Performance Analysis Hiroshi Shimizu (National Institute of Information and Communications Technology (NICT), Japan), Hitoshi Asaeda (National Institute of Information and Communications Technology (NICT), Japan), Masahiro Jibiki (National Institute of Information and Communications Technology, Japan), Nozomu Nishinaga (National Institute of Information and Communications Technology, Japan)	2177
On the Benefit of Information Centric Networks for Traffic Engineering	31/2
Kai Su (WINLAB, Rutgers University, USA), Cedric Westphal (Huawei Innovation Center, USA)	3178
In-network Caching of Internet-of-Things Data	
Serdar Vural (University of Surrey & Centre for Communication Systems Research, United Kingdom), Pirabakaran Navaratnam (University of Surrey, United Kingdom), Ning Wang (University of Surrey, United Kingdom), Chonggang Wang (InterDigital Communications, USA), Lijun Dong (InterDigital, USA), Rahim Tafazolli (University of Surrey, United Kingdom) CRCache: Exploiting the Correlation between Content Popularity and Network Topology	3185
Information for ICN Caching	
Wei Wang (Institute of Computing Technology, CAS & University of Chinese Academy of Science, P.R. China), Yi Sun (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China), Yang Guo (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China), Mohamed-Ali Kaafar (INRIA France & NICTA Australia, France), Jiong Jin (Swinburne University of Technology, Australia), Jun Li (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China), Zhongcheng Li (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)	3191
DITNM: Dynamic Interest Transmission Scheme in Content Centric Networking with Name Mapping	
Jia Chen (Beijing Jiaotong University, P.R. China), Huachun Zhou (Beijing Jiaotong University, P.R. China), Hongke Zhang (Beijing Jiaotong University, P.R. China)	
Transport Protocols and Routing	
On the Coexistence of Transport Protocols in Data Centers	
Syed Mohammad Irteza (Lahore University of Management Sciences, Pakistan), Adnan Ahmed (Lahore University of Management Sciences, Pakistan), Ihsan Ayyub Qazi (Lahore University of Management Sciences (LUMS), Pakistan), Sana Farrukh (Lahore University of Management Sciences, Pakistan), Babar Naveed Memon (Lahore University of Management Sciences, Pakistan)	3203

	Designing a New TCP Based on FAST TCP for Datacenter	
	Feng Zheng (Tsinghua University & Tsinghua National Laboratory for Information Science and Technology, P.R. China), Yongfeng Huang (Tsinghua University & Tsinghua National Laboratory for Information Science and Technology, P.R. China), Donghong Sun (Tsinghua University, P.R. China)	3209
	Multipath Policy Routing for the Inter-domain Scenario	0_07
	Pedro Amaral (Universidade Nova de Lisboa, Portugal), Luis Bernardo (Universidade Nova de Lisboa, Portugal), Paulo F Pinto (Universidade Nova de Lisboa, Portugal)	3215
	Improving the performance of Multipath TCP over Heterogeneous Paths using Slow Path Adaptation	
	Sabur Hassan Baidya (University of Texas at Dallas, USA), Ravi Prakash (University of Texas at Dallas, USA)	3222
	A Stub Multi-homing Solution for IPv6 Networks	
	Jie Li (University of Virginia, USA), Malathi Veeraraghavan (University of Virginia, USA)	3228
Mobile a	and Wireless Networks	
	Time and Location Aware Mobile Data Pricing	
	Qian Ma (The Chinese University of Hong Kong, Hong Kong), Ya-Feng Liu (Chinese Academy of Sciences, P.R. China), Jianwei Huang (The Chinese University of Hong Kong, Hong Kong)	3235
	A Cognitive Approach for Stable Cooperative Group Formation in Mobile Environments	
	Victor Sucasas (Instituto de Telecomunicacoes, Portugal), Ayman Radwan (Instituto de Telecomunicações & Queen's University, Portugal), Hugo Marques (University of Aveiro, Portugal), Jonathan Rodriguez (Instituto de Telecomunicações, Portugal), Seiamak Vahid (University of Surrey, United Kingdom), Rahim Tafazolli (University of Surrey, United Kingdom)	3241
	Kingdom) Cooperative Spectrum Sharing and Scheduling in Self-Organizing Femtocell Networks	3241
	Hsi-Lu Chao (National Chiao Tung University, Taiwan), Sau-Hsuan Wu (National Chiao Tung University, Taiwan), Yu-Han Huang (National Chiao Tung University, Taiwan), Shang-Chen Li (National Chiao Tung University, Taiwan)	3246
	Mobility Study for Named Data Networking in Wireless Access Networks	00
	Aytac Azgin (Georgia Tech, Huawei, USA), Ravishankar Ravindran (Huawei & Huawei, USA), Guoqiang Wang (Huawei, USA)	3252
	Network Coding: A remedy for Receiver Buffer Blocking in Concurrent Multipath Transfer of Data over Multi-hop Wireless Networks	
	Nasim Arianpoo (University of British Columbia, Canada), Ilknur Aydin (Farmingdale State College, USA), Victor CM Leung (The University of British Columbia, Canada)	3258
ICC'14	ONS: IEEE ICC 2014 - Optical Networks and Systems	
Optical	Networking	
	Traffic Grooming and Energy-efficiency in Flexible-Grid Networks	
	Arsalan Ahmad (Politecnico di Torino, Italy), Andrea Bianco (Politecnico di Torino, Italy), Edoardo Bonetto (Politecnico di Torino, France)	3264
	Using Application Layer Knowledge in Routing and Wavelength Assignment Algorithms Philip Wette (University of Paderborn, Germany), Holger Karl (University of Paderborn, Germany)	3270
	• • • • • • • • • • • • • • • • • • • •	_

Development of Onboard LPM-Based Header Processing and Reactive Link Selection for Optical	
Packet and Circuit Integrated Networks Hideaki Furukawa (NICT, Japan), Takaya Miyazawa (National Institute of Information and Communications Technology (NICT), Japan), Hiroaki Harai (National Institute of Information and Communications Technology, Japan), Yasuto Kuroda (Renesas Electronics Corporation, Japan), Shoji Koyama (Renesas Electronics Corporation, Japan), Shin'ichi Arakawa (Osaka	
University, Japan), Masayuki Murata (Osaka University, Japan)	3277
Raimena Veisllari (Norwegian University of Science and Technology, Norway), Norvald Stol (Norwegian University of Science and Technology, Norway), Steinar Bjornstad (NTNU, Norway), Carla Raffaelli (University of Bologna, Italy)	3283
Joint Defragmentation of Spectrum and Computing Resources in Inter-Datacenter Networks over Elastic Optical Infrastructure	
Xiahe Liu (University of Science and Technology of China, P.R. China), Liang Zhang (University of Science and Technology of China, P.R. China), Mingyang Zhang (University of Science and Technology of China, P.R. China), Zuqing Zhu (University of Science and Technology of China, P.R. China)	3289
Resource Allocation	
Alternative Routing and Zone-Based Spectrum Assignment Algorithm for Flexgrid Optical Networks	
Rafael Scaraficci (University of Campinas, Brazil), Nelson L. S. da Fonseca (State University of Campinas, Brazil)	
Reliable Resource Allocation for Optically Interconnected Distributed Clouds	
Yi Zhu (Hawaii Pacific University, USA), Yan Liang (Hawaii Pacific University, USA), Qiong Zhang (Fujitsu Laboratories of America, USA), Xi Wang (Fujitsu Laboratories of America, USA), Paparao Palacharla (FLA, USA), Motoyoshi Sekiya (Fujitsu Laboratories of America, Inc., USA)	3301
Co-scheduling Computational and Networking Resources in Elastic Optical Networks	
Jingxin Wu (George Washington University, USA), Juzi Zhao (The George Washington University, USA), Suresh Subramaniam (The George Washington University, USA)	3307
Dynamic Routing of Anycast and Unicast Traffic in Elastic Optical Networks	
Krzysztof Walkowiak (Wroclaw University of Technology, Poland), Mirosław Klinkowski (National Institute of Telecommunications, Poland), Andrzej Kasprzak (Wroclaw University of Technology, Poland)	3313
Dynamic Continuous and Non-Continuous Advance Reservation in SLICE Networks	
Bharath Honnenahalli Ramaprasad (NetApp, USA), Thilo Schöndienst (University of Massachusetts Lowell, USA), Vinod M. Vokkarane (University of Massachusetts Lowell & Massachusetts Institute of Technology (MIT), USA)	3319
Visible Light Communications	
On Visible Light Communication Using LED Array with DFT-Spread OFDM Chaopei Wu (Southeast University, P.R. China), Hua Zhang (Southeast University, P.R. China), Wei Xu (Southeast University, P.R. China)	3325
Capacity Analysis for Dimmable Visible Light Communications	
Jun-Bo Wang (Southeast University, P.R. China), Qing-Song Hu (Nanjing University of Aeronautics and Astronautics, P.R. China), Jiangzhou Wang (University of Kent, United Kingdom), Ming Chen (Southeast University, P.R. China), Yu-Hua Huang (Nanjing University of Aeronautics and Astronautics, P.R. China), Jin-Yuan Wang (Southeast University, P.R. China)	3331
Avoiding Spectral Efficiency Loss in Unipolar OFDM for Optical Wireless Communication	3331
Dobroslav A. Tsonev (University of Edinburgh, United Kingdom), Harald Haas (The University of Edinburgh, United Kingdom)	

Physical-Layer Security for Indoor Visible Light Communications	
Ayman Mostafa (University of British Columbia, Canada), Lutz Lampe (University of British Columbia, Canada)	3342
Towards Self-powered Solar Panel Receiver for Optical Wireless Communication	
Zixiong Wang (Nanyang Technological University, Singapore), Dobroslav A. Tsonev (University of Edinburgh, United Kingdom), Stefan Videv (University of Edinburgh, United Kingdom), Harald Haas (The University of Edinburgh, United Kingdom)	3348
Optical Networks and Systems Interactive Presentations	
Average Capacity of MIMO Free-Space Optical Gamma-Gamma Fading Channel	
Duy A. Luong (The University of Aizu, Japan), Anh T. Pham (The University of Aizu, Japan)	3354
DFT-OFDM Systems with Real Modulation and DC-biasing for Intensity Modulated Direct- Detection Optical Communications	
Jian A. Zhang (CSIRO, Australia), Xiaojing Huang (CSIRO Computational Informatics, Australia)	3359
Minimizing Spectrum Usage for Shared-Path Protection with Joint Failure Probability Constraint in Flexible Bandwidth Optical Networks	
Bowen Chen (School of Electronic and Information Engineering, Soochow University & Beijing University of Posts and Telecommunications, P.R. China), Jie Zhang (Beijing University of Posts and Telecommunications, P.R. China), Yongli Zhao (Beijing University of Posts and Telecommunications, P.R. China), Jason P. Jue (University of Texas at Dallas, USA), Shanguo Huang (Beijing University of Posts and Telecommunications, P.R. China), Wanyi Gu (Key Laboratory of Optical Communication and Lightwave Technologies, Ministry of Education,	2265
Beijing U, P.R. China)	3365
Jinan Xia (Politecnico di Torino, Italy), Andrea Bianco (Politecnico di Torino, Italy), Edoardo Bonetto (Politecnico di Torino, France), Roberto Gaudino (Politecnico di Torino, Italy)	3371
Subcarrier Digital Modulation Based Passive Optical Network Using Clipped Signal Sending Scheme	
Hiromi Ueda (Tokyo Univeisity of Technology, Japan), Toshinori Tsuboi (Tokyo University of Technology, Japan)	3377
Improving SINR in Indoor Cellular Visible Light Communication Networks	
Zhe Chen (University of Edinburgh, United Kingdom), Dobroslav A. Tsonev (University of Edinburgh, United Kingdom), Harald Haas (The University of Edinburgh, United Kingdom)	3383
Free Space Optical Systems	
Multiuser Dual-Hop Relaying over Hybrid RF/FSO Links	
Nikolaos I. Miridakis (University of Piraeus, Greece), Michail Matthaiou (Queen's University Belfast, United Kingdom), George K. Karagiannidis (Aristotle University of Thessaloniki, Greece)	3389
An Efficient Power Constrained Transmission Scheme for Hybrid OW/RF Systems	
Nestor Chatzidiamantis (Aristotle University of Thessaloniki, Greece), Leonidas Georgiadis (Aristotle University of Thessaloniki, Greece), Harilaos G. Sandalidis (University of Thessaly, Greece), George K. Karagiannidis (Aristotle University of Thessaloniki, Greece)	3395
Multiple User Pair Scheduling in Bi-directional Single Relay assisted FSO Systems	5555
Parul Puri (Netaji Subhas Institute of Technology, India), Parul Garg (Netaji Subhas Institute of Technology, New Delhi, India), Mona Aggarwal (Netaji Subhas Institute of Technology,	
New Delhi, India), Prabhat Kumar Sharma (ITM University, Gurgaon, India)	3401
Diversity Analysis of Free-Space Optical Networks with Multihop Transmissions Serj Haddad (EPFL, Switzerland), Olivier Lévêque (EPFL, Switzerland)	2400
Serj Haduau (LFFL, Switzerianu), Olivier Leveque (LFFL, Switzerianu)	34U0

Optical Spatial Pulse Position Amplitude Modulation over Atmospheric Turbulence Channels Tugba Ozbilgin (Bogazici University & TUBITAK Uekae, Turkey), Mutlu Koca (Bogazici University, Turkey)	3412
Scheduling, Switching and Signal Performance	
Scheduling in Optical Switching: Deploying Shared Wavelength Converters More Effectively Kurt Van Hautegem (Ghent University, Belgium), Wouter Rogiest (Ghent University, Belgium), Herwig Bruneel (Ghent University & Department of Telecommunications and Information Processing, Belgium) Joint Architecture of Data and Control Planes for Optical Flow Switched Networks	3418
Lei Zhang (MIT, USA), Vincent Chan (Massachusetts Institute of Technology, USA)	3425
Optical Spectrally Efficient FDM System for Electrical and Optical Bandwidth Saving Izzat Darwazeh (University College London, United Kingdom), Tongyang Xu (University College London, United Kingdom), Tao Gui (Jinan University, P.R. China), Yuan Bao (Jinan University, P.R. China), Li (Jinan University, P.R. China)	
Using Replicated Video Servers for VoD Traffic Offloading in Integrated Metro/Access Networks Roberto Fratini (Politecnico di Milano, Italy), Marco Savi (Politecnico di Milano, Italy), Giacomo Verticale (Politecnico di Milano, Italy), Massimo Tornatore (Politecnico di Milano & University of California, Davis, Italy)	3438
Improving Distribution Network Utilization in Optical Flow Switching Yamini Jayabal (University of Texas at Dallas, USA), Miguel Razo (University of Texas at Dallas & Computer Science, USA), Marco Tacca (The University of Texas at Dallas, USA),	
ICC'14 SAC: IEEE ICC 2014 - Selected Areas in Communications Symposium Cloud Resource Management	
On Insortius of Customer Browided Because Charing in Claud	
On Incentive of Customer-Provided Resource Sharing in Cloud Haiyang Wang (University of Minnesota at Duluth, USA), Jiangchuan Liu (Simon Fraser University, Canada), Ke Xu (Tsinghua University, P.R. China) Resource Management for Cognitive Cloud Gaming	3450
Wei Cai (The University of British Columbia, Canada), Min Chen (Huazhong University of Science and Technology, P.R. China), Conghui Zhou (We Software Limited, Canada), Victor CM Leung (The University of British Columbia, Canada), Henry C. B. Chan (The Hong Kong Polytechnic University, Hong Kong)	3/156
Resilience Options for Provisioning Anycast Cloud Services with Virtual Optical Networks Minh Bui (Concordia University, Canada), Brigitte Jaumard (Concordia University, Canada), Chris Develder (Ghent University - iMinds, Belgium)	
Towards Multi-Resource Physical Machine Provisioning for IaaS Clouds	
Lei Wei (Nanyang Technological University, Singapore), Bingsheng He (Nanyang Technological University, Singapore), Chuan Heng Foh (University of Surrey, United Kingdom)	3469
h-DDSS: Heterogeneous Dynamic Dedicated Servers Scheduling in Cloud Computing	
Husnu S Narman (University of Oklahoma, USA), Md Shohrab Hossain (Bangladesh University of Engineering and Technology, Bangladesh), Mohammed Atiquzzaman (University of Oklahoma, USA)	3 <i>4</i> 75
Situation 14, 55, 17	5 17 5

Energy Efficient Wireless I

	Distributed DTX Alignment with Memory	
	Hauke Holtkamp (DOCOMO Euro-Labs & The University of Edinburgh, Germany), Guido K E Dietl (University of Applied Sciences Landshut & DOCOMO Euro-Labs, Germany), Harald Haas (The University of Edinburgh, United Kingdom)	3481
	Solar Radiation Prediction and Energy Allocation for Energy Harvesting Base Stations	. 5-101
	Yanan Bao (University of California, Davis, USA), Xiaolei Wang (Tsinghua University, P.R. China), Xin Liu (UC Davis, USA), Sheng Zhou (Tsinghua University, P.R. China), Zhisheng Niu (Tsinghua University, P.R. China)	3487
	A Game-Theoretic Approach for Energy-Efficient Power Control in Spectrum Sharing Networks	
	Younggap Kwon (Yonsei University, Korea), Taewon Hwang (Yonsei University, Korea)	. 3493
	Traffic-Aware Data and Signaling Resource Management for Green Cellular Networks	
	Jian Wu (Tsinghua University, P.R. China), Sheng Zhou (Tsinghua University, P.R. China), Zhisheng Niu (Tsinghua University, P.R. China), Chunguang Liu (Hitachi China Research & Development Corporation, P.R. China), Peng Yang (Hitachi (CHINA) R&D Corporation, P.R. China), Guowang Miao (KTH, Royal Institute of Technology & Department of Communications Systems, Sweden)	3499
	Power Efficient Resource Allocation Strategies for Layered Video Delivery Over eMBMS Networks	
	Lorenzo Carlà (Università di Firenze, Italy), Francesco Chiti (Università degli Studi di Firenze, Italy), Romano Fantacci (University of Florence, Italy), Chadi Khirallah (The University of Edinburgh, United Kingdom), Andrea Tassi (Lancaster University, United Kingdom)	3505
e-Health I		
	Joint Power-QoS Control Scheme for Energy Harvesting Body Sensor Nodes	
	Ernesto Ibarra (CTTC, Spain), Angelos Antonopoulos (Telecommunications Technological Centre of Catalonia (CTTC), Spain), Elli Kartsakli (Universitat Politècnica de Catalunya (UPC), Spain), Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal), Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)	3511
	Robust Signal Synthesis of the 12-Lead ECG Using 3-Lead Wireless ECG Systems	. 5511
	Chih-Hao Hsu (National Chiao Tung University, Taiwan), Sau-Hsuan Wu (National Chiao Tung University, Taiwan)	3517
	2L-MAC: A MAC Protocol with Two-Layer Interference Mitigation in Wireless Body Area Networks for Medical Applications	
	Guan-Tsang Chen (Taiwan, Taiwan), Wen-Tsuen Chen (Academia Sinica, Taiwan), Shan- Hsiang Shen (Academia Sinica, Taiwan)	3523
	Epileptic Seizure Detection From EEG Signal Using Discrete Wavelet Transform and Ant Colony Classifier	
	Amal Naseem (Paris Descartes University, France), Osman Salem (University of Paris Descartes, France), Ahmed Mehaoua (University of Paris Descartes, France)	. 3529
	Respiration Signal Extraction From Photoplethysmogram Using Pulse Wave Amplitude Variation	
	Mairo Leier (Tallinn University of Technology, Estonia), Gert Jervan (Tallinn University of Technology, Estonia), Wilhelm Stork (Karlsruhe Institute of Technology, Germany)	. 3535
Energy Ef	ficient Wireless II	
	Joint Optimization of DVFS and Low-power Sleep-state Selection for Mobile Platforms	
	Alexander W. Min (Intel Corporation, USA), Ren Wang (Intel Labs, USA), James Tsai (Intel Corp, USA), Tsung-Yuan (Charles) Tai (Intel Corporation, USA)	3541
	Addressing the Energy-Delay Tradeoff in Wireless Networks with Load-Proportional Energy Usage	
	Jie Chen (RPI, USA), Biplab Sikdar (Rensselaer Polytechnic Institute, USA)	. 3547

Energy Efficiency and Spectral Efficiency Trade-off for OFDM Systems with Imperfect Channel Estimation	
Osama Amin (Assiut University & Memorial University of Newfoundland, Egypt), Ebrahim Bedeer (Memorial University of Newfoundland, Canada), Mohamed Hossam Ahmed (Memorial University, Canada), Octavia A. Dobre (Memorial University of Newfoundland, Canada)	3553
Error Rate Analysis and Optimal Power Allocation in Multiple Access Relay Channels with Analog Network Coding	
Konstantinos Ntontin (CTTC, Spain), Marco Di Renzo (French National Center for Scientific Research (CNRS), France), Ana Perez-Neira (UPC, Spain), Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)	3559
Distance-Based Energy-Efficient Opportunistic Forwarding in Mobile Delay Tolerant Networks Yue Lu (Zhejiang University, P.R. China), Wei Wang (Zhejiang University, P.R. China), Lin Chen (The University of Paris-Sud, France), Zhaoyang Zhang (Zhejiang University, P.R. China), Aiping Huang (Zhejiang University, P.R. China)	
Satellite and Space Networking	
MIMO Application for Reduced Adjacent Satellite Interference in SATCOM Downlinks	
Robert T. Schwarz (DIRACON Innovation Consultants GmbH, Germany), Stephan P. Winter (Orbital-Engineering Stephan Winter, Germany), Andreas Knopp (Munich University of the Bundeswehr & Institute for Information Transmission Systems, Germany)	3570
Rule-based Packet Scheduling for DVB-S2 Through Generic Stream Encapsulation	
Jean-Baptiste Dupé (Université de Toulouse & TéSA, France), Emmanuel Chaput (Irit- Enseeiht, France), Cédric Baudoin (Thales Alenia Space, France), Caroline Bes (CNES, France), Arnaud Deramecourt (Centre National d'Etudes Spatial, France), André-Luc Beylot (IRIT Toulouse, France)	3576
Reliability of Adaptive Transmission in State-Based Channels for Land Mobile Satellite Communications	3370
Daniele Tarchi (University of Bologna, Italy), Giovanni Emanuele Corazza (University of Bologna, Italy), Alessandro Vanelli-Coralli (University of Bologna, Italy)	3582
A Simulation Study of Network-Coding-Enhanced PEP for TCP Flows in GEO Satellite Networks	
Muhammad Muhammad (German Aerospace Center (DLR), Germany), Matteo Berioli (German Aerospace Center (DLR), Germany), Tomaso De Cola (German Aerospace Center (DLR), Germany)	3588
Performance Evaluation of Application Layer Joint Coding for Video Transmission with Smartphones Over Terrestrial/Satellite Emergency Networks	
Igor Bisio (University of Genoa, Italy), Aldo Grattarola (University of Genoa, Italy), Fabio Lavagetto (University of Genoa, Italy), Giulio Luzzati (University of Genoa, Italy), Mario Marchese (DIST- University of Genoa, Italy)	3594
Selected Areas in Communications Interactive Presentations I	
Diffusive Molecular Communication with Disruptive Flows	
Adam Noel (University of British Columbia, Canada), Karen C Cheung (University of British Columbia, Canada), Robert Schober (University of British Columbia, Canada)	3600
An L2 Policy Based Multipath Fabric Pedro Amaral (Universidade Nova de Lisboa, Portugal), Luis Bernardo (Universidade Nova de Lisboa, Portugal), Paulo F Pinto (Universidade Nova de Lisboa, Portugal), Fábio Júlio	
(Facudade de Ciências e Tecnologia, Universidade Nova de Lisboa, Portugal)	3607
Reputation-based Sensing-as-a-Service for Crowd Management Over the Cloud	
Burak Kantarci (University of Ottawa & School of Electrical Engineering and Computer Science, Canada), Hussein T Mouftah (University of Ottawa, Canada)	3614

VirtualRack: Bandwidth-Aware Virtual Network Allocation for Multi-Tenant Datacenters	
Tianlin Huang (Xi'an Jiaotong University, P.R. China), Chao Rong (Xi'an Jiaotong University, P.R. China), Yazhe Tang (Xi'an Jiaotong University, P.R. China), Chengchen Hu (Xi'an Jiaotong University, P.R. China), Jinming Li (Huawei Technology, P.R. China), Peng Zhang	
(Xi'an Jiaotong University, P.R. China)	. 3620
Distributed MapReduce Engine with Fault Tolerance Lixing Song (Ball State University, USA), Shaoen Wu (Ball State University, USA), Honggang Wang (University of Massachusetts, Dartmouth & College of Engineering, USA), Qing Yang (Montana State University, USA)	3626
Minimizing Disaster Backup Window for Geo-Distributed Multi-Datacenter Cloud Systems	
Jingjing Yao (University of Science and Technology of China, P.R. China), Ping Lu (University of Science and Technology of China, P.R. China), Zuqing Zhu (University of Science and Technology of China, P.R. China)	. 3631
A Lightweight Hybrid Security Framework for Wireless Sensor Networks	
Hichem Sedjelmaci (University of Bourgogne, DRIVE Lab, France), Sidi-Mohammed Senouci (University of Bourgogne - ISAT Nevers, France)	. 3636
GA-Based Frequency Selection Strategies for Graphene-Based Nano-Communication Networks	
Armita Afsharinejad (Telecommunication Software and Systems Group (TSSG), Waterford Institute of Technology (WIT), Ireland), Alan Davy (Waterford Institute of Technology, Ireland), Brendan Jennings (Waterford Institute of Technology, Ireland), Sasitharan Balasubramaniam (Tampere University of Technology, Finland)	3642
Efficient Fuzzy Vault Application in Node Recognition for Securing Body Sensor Networks	. 5042
Yang Lu (Ningbo University of Technology, P.R. China), Shudi Bao (Ningbo University of Technology, P.R. China)	3648
Energy-Efficient Downlink Transmission in Two-Tier Network MIMO OFDMA Networks	
Ahmed Hamdi Sakr (University of Manitoba, Canada), Ekram Hossain (University of Manitoba, Canada)	. 3652
Anomaly Detection in Medical WSNs Using Enclosing Ellipse and Chi-square Distance	
Osman Salem (University of Paris Descartes, France), Yaning Liu (JCP-Connect, France), Ahmed Mehaoua (University of Paris Descartes, France)	3658
Context Storage for M2M Scenarios	
Mário Antunes (Instituto de Telecomunicações, Portugal), Diogo Gomes (Universidade de Aveiro & Instituto de Telecomunicações, Portugal), Rui L Aguiar (University of Aveiro & Instituto de Telecomunicações, Portugal)	. 3664
Routing, Resource Allocation and Models	
Distributed Smart Grid Architecture for Delay and Price Sensitive Power Management	
Neal Master (Stanford University, USA), Jeffrey Mounzer (Stanford University, USA), Nicholas Bambos (Stanford University, USA) Optimal Planning of Power Distribution Communication Network Using Genetic Algorithm	. 3670
· · · · · · · · · · · · · · · · · · ·	
Yue Shi (Beijing University of Posts and Telecommunications, P.R. China), ShaoYong Guo (Beijing University of Posts and Telecommunications & State Key Laboratory of Networking & Switching Technology, P.R. China), Qiu Xue-song (Beijing University of Posts and Telecommunications, P.R. China), Feng Qi (Beijing University of Posts and Telecommunications, P.R. China)	. 3676
Performance and Applicability of Candidate Routing Protocols for Smart Grid's Wireless Mesh Neighbor-Area Networks	- 3. 3
Quang-Dung Ho (McGill University, Canada), Yue Gao (Mcgill University, Canada), Gowdemy Rajalingham (McGill University, Canada), Tho Le-Ngoc (McGill University, Canada)	3682
Stability Metric Based Routing Protocol for Low-Power and Lossy Networks	
Xin Yang (University of Florida, USA), Jianlin Guo (Mitsubishi Electronic Research Laboratories, USA), Philip Orlik (Mitsubishi Electric Research Laboratories, USA), Kieran	
Parsons (Mitsubishi Electric Research Laboratories, USA), Koichi Ishibashi (Mitsubishi Electoric Corp., Japan)	. 3688

Kazi Ashrafuzzaman (University of Calgary, Canada), Abraham O Fapojuwo (University of Calgary, Canada)	3694
Green Core Networks	
Amplifier Placements Optimization for Enhanced Energy Efficiency in Optical Transport Networks Jorge López Vizcaíno (Huawei Technologies Duesseldorf GmbH & Technische Universität Dortmund, Germany), Yabin Ye (Huawei Technologies Duesseldorf GmbH, Germany), Felipe Jiménez (Telefónica I+D, Spain), Peter Krummrich (TU Dortmund & Lehrstuhl fuer Hochfrequenztechnik, Germany)	
Decentralized Caching Strategies for Energy-Efficient Content Delivery	3700
Karla Kvaternik (University of Toronto, Canada), Jaime Llorca (Bell Labs, Alcatel-Lucent, USA), Daniel Kilper (University of Arizona & Center for Integrated Access Networks, USA), Lacra Pavel (University of Toronto, Canada)	3707
Anycast Routing for Carbon Footprint Reduction in WDM Hybrid Power Networks with Data Centers	
Piotr Boryło (AGH University of Science and Technology, Poland), Artur Lason (AGH University of Science and Technology, Poland), Jacek Rzasa (AGH University of Science and Technology, Poland), Andrzej Szymanski (AGH University of Science and Technology, Poland)	
HotPLUZ: A BGP-aware Green Traffic Engineering Approach	
Alejandro Ruiz-Rivera (University of Wollongong, Australia), Kwan-Wu Chin (University of Wollongong, Australia), Raad Raad (University of Wollongong, Australia), Sieteng Soh (Curtin University of Technology, Australia)	3721
Reliable Green Routing Using Two Disjoint Paths	
Gongqi Lin (Curtin University of Technology, Australia), Sieteng Soh (Curtin University of Technology, Australia), Mihai M Lazarescu (Curtin University, Australia), Kwan-Wu Chin (University of Wollongong, Australia)	3727
Networking and Security	
SONETOR: a Social Network Traffic Generator	
César Bernardini (Université de Lorraine & INRIA LORIA, France), Thomas Silverston (Université de Lorraine & LORIA, France), Olivier Festor (INRIA Nancy - Grand Est, France) Exploring the Efficiency and Mechanism of Whistleblowing System on Social Networking Site	3734
Hailiang Wang (Xi'an Jiaotong University, P.R. China), Yadong Zhou (Xian Jiaotong University, P.R. China), Xiaohong Guan (Xi'an Jiaotong University & Tsinghua University, P.R. China)	
An Additional Protection Layer for Confidential OSNs Posts Frederik Armknecht (Université de Bretagne Sud, France), Stefanie Roos (TU Dresden, Germany), Manuel Hauptmann (Uni Mannheim, Germany), Thorsten Strufe (TU Dresden, Germany)	3746
Cognition on the Networked Data of Stochastic Topology	3740
Tzu-Yu Chuang (National Taiwan University, Taiwan), Kwang-Cheng Chen (National Taiwan University, Taiwan)	3753
Cloud Security and Privacy	
Simulation-Based Optimization for Admission Control of Mobile Cloudlets	
Hoang Thai Dinh (Nanyang Technological University, Singapore), Dusit Niyato (Nanyang Technological University, Singapore), Long Bao Le (INRS, University of Quebec, Canada)	3764

Network Anomaly Detection in the Cloud: The Challenges of Virtual Service Migration	
Kirila Adamova (ETH Zurich, Switzerland), Dominik Schatzmann (ETH Zurich &	
Communication Systems Group, Switzerland), Paul Smith (AIT Austrian Institute of	
Technology GmbH, Austria), Bernhard Plattner (ETH Zurich, Switzerland)	3770
A Novel Authenticated Multi-party Key Agreement for Private Cloud	
Tuo He (Xidian University, Singapore), Maode Ma (Nanyang Technological University,	
Singapore), Wenping Ma (Xidian University, P.R. China), Bingsheng He (Nanyang Technological University, Singapore)	3776
Efficient Decentralized Attribute-based Access Control for Cloud Storage with User Revocation	
Jianwei Chen (Beijing University of Posts and Telecommunications, P.R. China), Huadong Ma	
(Beijing University of Posts and Telecommunications, P.R. China)	3782
A Clusterized Firewall Framework for Cloud Computing	
Meng Liu (Nanjing University, P.R. China), Wanchun Dou (Nanjing University, P.R. China), Shui Yu (Deakin University, Australia), Zhensheng Zhang (UCLA, USA)	3788
Energy Efficient Resource Allocation for MIMO	
MISO Information and Power Transfer with Finite-rate Feedback Under Fading Channel	
Chen-Feng Liu (Academia Sinica, Taiwan), Chia-Han Lee (Academia Sinica, Taiwan)	3794
Simultaneous Wireless Information and Energy Transfer for MIMO Relay Channel with Antenna Switching	
Ioannis Krikidis (University of Cyprus, Cyprus), Shigenobu Sasaki (Niigata University, Japan), Stelios Timotheou (University of Cyprus, Cyprus)	
Joint Source and Relay Energy-efficient Resource Allocation for Two-hop MIMO-AF Systems	
Fabien Héliot (University of Surrey, United Kingdom), Muhammad Ali Imran (University of	
Surrey, United Kingdom), Rahim Tafazolli (University of Surrey, United Kingdom)	3806
An Iterative Algorithm for Joint Antenna Selection and Power Adaptation in Energy Efficient MIMO	
Xingyu Zhou (Tsinghua University, P.R. China), Bo Bai (Tsinghua University, P.R. China), Wei	
Energy Efficient Multi-Antenna Downlink Broadcast Transmission	
Ernest Kurniawan (Institute for Infocomm Research, Singapore), Sumei Sun (Institute for Infocomm Research, Singapore)	3817
Internat of Things	
Internet of Things	
Design of a Low-Latency, High-Reliability Wireless Communication System for Control Applications	
Matthew Weiner (UC Berkeley, USA), Milos Jorgovanovic (University of California, Berkeley, USA), Anant Sahai (UC Berkeley, USA), Borivoje Nikolić (UC Berkeley, USA)	3829
On the Energy Savings Achieved Through an Internet of Things Enabled Smart City Trial	
Luis Sanchez (University of Cantabria, Spain), Ignacio Elicegui (Universidad de Cantabria,	
Spain), Javier Cuesta (Universidad de Cantabria, Spain), Luis Muñoz (University of Cantabria	
Spain)	3836
Efficient Neighbor Discovery in RFID Based Devices Over Resource-Constrained DTN Networks	
Danilo Amendola (Sapienza University of Rome, Italy), Floriano De Rango (University of Calabria, Italy), Khalil Massri (SAPIENZA Università di Roma, Italy), Andrea Vitaletti (DIS Sapienza Universita' di Roma, Italy)	3842
Task Allocation in Group of Nodes in the IoT: a Consensus Approach	
Giuseppe Colistra (University of Cagliari, Italy), Virginia Pilloni (University of Cagliari, Italy), Luigi Atzori (University of Cagliari, Italy)	3848

Broadband Access

Energy Efficient Discontinuous Operation in Vectored G.fast	
Jochen Maes (Alcatel-Lucent Bell Labs, Belgium), Carl Nuzman (Bell Labs, Alcatel-Lucent, USA)	3854
How Vectoring in G.fast May Cause Neighborhood Wars	
Eduardo Medeiros (Lund University, Sweden), Thomas Magesacher (Lund University, Sweden), Per-Erik Eriksson (Ericsson Research, Sweden), Chenguang Lu (Ericsson Research, Sweden), Per Ödling (Lund University, Sweden)	3859
Multi-User Parallel Channel Access for High Efficiency Carrier Grade Wireless LANs	
Hanqing Lou (Interdigital, USA), Xiaofei Wang (Interdigital, USA), Juan Fang (Interdigital, USA), Monisha Ghosh (Interdigital, USA), Guodong Zhang (InterDigital Communications Corp., USA), Robert L. Olesen (Interdigital Communications Corp., USA)	3865
Sleep Mode Mechanism with Improved Upstream Performance for Passive Optical Networks	
Jie Li (Centre for Energy-efficient Telecommunications (CEET), The University of Melbourne, Australia), N. Prasanth Anthapadmanabhan (Bell Labs, Alcatel-Lucent, USA), Chien Aun Chan (Centre for Energy-Efficient Telecommunications (CEET) & The University of Melbourne, Australia), Ka Lun Lee (University of Melbourne, Australia), Nga Dinh (Bell Labs Seoul, Korea), Peter Vetter (Alcatel-Lucent, USA)	3871
Scheduling Hybrid WDM/TDM EPONs with Heterogeneous Propagation Delays	
Qianjun Shuai (Communication University of China, P.R. China), Nirwan Ansari (NJIT, USA)	3877
Data Storage	
All-Bit-Line MLC Flash Memories: Optimal Detection Strategies	
Xiujie Huang (Jinan University, P.R. China), Meysam Asadi (University of Hawaii at Manoa, USA), Aleksandar Kavcic (University of Hawaii, USA), Narayana Prasad Santhanam (University of Hawaii at Manoa, USA)	3883
Constrained Coding and Detection for TDMR Using Generalized Belief Propagation	
Seyed Mehrdad Khatami (University of Arizona & Sharif University, USA), Bane Vasić (University of Arizona, USA)	3889
Index Assignment for Multiple Description Repair in Distributed Storage Systems	
Dževdan Kapetanović (Luxembourg University, Luxemburg), Symeon Chatzinotas (University of Luxembourg, Luxemburg), Björn Ottersten (University of Luxembourg, Luxemburg)	3896
Two-layer Locally Repairable Codes for Distributed Storage Systems	2002
Hongmei Xie (Lehigh University, USA), Zhiyuan Yan (Lehigh University, USA)	3902
Ravi Tandon (Virginia Tech, USA), SaiDhiraj Amuru (Virginia Tech, USA), T. Charles Clancy (Virginia Tech, USA), Michael Buehrer (Virginia Tech, USA)	2000
(Virginia Tech, USA), Michael Buenner (Virginia Tech, USA)	3900
Recommendation and Influence	
Influence Maximization in Social Networks with User Attitude Modification	
Songsong Li (Renmin University of China, P.R. China), Yuqing Zhu (California State University, Los Angeles, USA), Deying Li (Renmin University of China, P.R. China), Donghyun Kim (North Carolina Central University, USA), Huan Ma (Renmin University of China, P.R. China), Huang Hejiao (Harbin Institute of Technology, P.R. China)	3913
On Top-N Recommendation Using Implicit User Preference Propagation Over Social Networks Jun Zou (Georgia Institute of Technology, USA), Faramarz Fekri (Georgia Institute of	5713
Technology, USA)	3919

Predicting Social Networks and Psychological Outcomes Through Mobile Phone Sensing	
W. Quin Yow (Singapore University of Technology & Design, Singapore), Xiaoqian Li (Singapore University of Technology and Design, Singapore), Wan-Yu Hung (Singapore University of Technology and Design, Singapore), Megan Goldring (University of Southern	
California, USA), Long Cheng (Singapore University of Technology and Design & Beihang	
University, Singapore), Yu Gu (Singapore University of Technology and Design & Advanced Digital Sciences Center, Singapore)	. 3925
Maximizing Influence Propagation for New Agents in Competitive Environments	
Xiang Zhang (Arizona State University, USA), Dejun Yang (Colorado School of Mines, USA), Guoliang Xue (Arizona State University, USA)	. 3932
A Data-driven Study of Influences in Twitter Communities	
Huy Nguyen (University of Houston, USA), Rong Zheng (McMaster University, Canada)	. 3938
Energy Efficient Resource Allocation for OFDM	
QoS-Guaranteed Energy-Efficient Power Allocation in Downlink Multi-User MIMO-OFDM Systems	
Xiao Xiao (Tsinghua University, P.R. China), Xiaoming Tao (Tsinghua University, P.R. China), Jianhua Lu (Tsinghua University, P.R. China)	. 3945
Energy Saving in OFDMA Cellular Networks with Multi-Objective Optimization	
Prabhu Chandhar (Indian Institute of Technology Kharagpur, India), Suvra Sekhar Das (Indian Institute of Technology Kharagpur, India)	. 3951
Multiple Resource Allocation in OFDMA Downlink Networks: End-to-End Energy-Efficient Approach	
Quansheng Xu (Beijing University of Posts and Telecommunications, P.R. China), Xi Li (Beijing University of Posts and Telecommunications, P.R. China), Hong Ji (Beijing University of Posts and Telecommunications, P.R. China)	. 3957
Reliable and Energy-Efficient OFDM Based on Structured Compressive Sensing	
Linglong Dai (Tsinghua University, P.R. China), Zhaocheng Wang (Tsinghua University, P.R. China), Zhixing Yang (Tsinghua University, P.R. China), Guan Gui (Akita Prefectural	2062
University, Japan), Fumiyuki Adachi (Tohoku University, Japan)	. 3963
Molecular Communication and Networking	
Modeling and Performance Evaluation of Mobile Bionanosensor Networks for Target Tracking	
Yutaka Okaie (Osaka University, Japan), Tadashi Nakano (Osaka University, Japan), Takahiro Hara (Osaka University, Japan), Kazufumi Hosoda (Osaka University, Japan), Yasushi Hiraoka (Osaka University, Japan), Shojiro Nishio (Osaka University, Japan)	. 3969
Decode and Forward Relaying in Diffusion-based Molecular Communication Between Two Populations of Biological Agents	
Arash Einolghozati (Georgia Tech, USA), Mohsen Sardari (Georgia Institute of Technology, USA), Faramarz Fekri (Georgia Institute of Technology, USA)	. 3975
Adaptive Transmission Protocol for Molecular Communications in Cellular Tissues	
Michael Taynnan Barros (Waterford Institute of Technology & TSSG - Telecommunications Software and Systems Group, Ireland), Sasitharan Balasubramaniam (Tampere University of Technology, Finland), Brendan Jennings (Waterford Institute of Technology, Ireland), Yevgeni Koucheryavy (Tampere University of Technology, Finland)	. 3981
A Realistic Channel Model for Molecular Communication with Imperfect Receivers	
Nariman Farsad (York University, Canada), Na-Rae Kim (Yonsei University, Korea), Chan- Byoung Chae (Yonsei University, Korea), Andrew Eckford (York University, Canada)	. 3987
Design and Analysis of a Microfluidic Bus Network with Bypass Channels Andrea Biral (University of Padova, Italy), Andrea Zanella (University of Padova, Italy)	. 3993

Data Center Networking

Dis	istributedNet: A Reasonable Pricing and Flexible Network Architecture for Datacenter	
(Yong Zhan (University of Electronic Science and Technology of China, P.R. China), Du Xu (University of Electronic Science and Technology of China, P.R. China), Yiqi Ou (University of Electronic Science and Technology of China, P.R. China)	3999
	printNet: A High Performance Server-Centric Network Architecture for Data Centers	3333
'- - - - -	Ting Wang (Hong Kong University of Science and Technology, Hong Kong), Zhiyang Su (Hong Kong University of Science and Technology, Hong Kong), Yu Xia (Hong Kong University of Science and Technology, P.R. China), Yang Liu (Hong Kong University of Science & Technology, Hong Kong), Jogesh K. Muppala (Hong Kong University of Science and Technology, Hong Kong), Mounir Hamdi (Hong Kong University of Science and Technology, P.R. China)	4005
	acket-based Load-balancing in Fat-tree Based Data Center Networks	
I	Chunzhi He (The University of Hong Kong, Hong Kong), Kwan Yeung (University of Hong Kong, Hong Kong), Sugih Jamin (University of Michigan, USA)	4011
Ce	repartition: ~A New Paradigm for the Load Balance of Virtual Machine Reservations in Data enters	
	Wenhong Tian (University of Electronic Science and Technology of China, P.R. China), MinXian Xu (University of Electronic Science and Technology, China (UESTC), P.R. China), Yu Chen (University of Electronic Science and Technology, China (UESTC), P.R. China), Yong Zhao (University of Electronic and Science Technology of China, P.R. China)	4017
	Participating Fine-Granular Cloud Computing Platform with In-Network Guidance	
	Hideki Tode (Osaka Prefecture University, Japan), Kento Nishii (Osaka Prefecture University, Japan), Yosuke Tanigawa (Osaka Prefecture University, Japan)	4023
Green Wirele	ess Cellular Deployment	
9	Backhaul Becoming a Bottleneck for Green Wireless Access Networks? Sibel Tombaz (KTH Royal Institute of Technology, Sweden), Paolo Monti (KTH Royal Institute of Technology, Sweden), Fabricio Farias (Federal University of Pará, Brazil), Matteo Fiorani (KTH Royal Institute of Technology, Sweden), Lena Wosinska (KTH Royal Institute of Technology, Sweden)	4020
	Technology, Sweden), Jens Zander (KTH Royal Institute of Technology, Sweden) Dergy Exchange Among Base Stations in a Cellular Network Through the Smart Grid	4029
: !	Johann Leithon (National University of Singapore, Singapore), Teng Joon Lim (National University of Singapore, Singapore), Sumei Sun (Institute for Infocomm Research, Singapore)	4026
	pectral-, Energy-, & Cost-efficient Deployment of Small Cells in a HetNet Topology	4030
 	Hansung Leem (Korea Advanced Institute of Science and Technology, Korea), JaYeong Kim (Korea Advanced Institute of Science and Technology, Korea), Byoung Hoon Jung (Korea Advanced Institute of Science and Technology, Korea), Dan Keun Sung (Korea Advanced Institute of Science and Technology, Korea)	4042
	otimal Microcell Deployment for Effective Mobile Device Energy Saving in Heterogeneous etworks	
-	Kun Wei (Shanghai Research Center for Wireless Communications, P.R. China), Guoqiang Mao (The University of Technology, Sydney, Australia), Wuxiong Zhang (Shanghai Research Center for Wireless Communications, P.R. China), Yang Yang (Shanghai Research Center for Wireless Communications & CAS Shanghai Institute of Microsystem and Information Technology, P.R. China), Zihuai Lin (University of Sydney, Australia), Chung Shue Chen (Alcatel-Lucent Bell Labs, France)	4048
•	otimal Base Station Density for Power Efficiency in Cellular Networks	
(Sanglap Sarkar (Indian Institute of Technology, Madras & IIT-Madras, India), Radha Krishna Ganti (Indian Institute of Technology Madras, India), Martin Haenggi (University of Notre Dame, USA)	4054

Wireless Energy Harvesting

Energy-Harvesting Powered Transmissions of Bursty Data Packets with Strict Deadlines Xiaojing Chen (Fudan University, P.R. China), Xin Wang (Fudan University, P.R. China),	
Yichuang Sun (University of Hertfordshire, United Kingdom) Throughput and Ergodic Capacity of Wireless Energy Harvesting Based DF Relaying Network	4060
Ali A Nasir (Australian National University, Australia), Xiangyun Zhou (The Australian National University, Australia), Salman Durrani (The Australian National University, Australia), Rodney Andrew Kennedy (The Australian National University, Australia)	4066
Impact of Channel State Information on Wireless Energy Harvesting Cooperative Networks with Spatially Random Relays	
Zhiguo Ding (Newcastle University, United Kingdom), Ioannis Krikidis (University of Cyprus, Cyprus), Bayan S Sharif (Khalifa University, UAE), H. Vincent Poor (Princeton University, USA)	4072
Optimal Sensing Scheduling in Energy Harvesting Sensor Networks	
Jing Yang (University of Arkansas, USA)	4077
Distributed Flow Optimization Control for Energy-Harvesting Wireless Sensor Networks	
Kiyoshi Nakayama (University of California, Irvine & Donald Bren School of Information and Computer Sciences, USA), Nga Dang (University of California, Irvine, USA), Lubomir Bic (University of California, Irvine, USA), Michael B Dillencourt (University of California, Irvine, USA), Eli Bozorgzadeh (University of California, Irvine, USA), Nalini Venkatasubramanian	
(University of California, Irvine, USA)	4083
Clustering and Matching	
Graph Clustering Based on Mixing Time of Random Walks	
Konstantin Avrachenkov (INRIA Sophia Antipolis, France), Mahmoud El Chamie (INRIA Sophia Antipolis & Maestro Team - INRIA, France), Giovanni Neglia (INRIA Sophia Antipolis Mediterranee, France)	4089
Analysis of Clustering Coefficients of Online Social Networks by Duplication Models	
Duan-Shin Lee (National Tsing Hua University, Taiwan), Cheng-Shang Chang (National Tsing Hua University, Taiwan), Wen-Gui Ye (National Tsing Hua University, Taiwan), Min-Chien Cheng (National Tsing Hua University, Taiwan)	4005
Scalable and Robust Community Detection Via Proximity-based Cut and Merge	. 4093
Xiang Zhong (The Chinese University of Hong Kong, Hong Kong), Pili Hu (The Chinese University of Hong Kong, Hong Kong), Wing Cheong Lau (The Chinese University of Hong	
Kong, Hong Kong)	4101
A Trace-Driven Analysis on the User Behaviors in Social E-commerce Network	
Zhongwen Luo (China University of Geoscience, P.R. China), Huanhuan Zhu (China University of Geoscience, P.R. China), Deze Zeng (China University of Geosciences, P.R. China), Hong Yao (China University of Geosciences, Wuhan, P.R. China)	4108
Efficient Weight-based Private Matching for Proximity-based Mobile Social Networks	
Xiaoyan Zhu (Xidian University, P.R. China), Jie Liu (Xidian University, P.R. China), Shunrong Jiang (Xidian University, P.R. China), Zengbao Chen (Xidian University, P.R. China), Hui Li (Xidian University, P.R. China)	4114
Selected Areas in Communications Interactive Presentations II	
Exact Optimized-cost Repair in Multi-hop Distributed Storage Networks	
Majid Gerami (KTH (The Royal Institute of Technology), Sweden), Ming Xiao (Royal Institute of Technology, Sweden)	4120

	An Intrusion Detection System for Smart Grid Neighborhood Area Network	
	Nasim Beigi Mohammadi (University of Western Ontario, Canada), Jelena Mišić (Ryerson University, Canada), Hamzeh Khazaei (IBM & Canada Research and Development Center, Canada), Vojislav B. Mišić (Ryerson University, Canada)	4125
	A Mechanism for Detecting Gray Hole Attacks on Synchrophasor Data	
	Seemita Pal (Rensselaer Polytechnic Institute, USA), Huijiang Li (Rensselaer Polytechnic Institute, USA), Biplab Sikdar (Rensselaer Polytechnic Institute, USA), Joe H. Chow (Rensselaer Polytechnic Institute, USA)	4131
	An Optimized Time-Frequency Interleaving Scheme for OFDM-Based Power Line Communication Systems	
	Sicong Liu (Tsinghua University & Research Institute of Information Technology, Tsinghua National Laboratory of Information Science an, P.R. China), Fang Yang (Tsinghua University, P.R. China), Jian Song (Tsinghua University, P.R. China), Jianqi Li (China Electric Power Research Institute, P.R. China), Weilin Liu (State Grid Corporation of China, P.R. China)	4137
	Achievable Rates for Reduced-Complexity Receivers on Nonlinear Satellite Channels with Memory	
	John Peng (University of Virginia, USA), Stephen Wilson (University of Virginia, USA)	4143
	Perfect Match Model Based Link Assignment for Optical Satellite Network	
	Zhe Liu (Shanghai Jiao Tong University, P.R. China), Wei Guo (Shanghai Jiao Tong University, P.R. China), Changlin Deng (Shanghai Jiao Tong University, P.R. China), Weisheng Hu (Shanghai Jiao Tong University, P.R. China), He Chen (Shanghai Institute of Satellite Engineering, P.R. China), Yanbin Zhao (Shanghai Institute of Satellite Engineering, P.R. China), Ming Xia (Ericsson Research US, USA)	4149
	Optical Transmission Schemes for GEO Feeder Links	
	William G Cowley (University of South Australia, Australia), Dirk Giggenbach (German Aerospace Center, Germany), Ramon Mata Calvo (German Aerospace Center, Germany)	4154
	Optimizing Power Normalization for G.fast Linear Precoder by Linear Programming	
	Francisco C. B. F. Müller (Federal University of Para, Brazil), Chenguang Lu (Ericsson Research, Sweden), Per-Erik Eriksson (Ericsson Research, Sweden), Stefan Höst (Lund University, Sweden), Aldebaro Klautau (Universidade Federal do Para, Brazil)	4160
	Resilience in Next Generation Access Networks: Assessment of Survivable TWDM-PONs	
	Elaine Wong (Dept of Electrical and Electronic Engineering & The University of Melbourne, Australia)	4166
	Protocol Parameter Selection for Fiber-Supported IEEE 802.16m Networks	
	Pavlos Sklikas (University of Kent & Broadband and Wireless Communications Group, United Kingdom), Majlinda Mjeku (University of Kent, United Kingdom), Nathan J Gomes (University of Kent, United Kingdom)	4173
	Simulation Supported Estimation of End-to-End Transmission Parameters in Non-Viral Gene Delivery	
	Beata Wysocki (University of Nebraska-Lincoln, USA), Timothy Martin (University of Nebraska-Lincoln, USA), Tadeusz A. Wysocki (University of Nebraska-Lincoln, USA), Angela Pannier (University of Nebraska-Lincoln, USA)	4179
	Rotation-based Privacy-preserving Data Aggregation in Wireless Sensor Networks	
	Xiaoying Zhang (Renmin University of China, P.R. China), Hong Chen (Renmin University of China, P.R. China), Ke Wang (Simon Fraser University, Canada), Hui Peng (Renmin University of China, P.R. China), Yongjian Fan (Renmin University of China, P.R. China), Deying Li (Renmin University of China, P.R. China)	4184
Load and	Performance Management	
	Dynamic Offloading Algorithm in Intermittently Connected Mobile Cloudlet Systems Yang Zhang (Nanyang Technological University, Singapore), Dusit Niyato (Nanyang	
	Technological University, Singapore), Ping Wang (Nanyang Technological University, Singapore), Chen-Khong Tham (National University of Singapore, Singapore)	4190

	Joint Optimization of Task Mapping and Routing for Service Provisioning in Distributed Datacenters	
	Huawei Huang (The University of Aizu, Japan), Deze Zeng (China University of Geosciences, P.R. China), Song Guo (The University of Aizu, Japan), Hong Yao (China University of	4406
	Geosciences, Wuhan, P.R. China)	4196
	Ying Mao (University of Massachusetts Boston, USA), Bo Sheng (University of Massachusetts Boston, USA), Jiayin Wang (University of Massachusetts Boston, USA)	4202
	Load Balancing and Dynamic Scaling of Cache Storage Against Zipfian Workloads	
	Chris Cai (University of Illinois at Urbana-Champaign, USA), Guanfeng Liang (DOCOMO Innovations, USA), Ulas Can Kozat (DOCOMO Innovations, USA)	4208
	A Novel Performance Preserving VM Splitting and Assignment Scheme	
	Liu Liu (University of Electronic Science and Technology of China, P.R. China), Jie Xu (George Mason University, USA), Hongfang Yu (University of Electronic Science and Technology of China, P.R. China), Le Min Li (University of Electronic Science and Technology of China, P.R.	
	China), Chunming Qiao (State University of New York at Buffalo, USA)	4215
Performan	ce, Coexistence and Implementation	
	Utilizing Renewable Energy Resources by Adopting DSM Techniques and Storage Facilities	
	Pedram Samadi (University of British Columbia, Canada), Hamed Mohsenian-Rad (University of California at Riverside, USA), Vincent W.S. Wong (University of British Columbia, Canada), Robert Schober (University of British Columbia, Canada)	4221
	DIRECTOR: A Distributed Communication Transport Manager for the Smart Grid	
	James Wilcox (University of Bristol, United Kingdom), Dritan Kaleshi (University of Bristol, United Kingdom), Mahesh Sooriyabandara (Toshiba Research Europe Limited, United Kingdom)	4227
	An Analysis on Throughput and Feasibility of Narrow-band Power Line Communications in Advanced Distribution Automation Scenarios	7227
	Quang-Dung Ho (McGill University, Canada), Chon-Wang Chao (McGill University, Canada), Mahsa Derakhshani (McGill University, Canada), Tho Le-Ngoc (McGill University, Canada)	4233
	Analysis of Communication Networks for Smart Substations Using a Virtualized Execution Platform	
	Nils Dorsch (TU Dortmund University, Germany), Boguslaw Jablkowski (TU Dortmund University, Germany), Hanno Georg (TU Dortmund University, Germany), Olaf Spinczyk (Technische Universität Dortmund, Germany), Christian Wietfeld (TU Dortmund University & Communication Networks Institute, Germany)	4239
	Fair Energy Scheduling in Vehicle-to-Grid Networks in the Smart Grid	
	Weifeng Zhong (Guangdong University of Technology, P.R. China), Rong Yu (Guangdong University of Technology, P.R. China), Yan Zhang (Simula Research Laboratory and University of Oslo, Norway)	4246
e-Health II		
e-i leaitii ii		
	Privacy-Preserving Community Sensing for Medical Research with Duplicated Perturbation	
	Shunsuke Aoki (University of Tokyo, Japan), Kaoru Sezaki (University of Tokyo, Japan)	4252
	Demonstrating Accountable-eHealth Systems	
	Daniel Grunwell (Queensland University of Technology, Australia), Randike Gajanayake (Queensland University of Technology, Australia), Tony R Sahama (Queensland University of Technology & IEEE ACM IBS ACS SSAInc HISA, Australia)	425 <u>8</u>
	Improving Dental Care Recommendation Systems Using Trust and Social Networks	T4JU
	Sojen Pradhan (University of Technology Sydney, Australia), Valérie Gay (University of	4264
	Technology, Sydney, Australia), Surya Nepal (CSIRO, Australia)	4264

Fall Perception for Elderly Care: A Fall Detection Algorithm in Smart Wristlet mHealth System	
Zhinan Li (Peking University, P.R. China), Anpeng Huang (Peking University, P.R. China), Wenyao Xu (SUNY Buffalo, USA), Wei Hu (Potevio Institute of Technology co., Ltd, P.R. China), LinZhen Xie (Peking University, P.R. China)	4270
Interactive Crowdsourcing to Spontaneous Reporting of Adverse Drug Reactions	1270
Chao Chen (Peking University, P.R. China), Yining Huang (Peking University First Hospital, P.R. China), Yi Liu (Peking University, P.R. China), Chengdong Liu (Peking University, P.R. China), Lingchao Meng (Peking University First Hospital, P.R. China), Yunchuang Sun (Peking University First Hospital, P.R. China), Kaigui Bian (Peking University, P.R. China), Anpeng Huang (Peking University, P.R. China), Xiaohui Duan (Peking University, P.R. China), Bingli Jiao (Peking University, P.R. China)	4275
Energy Efficient Networks and Computing	
Energy Efficient User Grouping and Scheduling for Collaborative Mobile Cloud	
Zheng Chang (University of Jyväskylä, Finland), Tapani Ristaniemi (University of Jyväskylä, Finland), Zhisheng Niu (Tsinghua University, P.R. China)	4281
Dynamic Resource Management in Virtualized Data Centers with Bursty Traffic Martin Valdez-Vivas (Stanford University, USA), Nicholas Bambos (Stanford University, USA), John Apostolopoulos (Cisco Systems, USA)	4287
Coordinating Energy-Efficient CPEs on IEEE 1904.1 Compliant Systems Via ONU for Enhanced Power Savings: Proposal and Demonstration	
Hiroko Nomura (NTT, Japan), Hiroyuki Uzawa (NTT, Japan), Yuki Arikawa (NTT, Japan), Yukikuni Nishida (NTT, Japan), Hirotaka Ujikawa (NTT, Japan), Ken-Ichi Suzuki (NTT, Japan), Naoto Yoshimoto (Chitose Institute of Science and Technology, Japan)	4294
Migration to Energy Efficient Routers: Where to Start?	
Marcel Caria (Technische Universität Carolo-Wilhelmina zu Braunschweig, Germany), Francisco Carpio (TU Braunschweig, Germany), Admela Jukan (Technische Universität Carolo-Wilhelmina zu Braunschweig, Germany), Marco Hoffmann (Nokia Siemens Networks GmbH & Co. KG, Germany)	4300
The Positive Impact of Failures on Energy Efficient Virtual Machines Consolidation	
Andres J Gonzalez (Telenor Research, Norway), Bjarne E. Helvik (Norwegian University of Science and Technology, Norway)	4307
Satellite and Space Communications	
Experimental Evaluation Using Prototype of Autologous Spectrum Regenerating Equalization for Sub-spectrum Suppressed Transmission	
Jun Mashino (NTT, Japan), Jun-ichi Abe (Nippon Telegraph and Telephone Corporation, Japan), Takatoshi Sugiyama (NTT, Japan) Multicarrier LUT-based Data Predistortion for Non-linear Satellite Channels	4313
Roberto Piazza (University of Luxembourg, Luxemburg), Bhavani Shankar Mysore R (Interdisciplinary Centre for Security, Reliability and Trust & University of Luxembourg, Luxemburg), Björn Ottersten (University of Luxembourg, Luxemburg)	4319
Low Complexity Block Pre-Distortion of a Multi-Carrier Non-Linear Satellite Channel	
Thibault Deleu (Université Libre de Bruxelles, Belgium), Mathieu Dervin (Thales Alenia Space, France), François Horlin (Université Libre de Bruxelles, Belgium)	4325
DVB-S2 Spectrum Efficiency Improvement with Hierarchical Modulation	. = =
Hugo Méric (INRIA Chile, Chile), Jose M Piquer (University of Chile, Chile)	4331
A Framework of APSK Constellation Labeling Design for Satellite Transmission Keging Van (Teinghua University, P.P. China), Eng Vang (Teinghua University, P.P. China)	
Keqian Yan (Tsinghua University, P.R. China), Fang Yang (Tsinghua University, P.R. China), Jian Song (Tsinghua University, P.R. China), Fei Ren (Sichuan Changhong Electronic Ltd. Co., P.R. China), Jia Li (Sichuan Changhong Electronic Ltd. Co., P.R. China)	4337

ICC'14 SPC: IEEE ICC 2014 - Signal Processing for Communications Symposium

Cognitive Radio

Multiuse	r Cognitive Relay Networks in the Presence of Direct Links
Trung Univer	Lei (Utah State University, USA), Rose Qingyang Hu (Utah State University, USA), Q. Duong (Queen's University Belfast, United Kingdom), Lisheng Fan (Shantou sity, P.R. China), Maged Elkashlan (Queen Mary, University of London, United
	om) Analysis of Cognitive Relay Networks with Energy Harvesting and Information Transfer
Zihao V Univer China) Liu (Sh	Wang (Shanghai Jiao Tong University, P.R. China), Zhiyong Chen (Shanghai Jiao Tong sity, P.R. China), Ling Luo (Electric Power Research Institute, SMEPC, State Grid, P.R., Zixia Hu (Qualcomm, USA), Bin Xia (Shanghai Jiao Tong University, P.R. China), Huinanghai JiaoTong University, P.R. China)
	e Allocation and Transmission Optimization for MIMO Cognitive Femtocells
Compa China	ang Luan (Tsinghua University & Institute of China Electronic System Engineering any, P.R. China), Feifei Gao (Tsinghua University, P.R. China), Zaichu Yang (Institute of Electronic System Engineering Company, P.R. China), James C. F. Li (NEC Laboratories P.R. China), Ming Lei (NEC Laboratories China, P.R. China)
Opportui	nistic Cognitive Relay with 1-bit Feedback
	ang (University of New South Wales, Australia), Wei Zhang (The University of New Wales, Australia)
Investiga	ation on Cooperative SC-FDE Relaying for Spectrum Sharing
Chih-P	theng Chan (National Taiwan University, Taiwan), Wei-Chieh Huang (RTK, Taiwan), leng Li (National Sun Yat-sen University, Taiwan), Hsueh-Jyh Li (National Taiwan sity, Taiwan)
	n, Equalization and Modeling
Estimatio <i>Innovati</i>	
Estimation Innovation Shih You	n, Equalization and Modeling ve Parallel Equalizer Design for Continuous Phase Modulation Systems u Chang (National Tsing Hua University of Taiwan, Taiwan), Hsiao-Chun Wu (Louisiana Jniversity, USA)
Innovation Shih You State U	n, Equalization and Modeling ve Parallel Equalizer Design for Continuous Phase Modulation Systems u Chang (National Tsing Hua University of Taiwan, Taiwan), Hsiao-Chun Wu (Louisiana University, USA) ualization and Gaussian Sums Particle Filtering Phase Noise Estimation
Innovation Shih You State U Joint Equipedro Portug (Institut	n, Equalization and Modeling ve Parallel Equalizer Design for Continuous Phase Modulation Systems u Chang (National Tsing Hua University of Taiwan, Taiwan), Hsiao-Chun Wu (Louisiana University, USA) ualization and Gaussian Sums Particle Filtering Phase Noise Estimation Pedrosa (Instituto de Telecomunicações - Lisboa & Instituto Superior Tecnico, al), Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal), Fernando Nunes uto Superior Técnico & Instituto de Telecomunicações, Portugal), António J. Rodrigues
Innovation Shih Yo State U Joint Equipment Pedro Portug (Institu	n, Equalization and Modeling ve Parallel Equalizer Design for Continuous Phase Modulation Systems u Chang (National Tsing Hua University of Taiwan, Taiwan), Hsiao-Chun Wu (Louisiana University, USA) ualization and Gaussian Sums Particle Filtering Phase Noise Estimation Pedrosa (Instituto de Telecomunicações - Lisboa & Instituto Superior Tecnico, al), Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal), Fernando Nunes uto Superior Técnico & Instituto de Telecomunicações, Portugal), António J. Rodrigues instituto Superior Técnico, Portugal) annel, Phase Noise, and Carrier Frequency Offset Estimation in Cooperative OFDM
Innovation Shih Yo State U Joint Equ Pedro Portug (Institu (IT / In Joint Cha Systems Omar S (Austra	n, Equalization and Modeling ve Parallel Equalizer Design for Continuous Phase Modulation Systems u Chang (National Tsing Hua University of Taiwan, Taiwan), Hsiao-Chun Wu (Louisiana University, USA) ualization and Gaussian Sums Particle Filtering Phase Noise Estimation Pedrosa (Instituto de Telecomunicações - Lisboa & Instituto Superior Tecnico, al), Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal), Fernando Nunes uto Superior Técnico & Instituto de Telecomunicações, Portugal), António J. Rodrigues instituto Superior Técnico, Portugal) annel, Phase Noise, and Carrier Frequency Offset Estimation in Cooperative OFDM
Innovation Shih Yestate U Joint Equipment (Institution (IT / In Joint Charse) Omars (Austra Austra	n, Equalization and Modeling ve Parallel Equalizer Design for Continuous Phase Modulation Systems u Chang (National Tsing Hua University of Taiwan, Taiwan), Hsiao-Chun Wu (Louisiana University, USA) ualization and Gaussian Sums Particle Filtering Phase Noise Estimation Pedrosa (Instituto de Telecomunicações - Lisboa & Instituto Superior Tecnico, al), Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal), Fernando Nunes uto Superior Técnico & Instituto de Telecomunicações, Portugal), António J. Rodrigues instituto Superior Técnico, Portugal) annel, Phase Noise, and Carrier Frequency Offset Estimation in Cooperative OFDM Salim, Omar (University of Southen Queensland & USQ, Australia), Ali A Nasir alian National University, Australia), Wei Xiang (University of Southern Queenslan, lia), Rodney Andrew Kennedy (The Australian National University, Australia) Earns Profit: Improved Adaptive Channel Estimation using Sparse VSS-NLMS
Innovation Shih Yill State U Joint Equ Pedro Portug (Institu (IT / In Joint Cha Systems Omar S (Austra Austra Variable Algorithm Guan (China)	n, Equalization and Modeling ve Parallel Equalizer Design for Continuous Phase Modulation Systems u Chang (National Tsing Hua University of Taiwan, Taiwan), Hsiao-Chun Wu (Louisiana University, USA) ualization and Gaussian Sums Particle Filtering Phase Noise Estimation Pedrosa (Instituto de Telecomunicações - Lisboa & Instituto Superior Tecnico, al), Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal), Fernando Nunes uto Superior Técnico & Instituto de Telecomunicações, Portugal), António J. Rodrigues enstituto Superior Técnico, Portugal) annel, Phase Noise, and Carrier Frequency Offset Estimation in Cooperative OFDM Salim, Omar (University of Southen Queensland & USQ, Australia), Ali A Nasir alian National University, Australia), Wei Xiang (University of Southern Queenslan, lia), Rodney Andrew Kennedy (The Australian National University, Australia) Earns Profit: Improved Adaptive Channel Estimation using Sparse VSS-NLMS ms Gui (Akita Prefectural University, Japan), Linglong Dai (Tsinghua University, P.R. , Shinya Kumagai (Tohoku University, Japan), Fumiyuki Adachi (Tohoku University,
Innovation Shih Yill State U Joint Equipment (Institut (IT / In Joint Chas Systems Omar S (Austra Austra Variable Algorithm Guan (China) Japan)	n, Equalization and Modeling ve Parallel Equalizer Design for Continuous Phase Modulation Systems u Chang (National Tsing Hua University of Taiwan, Taiwan), Hsiao-Chun Wu (Louisiana University, USA) ualization and Gaussian Sums Particle Filtering Phase Noise Estimation Pedrosa (Instituto de Telecomunicações - Lisboa & Instituto Superior Tecnico, al), Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal), Fernando Nunes uto Superior Técnico & Instituto de Telecomunicações, Portugal), António J. Rodrigues instituto Superior Técnico, Portugal) annel, Phase Noise, and Carrier Frequency Offset Estimation in Cooperative OFDM Salim, Omar (University of Southen Queensland & USQ, Australia), Ali A Nasir alian National University, Australia), Wei Xiang (University of Southern Queenslan, lia), Rodney Andrew Kennedy (The Australian National University, Australia) Earns Profit: Improved Adaptive Channel Estimation using Sparse VSS-NLMS ins Gui (Akita Prefectural University, Japan), Linglong Dai (Tsinghua University, P.R.
Innovation Shih Yestate U Joint Equation Pedro Portug (Institution (IT / In Joint Charses) Omar Section (Austra Austra Variable Algorithm Guan (China) Japan) Co-primer Giong	n, Equalization and Modeling ve Parallel Equalizer Design for Continuous Phase Modulation Systems u Chang (National Tsing Hua University of Taiwan, Taiwan), Hsiao-Chun Wu (Louisiana University, USA) ualization and Gaussian Sums Particle Filtering Phase Noise Estimation Pedrosa (Instituto de Telecomunicações - Lisboa & Instituto Superior Tecnico, al), Rui Dinis (Instituto de Telecomunicações - FCT-UNL, Portugal), Fernando Nunes uto Superior Técnico & Instituto de Telecomunicações, Portugal), António J. Rodrigues nstituto Superior Técnico, Portugal) annel, Phase Noise, and Carrier Frequency Offset Estimation in Cooperative OFDM Salim, Omar (University of Southen Queensland & USQ, Australia), Ali A Nasir alian National University, Australia), Wei Xiang (University of Southern Queenslan, lia), Rodney Andrew Kennedy (The Australian National University, Australia) Earns Profit: Improved Adaptive Channel Estimation using Sparse VSS-NLMS ms Gui (Akita Prefectural University, Japan), Linglong Dai (Tsinghua University, P.R. , Shinya Kumagai (Tohoku University, Japan), Fumiyuki Adachi (Tohoku University,

Signal Detection and Synchronization

Real-Time Passive Capturing of the GSM Radio	
Islam Alyafawi (University of Bern, Switzerland), Desislava Dimitrova (University of Bern, Switzerland), Torsten Ingo Braun (University of Bern, Switzerland)	4401
Performance Evaluation of Eigenvalue-based Detection Strategies in a Sensor Network	
Eric Ayeh (University of North Texas, USA), Kameswara Rao Namuduri (University of North Texas, USA), Xinrong Li (University of North Texas, USA)	4407
WiFi Leakage Detection in LTE Downlink for In-Device Interference Avoidance	
Xue Li (Samsung Information Systems America R&D Center & IEEE Member, Member of Society of Women Engineers, USA), Bill Plumb (MediaTek Inc., USA), Zhiqiang Wu (Wright State University, USA)	4412
Low Complexity Signal Detection Employing Multi-Stream Constrained Search for MIMO Communications	
Katsuya Kato (SHARP corporation, Japan), Kazuhiko Fukawa (Tokyo Institute of Technology, Japan), Ryota Yamada (SHARP corporation, Japan), Hiroshi Suzuki (Tokyo Institute of Technology, Japan), Naoki Okamoto (SHARP corporation, Japan)	4418
Inter-symbol Interference Analysis of Synaptic Channel in Molecular Communications	
Qiang Liu (University of Electronic Science and Technology of China, P.R. China), Peng He (University of Electronic Science and Technology of China, P.R. China), Kun Yang (University of Essex, United Kingdom), Supeng Leng (University of Electronic Science and Technology of China, P.R. China)	4424
Cooperative Signal Processing I	
Imperfect CSI Based Two-Way AF MIMO Relaying of OSTBC	
Arti Mk (Indian Institute of Technology - Delhi, India), Manav Bhatnagar (Indian Institute of Technology Delhi, India)	4430
Generalized Signal Alignment For MIMO Two-Way X Relay Channels	
Kangqi Liu (Shanghai Jiao Tong University, P.R. China), Meixia Tao (Shanghai Jiao Tong University, P.R. China), Zhengzheng Xiang (Shanghai Jiao Tong University, P.R. China), Xin Long (Shanghai Jiao Tong University, P.R. China)	4436
An Improved Two-Way Training for Discriminatory Channel Estimation via semiblind approach	
Junjie Yang (Gangdong University of Technology, P.R. China), Rong Yu (Guangdong University of Technology, P.R. China), Xiangyun Zhou (The Australian National University, Australia), Yan Zhang (Simula Research Laboratory and University of Oslo, Norway)	4442
Joint Cooperative Relaying and Jamming for Maximum Secrecy Capacity in Wireless Networks	
Li Wang (Beijing University of Posts and Telecommunications, P.R. China), Chunyan Cao (BUPT, P.R. China), Mei Song (Beijing University of Posts and Telecommunications, P.R. China), Yu Cheng (Illinois Institute of Technology, USA)	4448
Joint Relay and Antenna Selection for Full-Duplex AF Relay Networks	
Kun Yang (Peking University, P.R. China), Hongyu Cui (Peking University, P.R. China), Lingyang Song (Peking University, P.R. China), Yonghui Li (University of Sydney, Australia)	4454
Massive MIMO	
Multiuser Detection for Uplink Large-scale MIMO under One-Bit Quantization	
Wang Shengchu (Tsinghua University, P.R. China), Yunzhou Li (Tsinghua University, P.R. China), Jing Wang (Tsinghua University, P.R. China)	4460
Robust BF in Large-Scale Antenna Systems with Imperfect Channel State Information	
Min Lin (PLA University of Science and Technology & Southeast University, P.R. China), Jian Ouyang (Institute of Signal Processing and Transmission, Nanjing University of Posts and Telecommunications, P.R. China), Wei-Ping Zhu (Concordia University, P.R. China), Yongming	
Huang (Southeast University, P.R. China)	4466

Multi-cell H-inf Precoding in Massive MIMO Systems	
Peng Xu (University of Kent, United Kingdom), Jiangzhou Wang (University of Kent, United	
Kingdom), Jinkuan Wang (P.O.Box120 Northeastern Qinhuangdao City Hebei Province P.R.	
Chinia, P.R. China), Feng Qi (Advanced Science Institute, RIKEN, Japan)	4472
Antenna Grouping based Feedback Reduction for FDD-based Massive MIMO Systems	
Byungju Lee (Korea University, Korea), Byonghyo Shim (Korea University, Korea), David Love (Purdue University, USA), Junil Choi (Purdue University, USA), Ji-Yun Seol (Samsung	
Electronics, Korea)	4477
Bridging the Gap Between Linear and Non-Linear Precoding in Small- and Large-Scale MIMO Downlinks	
Christos Masouros (University College London, United Kingdom), Mathini Sellathurai (Heriot-Watt University, United Kingdom), Tharmalingam Ratnarajah (The University of Edinburgh, United Kingdom)	4483
Cooperative Signal Processing II	
Optimum Power and Time Allocation for Cooperative Relaying Protocol	
Zijian Mo (SUNY at Buffalo, USA), Weifeng Su (State University of New York at Buffalo, USA), Stella Batalama (State University of New York (SUNY) at Buffalo, USA), John Matyjas (AFRL Rome/NY, USA)	
Linear-mapping Based Cooperative Relaying Protocol Design with Optimum Power and Time Allocation	
Zijian Mo (SUNY at Buffalo, USA), Weifeng Su (State University of New York at Buffalo, USA), Stella Batalama (State University of New York (SUNY) at Buffalo, USA), John Matyjas (AFRL Rome/NY, USA)	
Differential Modulation for Amplify-and-Forward Two-Way Relaying with Carrier Offsets	
Zhuo Wu (Shanghai University, P.R. China), Guangxiang Li (Shanghai University, P.R. China), Tao Wang (Shanghai University, P.R. China)	
Secrecy Rate Study in Two-Hop Relay Channel with Finite Constellations	
Zhen Qu (Shenzhen University, P.R. China), Shengli Zhang (Shenzhen University, P.R. China), Mingjun Dai (Shenzhen University, P.R. China), Hui Wang (Shenzhen University, P.R. China)	4507
Equalizing Multihop OFDM Relay Channel under Unknown Channel Orders and Doppler Frequencies	
Jingrong Zhou (The University of Hong Kong & Sun Yat-Sen University, P.R. China), Yik- Chung Wu (The University of Hong Kong, Hong Kong), Rui Min (The University of Hong Kong, Hong Kong), JiaYin Qin (Sun Yat-Sen University, P.R. China)	4512
Compressive Sensing and Compressive Sampling	
Iterative Detection for Compressive Sensing: Turbo CS	
Amin Movahed (University of New South Wales, Australia), Mark C Reed (University of New South Wales, Australia)	4518
Sparse Channel Estimation for OFDM Based Two-Way Relay Networks	-
Nina Wang (Wireless Center, Institute of Computing Technology, Chinese Academy of	
Sciences, P.R. China), Yongtao Su (Institute of Computing Technology, Chinese Academy of Science, P.R. China), Jinglin Shi (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China), Yiqing Zhou (Chinese Academy of Science, P.R. China), Guan Gui (Akita Prefectural University, Japan)	4524
Soft Consistency Reconstruction: A Robust 1-bit Compressive Sensing Algorithm	7JZ 7
Xiao Cai (Zhejiang University, P.R. China), Zhaoyang Zhang (Zhejiang University, P.R.	
China), Huazi Zhang (Zhejiang University, P.R. China), Chunguang Li (Zhejiang University, P.R. China), Chunguang Li (Zhejiang University, P.R. China)	4530

	Spatio-Temporal Estimation with Bayesian Maximum Entropy and Compressive Sensing in Communication Constrained Networks	
	Sutharshan Rajasegarar (University of Melbourne, Australia), Christopher Leckie (University of Melbourne, Australia), Marimuthu Palaniswami (University of Melbourne, Australia)	. 4536
	Efficient Channel Estimation Using Expander Graph based Compressive Sensing	
	Junjie Pan (Zhejiang University, P.R. China), Feifei Gao (Tsinghua University, P.R. China)	4542
Topics in	Signal Processing in Communication and Other Emerging Systems	
	MMSE Interference Estimation in LTE Networks	
	Federico Penna (Samsung MSL, USA), Slawomir Stanczak (Fraunhofer Heinrich Hertz Institute & Technische Universität Berlin, Germany), Zhe Ren (BMW Group Research and Technology, Germany), Peter Fertl (BMW Group Research and Technology, Germany)	. 4548
	Bayesian Joint Detections For 60GHz Millimeter-wave Communications With the Power Amplifier Nonlinearity	
	Bin Li (Beijing University of Posts and Telecommunications & Key Lab of Universal Wireless Communications, MOE, P.R. China), Zheng Zhou (Beijing University of Posts and Telecommunications, P.R. China), Chenglin Zhao (Beijing University of Posts and Telecommunications, P.R. China), Arumugam Nallanathan (King's College London, United Kingdom)	4553
	Capacity Analysis of Finite Scatterer MIMO Wireless Channels	
	Shangbin Wu (Heriot-Watt University, United Kingdom), Chengxiang Wang (Heriot-Watt University, United Kingdom), Ai Bo (Beijing Jiaotong University, P.R. China), Yejun He (Shenzhen University, P.R. China)	. 4559
	Modeling of Amplitude-Correlated and Occurrence-Dependent Impulsive Noise for Power Line Communication	
	Jun Yin (University of Liverpool, United Kingdom), Xu Zhu (University of Liverpool, United Kingdom), Yi Huang (University of Liverpool, United Kingdom)	4565
	Low-Complexity Frequency Synchronization for ICA Based Semi-Blind CoMP Systems with ICI and Phase Rotation Caused by Multiple CFOs	
	Yufei Jiang (University of Liverpool, United Kingdom), Xu Zhu (University of Liverpool, United Kingdom), Eng Gee Lim (Xi'an Jiaotong-Liverpool University, P.R. China), Yi Huang (University of Liverpool, United Kingdom), Hai Lin (Osaka Prefecture University, Japan)	. 4571
	Network Formation Games for the Link Selection of Cooperative Localization in Wireless Networks	
	Zijun Zhao (Peking University, P.R. China), Rongqing Zhang (Colorado State University, USA), Xiang Cheng (Peking University, P.R. China), Liuqing Yang (Colorado State University, USA), Bingli Jiao (Peking University, P.R. China)	. 4577
	A General Analytical Framework of Scheduling Algorithms for Network Navigation	
	Tianheng Wang (MIT, USA), Yuan Shen (Massachusetts Institute of Technology, USA), Moe Win (Massachusetts Institute of Technology, USA)	4583
	Minimum-Distortion Data Embedding in Video Streams	
	Ming Li (Dalian University of Technology, P.R. China), Ngwe Thawdar (University at Buffalo, USA), Dimitris A. Pados (The State University of New York at Buffalo, USA), Stella N. Batalama (State University of New York at Buffalo, USA), Michael Medley (Air Force Research Laboratory, USA)	. 4589
	Two-Step Wireless Positioning Technique by Exploitation of Extended Reference Nodes	
	Yu He (University of Western Ontario, Canada), Xianbin Wang (The University of Western Ontario, Canada), Weikun Hou (The University of Western Ontario, Canada)	. 4595
	Separate-Combine Recovery for Compressed Sensing of Large Images	
	Yan Lin (Harbin Institute of Technology, P.R. China), Shaohua Wu (Harbin Institute of Technology, P.R. China), Jia Yu (Harbin Institute of Technology Shenzhen Graduate School, P.R. China), Xiaodong Lin (University of Ontario Institute of Technology, Canada)	4601
	Linear and Non-linear Transceiver Processing for MIMO-FBMC Systems	001
	Madushanka Soysa (University of California San Diego, USA), Premanandana Rajatheva	4607

Design Algorithm of Relative Magnitude Coefficients using Brent's Method on the K-User MIMO- IFC	
Kunitaka Matsumura (Keio University, Japan), Tomoaki Ohtsuki (Keio University, Japan)	4613
Antonio Bolognino (Politecnico di Milano, Italy), Umberto Spagnolini (Politecnico di Milano, Italy)	4620
SIMO and MIMO Systems I	
Data-Aided Channel Estimation in Large Antenna Systems	
Junjie Ma (City University of Hong Kong, Hong Kong), Li Ping (City University of Hong Kong, Hong Kong)	4626
Novel Algorithm for Prediction of Wideband Mobile MIMO Wireless Channels	4020
Ramoni O. Adeogun (Victoria University of Wellington, New Zealand), Paul D Teal (Victoria University of Wellington, New Zealand), Pawel A. Dmochowski (Victoria University of Wellington, New Zealand)	4632
Least-Squares Iterative PAR Reduction for Point-to-Point Large-Scale MIMO-OFDM Systems	
Abdul Wakeel (Jacobs University Bremen, Germany), Werner Henkel (Jacobs University Bremen, Germany)	4638
Diversity Effects in the Estimation of a Gauss-Markov Process Over a Fading Channel	1030
Reza Parseh (Norwegian University of Science and Technology, Norway), Kimmo Kansanen (Norwegian University of Science and Technology, Norway)	4644
Dynamic Channel Estimation and Power Allocation for Wireless Power Beamforming Gang Yang (Nanyang Technological University, Singapore), Chin Keong Ho (Institute for	
Infocomm Research, A*STAR, Singapore), Yong Liang Guan (Nanyang Technological University, Singapore)	4650
OFDM and Multi-carrier Systems	
Comparison of Direct Sequence Spread Spectrum Rake Receiver with a Maximum Ratio	
Combining Multicarrier Spread Spectrum Receiver	
Daryl Leon Wasden (University of Utah, USA), Hussein Moradi (Idaho National Laboratory, USA), Behrouz Farhang-Boroujeny (University of Utah, USA)	4656
Adaptive Self-sustainable OFDM Communications	
Marco Maso (Singapore University of Technology and Design, Singapore), Subhash Lakshminarayana (Singapore University of Technology and Design (SUTD), Singapore), Tony Q. S. Quek (Singapore University of Technology and Design (SUTD) & Institute for Infocomm Research, Singapore)	1667
On Inter-cell Interference Factor In the Uplinks of Multicell Planar Networks	4002
Jing Zhang (HUST, P.R. China), Yili Xin (Huazhong University of Science and Technology, P.R.	
China), Tao Han (Huazhong University of Science and Technology, P.R. China), Minho Jo (Korea University, Korea), Qiang Li (Huazhong University of Science and Technology, P.R.	
China), Tao Han (Huazhong University of Science and Technology, P.R. China), Minho Jo (Korea University, Korea), Qiang Li (Huazhong University of Science and Technology, P.R. China), Ge Xiaohu (Huazhong University of Science & Technology, P.R. China)	4669
China), Tao Han (Huazhong University of Science and Technology, P.R. China), Minho Jo (Korea University, Korea), Qiang Li (Huazhong University of Science and Technology, P.R. China), Ge Xiaohu (Huazhong University of Science & Technology, P.R. China) Exploiting Cyclic Prefix for Joint Detection, Decoding and Channel Estimation in OFDM via EM Algorithm and Message Passing Jindan Yang (University of Western Australia, Australia), Qinghua Guo (University of Wollongong, Australia), Defeng Huang (University of Western Australia, Australia), Nordholm	
China), Tao Han (Huazhong University of Science and Technology, P.R. China), Minho Jo (Korea University, Korea), Qiang Li (Huazhong University of Science and Technology, P.R. China), Ge Xiaohu (Huazhong University of Science & Technology, P.R. China) Exploiting Cyclic Prefix for Joint Detection, Decoding and Channel Estimation in OFDM via EM Algorithm and Message Passing Jindan Yang (University of Western Australia, Australia), Qinghua Guo (University of	

Adaptive Antennas and Beamforming

Guangxu Zhu (Zhejiang University, P.R. Chir China), Himal A Suraweera (University of Per University, P.R. China), Chau Yuen (Singapor	radeniya, Sri Lanka), Zhaoyang Zhang (Zhejiang
Transmit Beamforming for Multiuser Downlink	
	(in Wang (Fudan University, P.R. China), Yu Zhu 4692
Transmit Power Minimization Beamforming via Networks with Multiple Eavesdroppers	Amplify-and-Forward Relays in Wireless
Bai (Beihang University, P.R. China), Haige A (Gwangju Institute of Science and Technolog), Chen Chen (Peking University, P.R. China), Lin Kiang (Peking University, P.R. China), Jinho Choi ıy (GIST), Korea)
Multicast Multigroup Beamforming under Per-a	
(University of Luxembourg, Luxemburg), Bjö	bourg & SnT, Luxemburg), Symeon Chatzinotas orn Ottersten (KTH Royal Institute of Technology, 4704
Secrecy in MIMOME Wiretap Channels: Beamfo	
Chenxi Liu (University of New South Wales, A University, Australia), Giovanni Geraci (Singa Singapore), Jinhong Yuan (University of New	apore University of Technology and Design,
	Min Sheng (Xidian University, P.R. China), Feifei 4717
Dominik Auras (RWTH Aachen University, Ge University, Germany), Gerd H. Ascheid (RWT	ermany), Rainer Leupers (RWTH Aachen TH Aachen University, Germany)4722
Spatial DCT-Based Least Square Estimation in	
Maha Alodeh (SnT, Luxemburg), Symeon Ch Luxemburg), Björn Ottersten (University of L	
PAPR Constrained Power Allocation for Iterative	
Valtteri T Tervo (University of Oulu, Finland)	, Antti Tölli (University of Oulu, Finland), Juha Tadashi Matsumoto (CWC - Oulu, Finland)4735
Impact of Residual Transmit RF Impairments o	•
Xinlin Zhang (Chalmers University of Techno University Belfast, United Kingdom), Mikael (Sweden), Emil Björnson (Linköping Universit	
ICC'14 WCS: IEEE ICC 2014 - Wireless Cor Cooperative Communications - Uplink and Resource	mmunications Symposium

Error Probability Bounds for Interference-Limited Cooperative Networks

Melbourne, Australia), Jamie Evans (Monash University, Australia)

Rajitha Senanayake (University of Melbourne, Australia), Phee Lep Yeoh (University of

	RAN Architecture	
	Yinan Qi (University of Surrey, United Kingdom), Muhammad Ali Imran (University of Surrey, United Kingdom), Atta Ul Quddus (University of Surrey, United Kingdom), Rahim Tafazolli (University of Surrey, United Kingdom)	4753
	Power Allocation for CoMP System with Backhaul Limitation	
	Jia Yu (Harbin Institute of Technology Shenzhen Graduate School, P.R. China), Ye Wang (University of Ontario Institute of Technology, Canada), Xiaodong Lin (University of Ontario Institute of Technology, Canada), Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, P.R. China)	4759
	Coordinated Resource Allocation with Vertical Beamforming in 3D MIMO-OFDMA Networks Weidong Zhang (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, P.R. China), Ying Wang (Beijing University of Posts and Telecommunications, P.R. China), Peilong Li (BUPT, P.R. China)	
	Optimal Energy and Spectrum Sharing for Cooperative Cellular Systems	1705
	Yinghao Guo (National University of Singapore, Singapore), Jie Xu (National University of Singapore, Singapore, Singapore), Lingjie Duan (Singapore University of Technology and Design (SUTD), Singapore), Rui Zhang (National University of Singapore, Singapore)	4771
Massive M	IMO I	
	Massive MIMO Multicasting in Noncooperative Multicell Networks	
	Zhengzheng Xiang (Shanghai Jiao Tong University, P.R. China), Meixia Tao (Shanghai Jiao Tong University, P.R. China), Xiaodong Wang (Columbia University, USA)	4777
	Massive MIMO Transmission with Pilot Reuse in Single Cell	
	Li You (Southeast University, P.R. China), Xiqi Gao (Southeast University, P.R. China), Xiang- Gen Xia (University of Delaware, USA), Ni Ma (Huawei Technologies Co., Ltd., P.R. China), Yan Peng (Huawei Technologies Co., Ltd., P.R. China)	4783
	Convex Optimization based Multiuser Detection for Uplink Large-scale MIMO under Low- Resolution Quantization	
	Wang Shengchu (Tsinghua University, P.R. China), Yunzhou Li (Tsinghua University, P.R. China), Jing Wang (Tsinghua University, P.R. China)	4789
	On the Design of Hybrid Limited Feedback for Massive MIMO systems	
	Hengzhi Wang (Zhejiang University, P.R. China), Wei Wang (Zhejiang University, P.R. China), Zhaoyang Zhang (Zhejiang University, P.R. China)	4795
	Zero-forcing Beamforming in Massive MIMO Systems with Time-Shifted Pilots Shi Jin (Southeast University, P.R. China), Xiaoyu Wang (Southeast University, P.R. China), Zheng Li (Southeast University, P.R. China), Kai-Kit Wong (University College London, United Kingdom)	4801
Relaying I	g,	
	Multipair Massive MIMO Full-Duplex Relaying with MRC/MRT Processing	
	Hien Quoc Ngo (Linkoping University, Sweden), Himal A Suraweera (University of Peradeniya, Sri Lanka), Michail Matthaiou (Queen's University Belfast, United Kingdom), Erik G. Larsson (Linköping University, Sweden)	4807
	Opportunistic Space-Time Coding to Exploit Cooperative Diversity in Fast-Fading Channels	
	Wei Jiang (University of Duisburg-Essen, Germany), Hanwen Cao (Universität Duisburg-Essen, Germany), Thomas Kaiser (Universität Duisburg-Essen, Germany)	4814
	Network Coded Power Adaptation Scheme in Non-orthogonal Multiple-Access Relay Channels	
	Sha Wei (Shanghai Jiaotong University, P.R. China), Jun Li (University of Sydney, Australia), Wen Chen (Shanghai Jiao Tong University, P.R. China)	4820

Hui Gao (Be University o Technology	User Scheduling Scheme for MIMO Multi-way Relay Channel eijing University of Posts and Telecommunications, P.R. China), Yuan Ren (Beijing of Posts and Telecommunications, P.R. China), Chau Yuen (Singapore University of and Design, Singapore), Tiejun Lv (Beijing University of Posts and Dications, P.R. China)	4826
	Analysis of Decode-and-Forward Dual-Hop Opportunistic Relaying With Power	. 1020
	niversity of Western Ontario, Canada), Aydin Behnad (The University of Western nada), Xianbin Wang (The University of Western Ontario, Canada)	. 4832
mmWave and UWB I		
Vinod Kriste (University	Determination of UWB Ranging Errors in an Outdoor Environment em (University of Southern California, USA), Somasundaram Niranjayan of Southern California, USA), Seun Sangodoyin (University of Southern California, eas Molisch (Mitsubishi Electric Research Laboratory, USA)	. 4838
Calibration of Annealing	Indoor UWB Sub-band Divided Ray Tracing Using Multiobjective Simulated	
(Graz Unive Leitinger (G Technology _, Witrisal (Gr	ian (FTW, Telecommunications Research Center Vienna, Austria), Paul Meissner Prisity of Technology, Austria), Francesco Mani (TELECOM ParisTech, France), Erik Praz University of Technology, Austria), Markus Fröhle (Chalmers University of Sweden), Claude Oestges (Université Catholique de Louvain, Belgium), Klaus Prisity of Technology, Austria), Thomas Zemen (FTW Telecommunications Penter Vienna, Austria)	. 4844
Orbital-Angula Yan Yan (Ur California, U (University USA), Chan Southern Ca Tur (Tel Avi	n of 8-Mode 32-Gbit/s Millimeter-Wave Free-Space Communication Link using 4 ar-Momentum Modes on 2 Polarizations niversity of Southern California, USA), Guodong Xie (University of Southern USA), Hao Huang (University of Southern California, USA), Martin Lavery of Glasgow, United Kingdom), Nisar Ahmed (University of Southern California, gjing Bao (University of Southern California, USA), Yongxiong Ren (University of alifornia, USA), Andreas Molisch (University of Southern California, USA), Moshe v University, Israel), Miles Padgett (University of Glasgow, United Kingdom), Alan versity of Southern California, USA)	. 4850
Communication		
NYU-Poly, L University 8 <i>73 GHz Millim</i>	NYU WIRELESS & NYU-Poly, USA), George R MacCartney, Jr. (NYU WIRELESS & USA), Shu Sun (NYU WIRELESS & NYU-Poly, USA), Theodore Rappaport (New York NYU WIRELESS, USA) A NYU WIRELESS, USA) Beter Wave Propagation Measurements for Outdoor Urban Mobile and Backhaul	. 4856
George R M	ons in New York City acCartney, Jr. (NYU WIRELESS & NYU-Poly, USA), Theodore Rappaport (New York A NYU WIRELESS, USA)	. 4862
Heterogeneous Networ	ks I	
	Filled Subframes for Optimum Operation of Co-Channel LTE HetNets	
Lucent, Irel	era (Bell Labs, Alcatel-Lucent Ltd., Ireland), David López-Pérez (Bell Labs Alcatel- and)	. 4868
Networks	cheme Towards Downlink Traffic Load Balance in Heterogeneous Cellular	
Mähönen (R	TH Aachen University & Institute for Networked Systems, Germany), Petri WTH Aachen University, Germany), Marina Petrova (RWTH Aachen University,	. 4875

	Small Cell Dynamic TDD Transmissions in Heterogeneous Networks	
	Ming Ding (Sharp Laboratories of China, P.R. China), David López-Pérez (Bell Labs Alcatel- Lucent, Ireland), Ruiqi Xue (Shanghai Jiao Tong University, P.R. China), Athanasios V. Vasilakos (National Technical University of Athens & Kuwait University, Greece), Wen Chen	
	(Shanghai Jiao Tong University, P.R. China)	4881
	A Bargaining Game Based Access Network Selection Scheme for HetNet	
	Yi-Shing Liou (National Chiao Tung University, Taiwan), Rung-Hung Gau (National Chiao Tung University, Taiwan), Chung-Ju Chang (National Chiao Tung University, Taiwan)	4888
	Efficient Resource Optimization for Heterogeneous Smart-Building Networks	
	Zijie Zheng (Peking University, P.R. China), Tianyu Wang (Peking University, P.R. China), Lingyang Song (Peking University, P.R. China), Zhu Han (University of Houston, USA)	4894
MIMO I		
	An Enhanced Multi-User Eigen Transmission Scheme for Cell-Edge Performance Improvement Huan Sun (Bell Labs & Alcatel-Lucent Shanghai Bell Co., Ltd., P.R. China), Jiayi Zhang	
	(National Institute of Standards and Technology, USA), Yubo Yang (Alcatel Shanghai Bell, P.R. China)	4900
	Simple Turbo MIMO Scheme Using Arithmetic Extended Mapping and Repetition Codes	1300
	Keisuke Yamamoto (Hitachi, Ltd., Japan), Takashi Yano (Hitachi, Ltd., Japan), Takehiko Kobayashi (HItachi Kokusai Electric Inc., Japan)	4905
	Linear Interference Suppression with Covariance Mismatches in MIMO-OFDM Downlink	
	Chien-Chun Cheng (National Chiao Tung University, Taiwan), Serdar Sezginer (Sequans, France), Hikmet Sari (École Supérieure d'Électricité (SUPELEC), France), Yu T. Su (National Chiao Tung University, Taiwan)	4910
	Outage Performance of Space Diversity Systems with Nth-Best Receive Antenna Selection and Co-Channel Interference	
	Anas M. Salhab (King Fahd University of Petroleum & Minerals, Saudi Arabia), Salam A. Zummo (KFUPM, Saudi Arabia)	4916
	Linear Transceiver Design for Full-Duplex Multi-User MIMO System	
	Shenghong Li (The HONG KONG University of Science and Technology, Hong Kong), Ross Murch (HKUST, Hong Kong), Vincent Lau (Hong Kong University of Science and Technology, Hong Kong)	4921
		1521
Spectrum	Sensing and Cognitive Networks I	
	Modeling Hidden Collision in Dynamic Spectrum Access to CSMA/CA networks	
	Marouane Sebgui (Mohammed V university Agdal, Mohammadia School of Engineering, LEC Laboratory, Morocco), Jalal N Almhana (Universite de Moncton, Canada), Slimane Bah (Ecole Mohammadia des Ingenieurs (EMI) & Mohammed V University, Morocco), Zikuan Liu (Universite de Moncton, Canada), Belhaj El Graini (Ecole Mohammadia d'Ingénieurs, Morocco)	4927
	Adaptive Channel Access in Spectrum Database-Driven Cognitive Radio Networks	4327
	Yi Liu (Guangdong University of Technology, Singapore), Rong Yu (Guangdong University of Technology, P.R. China), Miao Pan (Texas Southern University, USA), Yan Zhang (Simula	
	Research Laboratory and University of Oslo, Norway)	4933
	Detecting the Greedy Spectrum Occupancy Threat in Cognitive Radio Networks	
	Songjun Ma (Shanghai Jiao Tong University, P.R. China), Yunfeng Peng (Shanghai Jiao Tong University, P.R. China), Tao Wang (Peking University, P.R. China), Xiaoying Gan (Shanghai Jiao Tong University, P.R. China), Feng Yang (Shanghai Jiaotong University, P.R. China), Xiaoying Gan (Shanghai Jiao Tong University,	4000
	Xinbing Wang (Shanghai Jiaotong University, P.R. China), Mohsen Guizani (QU, USA)	4939

	Energy-efficient Cooperative Spectrum Sensing and Transmission in Multi-channel Cognitive Radio Networks	
	Jules Merlin Mouatcho Moualeu (University of the Witwatersrand, South Africa), Telex Magloire Nkouatchah Ngatched (Grenfell Campus - Memorial University of Newfoundland, Canada), Walaa Hamouda (Concordia University, Canada), Fambirai Takawira (University of the Witwatersrand, South Africa)	4
	Multiple-Antenna Signal Detection in Cognitive Radio Networks with Multiple Primary User Signals	т.
	Raymond Hall Yip Louie (Hong Kong University of Science and Technology, Hong Kong), Matthew R McKay (Hong Kong University of Science and Technology, Hong Kong), Yang Chen (University of Macau, Macao)	4'
ergy l	Efficienct Communications	
	Energy-Efficient Transmission of Delay-Limited Bursty Data Packets under Non-Ideal Circuit Power Consumption	
	Zheng Nan (Fudan University, P.R. China), Xin Wang (Fudan University, P.R. China), Wei Ni (CSIRO, Australia)	4
	Energy-Efficient Antenna Selection and Power Allocation in Downlink Distributed Antenna Systems: A Stochastic Optimization Approach	
	Yuzhou Li (Xidian University, P.R. China), Min Sheng (Xidian University, P.R. China), Yan Zhang (Xidian University, P.R. China), Xijun Wang (Xidian University, P.R. China), Juan Wen (Xidian University, P.R. China)	4
	Energy Efficient Cooperative Network Localization	
	Wenhan Dai (Massachusetts Institute of Technology, USA), Yuan Shen (Massachusetts Institute of Technology, USA), Moe Win (Massachusetts Institute of Technology, USA)	4
	Energy Efficiency in Wireless Cooperative Caching Networks	
	Chenchen Yang (Shanghai Jiao Tong University, P.R. China), Zhiyong Chen (Shanghai Jiao Tong University, P.R. China), Yao Yao (Huawei Technologies Co., Ltd., P.R. China), Bin Xia (Shanghai Jiao Tong University, P.R. China), Hui Liu (Shanghai JiaoTong University, P.R. China)	4
	Delay-QoS-Driven Spectrum and Energy Efficiency Tradeoff	
	Leila Musavian (Lancaster University, United Kingdom), Qiang Ni (Lancaster University, United Kingdom)	4
ting	and Scheduling	
	Improving Small Cell Capacity with Common-Carrier Full Duplex Radios	
	Sanjay Goyal (Polytechnic Institute of New York University, USA), Pei Liu (Polytechnic School of Engineering, New York University, USA), Shivendra Panwar (Polytechnic Institute of New York University, USA), Robert A. DiFazio (InterDigital Communications Corp., USA), Rui Yang (Interdigital, USA), Jialing Li (Qualcomm Technologies Inc., USA), Erdem Bala (InterDigital, USA)	4
	Multi-user Scheduling Schemes for Simultaneous Wireless Information and Power Transfer	
	Rania Morsi (Friedrich-Alexander-University Erlangen-Nuremberg, Germany), Diomidis S. Michalopoulos (University of Erlangen-Nuremberg & Institute for Digital Communications, Germany), Robert Schober (University of British Columbia, Canada)	4
	Opportunistic Downlink Scheduling with Fair Resource Sharing for Distributed Antenna Systems Xin Ge (The University of British Columbia, Canada), Hu Jin (Hanyang University, Korea),	
	Victor CM Leung (The University of British Columbia, Canada)	5
	Multicell Coordinated Scheduling with Multiuser ZF beamforming Min Li (Masquario University, Australia), Chunchan Liu (Masquario University, Australia), Jain	
	Min Li (Macquarie University, Australia), Chunshan Liu (Macquarie University, Australia), Iain B. Collings (CSIRO, Australia), Stephen Hanly (Macquarie University, Australia)	5

F	the CDF-Based Scheduling for Multi-Cell Uplink Networks Hu Jin (Hanyang University, Korea), Bang Chul Jung (Gyeongsang National University, Korea), Victor CM Leung (The University of British Columbia, Canada)	5012
Relaying: Nor	n-regenerative Relaying	
M M	lay Selection of Nonregenerative Secure Relay Networks MinChul Ju (KookMin University, Korea), Kyu-Sung Hwang (Kyungil University, Korea), Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)	5018
Rol	bust Filter and Forward Relay Beamforming with Spherical Channel State Information certainties	
R	Saeideh Mohammadkhani (Iran University of Science & Technology, Iran), S. Mohammad Razavizadeh (Iran University of Science & Technology (IUST), Iran), Inkyu Lee (Korea University, Korea)	5023
Мал	ximizing End-to-End Capacity of MIMO Nonregenerative Relay Networks Via Time Scheduling d Subchannel Pairing	
Т	Mao Yan (Southwest Jiaotong University, P.R. China), Yang Liu (Lehigh University, USA), iffany Jing Li (Lehigh University, USA), Qingchun Chen (Southwest Jiaotong University, P.R. China)	5029
Sel	lective DF Relaying in Multi-Relay Networks With Different Modulation Levels	
C	Hamza Umit Sokun (Carleton University, Canada), Akram Bin Sediq (Carleton University, Canada), Salama Said Ikki (Lakehead University & Electrical Engineering Department, Canada), Halim Yanikomeroglu (Carleton University, Canada)	5035
I/Q	Imbalance in Two-Way AF Relaying: Power Allocation and Performance Analysis	
	ingya Li (Chalmers University of Technology, Sweden), Michail Matthaiou (Queen's University Selfast, United Kingdom), Tommy Svensson (Chalmers University of Technology, Sweden)	5042
Estimation an	d Detection I	
	rm-Based Joint Transmit/Receive Antenna Selection Aided and Two-Tier Channel Estimation sisted STSK Systems	
K	Peichang Zhang (UOS, United Kingdom), Sheng Chen (University of Southampton, United Kingdom), Chen Dong (University of Southampton, United Kingdom), Li Li (University of Southampton, United Kingdom), Lajos Hanzo (University of Southampton, United Kingdom)	5049
Сог	mpressive Sensing Based Estimation of OFDM Nonlinear Distortion	
Т	Abolfazl Ghassemi (University of Tehran, Iran), Hazhir Ghasemnezhad (Shiraz University of Fechnology & SKED / Shahid Bahonar University, Iran), T. Aaron Gulliver (University of Victoria, Canada)	5055
	-prime Sampling for Higher-Order Statistics with Application to LTE Channel Estimation	
Д	Qiong Wu (University of Texas at Arlington, USA), Qilian Liang (University of Texas at Arlington, USA)	5060
	timal Selection of Pilot Positions for Frequency Domain Pilot Multiplexing Channel Estimation SC-FDE	
C	diaowen Wen (Peking University, P.R. China), Xiang Cheng (Peking University, P.R. China), Chengxiang Wang (Heriot-Watt University, United Kingdom), Miao Wang (Beijing Jiaotong University, P.R. China), Bingli Jiao (Peking University, P.R. China)	5066
Opa	timum Designs for High Mobility Systems with Channel Estimation Errors	

Recent Advances in MIMO and OFDM

Sequential Convex Programming for Full-Duplex Single-User MIMO Systems	
Sean Huberman (McGill University, Canada), Tho Le-Ngoc (McGill University, Canada)	5078
Joint GSVD-SVD Precoding and Power Allocation for Security of AF MIMO Relay Networks	
Hui-Ming Wang (Xi'an Jiaotong University, P.R. China), Feng Liu (Xi'an Jiaotong University, P.R. China), Pengcheng Mu (Xi'an Jiaotong University, P.R. China)	5083
Analysis of BER and Capacity for Dual-hop OFDM Relay System with Subcarrier Mapping in Nakagami-m Fading	
Raza Ali Shah (ICT, SET, Asian Institute of Technology (AIT) & National Institute of Technology (NII), Tokyo, Thailand), Premanandana Rajatheva (University of Oulu, Finland), Yusheng Ji (National Institute of Informatics, Japan)	5089
Super-Cell From Inner Sectors of Active Antenna System (AAS) - Vertical Sectorization	
Dereje Woldemedhin Kifle (Nokia Solutions and Networks, Germany), Bernhard Wegmann (Nokia Solutions and Networks, Germany), Petri Eskelinen (Magister Solutions Ltd., Finland), Ingo Viering (Nomor Research GmbH, Germany), Anja Klein (TU Darmstadt, Germany)	5095
CSI-RS Design for 3D MIMO in Future LTE-Advanced	
Yang Song (DOCOMO Beijing Communications Laboratories Co., Ltd., P.R. China), Satoshi Nagata (NTT DoCoMo, Inc., Japan), Huiling Jiang (DOCOMO Beijing Communications Laboratories Co., Ltd., P.R. China), Lan Chen (NTT DOCOMO, Japan)	5101
Low-Complexity layered BP-based Detection and Decoding for a NB-LDPC Coded MIMO System	
Ali Haroun (Telecom Bretagne, France), Charbel Abdel Nour (Institut Telecom - Telecom Bretagne, France), Matthieu Arzel (Telecom Bretagne, France), Christophe Jego (IMS CNRS Laboratory & IPB ENSEIRB-MATMECA, France)	5107
Fibonacci Sequence and Cascaded Directed Relay Networks with Time-Division-Duplex Constraint Feng Liu (Shanghai Maritime University, P.R. China), Xiaofeng Wang (Shanghai Maritime	
University, P.R. China), Liansun Zeng (Shanghai Maritime University, P.R. China)	5113
Load Diversity Based Processing Resource Allocation for Super Base Stations in Large-scale Centralized Radio Access Networks	
Zhai Guowei (Institue of Computing Technology, Chinese Academy of Sciences, P.R. China), Lin Tian (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China), Yiqing Zhou (Chinese Academy of Science, P.R. China), Jinglin Shi (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)	5119
Decentralizing the Optimal Multi-cell Beamforming via Large System Analysis	
Hossein Asgharimoghaddam (University of Oulu & Center for Wireless Communication, Finland), Antti Tölli (University of Oulu, Finland), Premanandana Rajatheva (University of Oulu, Finland)	E12E
Oulu, Finland) Outage and Energy Efficiency Tradeoff for Multi-Flow Cooperative Communication Systems	5125
Bo Bai (Tsinghua University, P.R. China), Wei Chen (Tsinghua University, P.R. China), Zhigang Cao (Tsinghua University, P.R. China), Khaled B. Letaief (The Hong Kong University of Science and Technology, Hong Kong)	5131
Distributed Weighted Sum-Rate Maximization in Multicell MU-MIMO OFDMA Downlink	5151
Mirza Golam Kibria (Kyoto University & Graduate School of Informatics, Japan), Hidekazu Murata (Kyoto University, Japan), Jun Zheng (Southeast University, P.R. China)	5137
Adaptive RTT-Driven Transport-Layer Flow and Error Control Protocol for QoS Guaranteed Image Transmission Over Multi-Hop Underwater Wireless Networks: Design, Implementation, and Analysis	
Ping Wang (Texas A&M University, Department of Electrical and Computer Engineering, USA), Jiahao Li (Texas A&M University, USA), Xi Zhang (Texas A&M University, ECE Department, USA)	5142
1	· -

Cooperative Communications - Transmission Technologies

Interference due to Null Space Mismatch in Cooperative Multipoint MIMO Cellular Networks Alexandros Manolakos (Stanford University, USA), Yair Noam (Bar Ilan University, Israel),	F1.40
Andrea Goldsmith (Stanford University, USA)	5148
Yuanming Shi (The Hong Kong University of Science and Technology, Hong Kong), Jun Zhang (The Hong Kong University of Science and Technology, Hong Kong), Khaled B. Letaief (The Hong Kong University of Science and Technology, Hong Kong)	5154
Analysis of Non-Coherent Joint-Transmission Cooperation in Heterogeneous Cellular Networks	
Ralph Tanbourgi (Karlsruhe Institute of Technology (KIT), Germany), Sarabjot Singh (The University of Texas at Austin, USA), Jeffrey Andrews (The University of Texas at Austin, USA), Friedrich K. Jondral (Karlsruhe Institute of Technology, Germany)	
Location-Aware Coordinated Multipoint Transmission in OFDMA Networks	
Ahmed Hamdi Sakr (University of Manitoba, Canada), Hesham ElSawy (King Abdullah University of Science and Technology (KAUST), Saudi Arabia), Ekram Hossain (University of Manitoba, Canada)	5166
Successive Interference Cancellation in Downlink Cooperative Cellular Networks	
Daniel Jaramillo-Ramirez (Orange Labs & Supélec, France), Marios Kountouris (Supélec, France), Eric Hardouin (Orange Labs, France)	5172
Massive MIMO II	
Multi-timescale Interference Mitigation for Massive MIMO Cellular Networks	
An Liu (Hong Kong University of Science and Technology, Hong Kong), Vincent Lau (Hong Kong University of Science and Technology, Hong Kong), Rongdao Yu (Huawei Technologies CO., LTD., P.R. China), Martin Liu (Huawei Technologies CO., LTD., P.R. China)	5178
Uplink Power Control with MMSE Receiver in Multi-Cell MU-Massive-MIMO Systems	
Kaifeng Guo (RWTH Aachen University & Institute for Communication Technologies and Embedded Systems, Germany), Yan Guo (RWTH Aachen University & Faculty of Electrical Engineering and Information Technology, Germany), Gabor Fodor (Ericsson Research & Royal Institute of Technology (KTH), Sweden), Gerd H. Ascheid (RWTH Aachen University, Germany)	E10 <i>1</i>
On the Convergence of Massive MIMO Systems	3104
Peter J Smith (The University of Canterbury, New Zealand), Callum Neil (Victoria University of Wellington, New Zealand), Mansoor Shafi (Telecom New Zealand, New Zealand), Pawel A. Dmochowski (Victoria University of Wellington, New Zealand)	5191
User Grouping and Scheduling for Large Scale MIMO Systems with Two-Stage Precoding	
Yi Xu (Auburn University, USA), Guosen Yue (NEC Laboratories America, Inc., USA), Narayan Prasad (NEC Labs America, Princeton, USA), Sampath Rangarajan (NEC Labs America, USA), Shiwen Mao (Auburn University, USA)	5197
Evaluation of 30 Gbps Super High Bit Rate Mobile Communications Using Channel Data in 11 GHz band 24x24 MIMO Experiment	019,
Satoshi Suyama (NTT DOCOMO, INC., Japan), Jiyun Shen (NTT DOCOMO, INC., Japan), Hiroshi Suzuki (Tokyo Institute of Technology, Japan), Kazuhiko Fukawa (Tokyo Institute of Technology, Japan), Yukihiko Okumura (NTT DOCOMO, INC., Japan)	5203
Modulation and Coding	
Wireless Index Coding Through Rank Minimization	
Jonathan I Tamir (University of California, Berkeley, USA), Ethan R Elenberg (The University of Texas at Austin, USA), Anurag Banerjee (University of Texas at Austin, USA), Sriram Vishwanath (University of Texas Austin, USA)	5209

Spectrally-Efficient FDMA-CPM Systems		
AUCOM International Consulting Telecomm,	M. Aulin (Chalmers University of Technology & , Sweden), Baoming Bai (Xidian University, P.R.	5215
Joint Blind Frame Synchronization and Encode		0210
Tian Xia (Louisiana State University, USA),	Hsiao-Chun Wu (Louisiana State University, USA), ity of Taiwan, Taiwan)	5221
A New Filter-Bank Multicarrier System for QAI		
	oonchang Choi (Yonsei University, Korea), td., Korea), Daesik Hong (Yonsei University, orea)	5227
LDPC Code Optimization with Joint Source-Ch Signals		
Reza Asvadi (University of Oulu & Cenetr fo Matsumoto (Japan Advanced Institute of Sc	r Wireless Communications (CWC), Finland), Tad ience and Technology, Japan), Markku Juntti	5233
Device to Device Communications		
Interference Pricing for Device-to-Device Com	nmunications	
Yuan Liu (South China University of Techno University of Technology, P.R. China)	logy, P.R. China), Suili Feng (South China	5239
Interference Constrained Device-to-Device Co	ommunications	
Institute of Technology & Department of Co (University of Houston, USA), Slimane Ben	echnology, Sweden), Guowang Miao (KTH, Royal ommunications Systems, Sweden), Zhu Han Slimane (KTH Royal Institute of Technology,	5245
	vice Multi-Hop Routing for 5G Cellular Networks	00
Joongheon Kim (USC and Intel, USA), Andre	eas Molisch (University of Southern California,	5251
Power Control for Device-to-Device Communi		
University, USA), Lijun Qian (Prairie View A	University, USA), Xiangfang Li (Prairie View A&M &M University, USA), Zhu Han (University of	5257
	Device-to-device Cooperative Relays Underlaying	3237
	eek Networks, USA)	5263
Heterogeneous Networks II		
Power Controlled System Revenue Maximizati Networks	ion in Large-scale Heterogeneous Cellular	
of Technology, P.R. China), Yuan Wu (Zheji	ogy, P.R. China), Cheng Qian (Zhejiang University ang University of Technology, P.R. China), chnology, P.R. China)	5269
Energy Efficient Uplink Resource Allocation in	_	
(University of Waterloo, Canada), Weihua Z	t Qatar, Qatar), Amila Tharaperiya Gamage 'huang (University of Waterloo, Canada), Sherman	F275
	ag of Cognitive Heterogeneous Collular Naturals	52/5
•	ng of Cognitive Heterogeneous Cellular Networks 1), Tomoaki Ohtsuki (Keio University, Japan)	5281

	Interference Alignment with Combined Receivers For Heterogeneous Networks Refik Ustok (Victoria University of Wellington, New Zealand), Mansoor Shafi (Telecom New Zealand, New Zealand), Pawel A. Dmochowski (Victoria University of Wellington, New Zealand), Peter J Smith (The University of Canterbury, New Zealand)	5287
	Rotating Clustering with Simulated Annealing User Scheduling for Coordinated Heterogeneous MIMO Cellular Networks	
	Hakimeh Purmehdi (University of Alberta, Canada), Robert C. Elliott (University of Alberta / Telecommunications Research Laboratories, Canada), Witold A. Krzymień (University of Alberta / TRLabs, Canada), Jordan Melzer (TELUS Communications, Canada)	5293
MIMO II		
	On the MIMO Capacity with Residual Transceiver Hardware Impairments	
	Xinlin Zhang (Chalmers University of Technology, Sweden), Michail Matthaiou (Queen's University Belfast, United Kingdom), Emil Björnson (Linköping University, Sweden), Mikael Coldrey (Ericsson Research & Ericsson AB, Sweden), Mérouane Debbah (Supelec, France)	5299
	Linear MIMO Precoding in Jointly-Correlated Fading Multiple Access Channels with Finite Alphabet Signaling	
	Yongpeng Wu (University Erlangen-Nurnberg, Germany), Chao-Kai Wen (National Sun Yatsen University, Taiwan), Chengshan Xiao (Missouri University of Science and Technology, USA), Xiqi Gao (Southeast University, P.R. China), Robert Schober (Universität Erlangen-Nürnberg, Germany)	5306
	An accurate frame error rate approximation of coded diversity systems with non-identical diversity branches	3300
	Gang Wang (University of Arkansas, USA), Jingxian Wu (University of Arkansas, USA), Yahong Rosa Zheng (Missouri University of Science and Technology, USA)	5312
	Multi-User MIMO across Small Cells	0011
	Danny Finn (Trinity College Dublin & CTVR Telecomunications Research Centre, Ireland), Hamed Ahmadi (Trinity College Dublin, Ireland), Andrea F. Cattoni (Aalborg University, Denmark), Luiz DaSilva (Trinity College, Ireland)	5318
	Recursive Spatial Multiplexing with a Capacity-Limited Feedback Channel	
	Nour Mansour (University of Kassel, Germany), Dirk Dahlhaus (University of Kassel, Germany), Ibrahim Asghar Shah (University of Kassel, Germany), Thomas Hunziker (Lucerne University of Applied Sciences and Arts, Switzerland)	5325
Spectrum	Sensing and Cognitive Networks II	
	A Novel Interference-Aware, Optimal Gain Adaptation Policy For a Non-regenerative, Underlay Cognitive Radio Relay	
	B. Sainath (Indian Institute of Science, India), Neelesh B. Mehta (Indian Institute of Science, India)	5330
	Utilization of LTE-A Uplink Resource for Cognitive Radio Network via Matching and Quantizing	
	Xinwei Fei (Tsinghua University, P.R. China), Bo Bai (Tsinghua University, P.R. China), Wei Chen (Tsinghua University, P.R. China), Xin Guo (Sony (China) Ltd., P.R. China)	5336
	Pricing and Power Allocation in Sensing-based Cognitive Femtocell Networks	
	Qiaoqiao Zhou (Beijing University of Posts and Telecommunications, P.R. China), Zhong Chen (The 28th Research Institute of China Electronics Technology Group Corporation, P.R. China), Feifei Gao (Tsinghua University, P.R. China), James C. F. Li (NEC Laboratories China, P.R. China)	E242
	China), Ming Lei (NEC Laboratories China, P.R. China) Ergodic Capacity of Cognitive TAS/GSC Relaying in Nakagami-m Fading Channels	3342
	Yansha Deng (Queen Mary, University of London, United Kingdom), Lifeng Wang (Queen Mary, University of London, United Kingdom), Maged Elkashlan (Queen Mary, University of	
	London, United Kingdom), Kyeong Jin Kim (Mitsubishi Electric Research Laboratories (MERL), USA), Trung Q. Duong (Queen's University Belfast, United Kingdom)	5348

	Cognitive Spectrum Access in Two-Tier Femtocell Networks	
	Lu Yang (The Hong Kong University of Science and Technology, Hong Kong), Shenghui Song (The Hong Kong University of Science and Technology, Hong Kong), Khaled B. Letaief (The Hong Kong University of Science and Technology, Hong Kong)	5354
	5 5 , 3,,	
Energy Ha	arvesting and Energy Efficiency	
	Multiuser communications with energy harvesting transmitters	
	Maria Gregori (CTTC, Spain), Miquel Payaró (CTTC, Spain)	5360
	A Harvest-Use-Store Mode for Energy Harvesting Communication Systems with Optimal Power Policy	
	Fangchao Yuan (Nanjing University of Posts and Telecommunications, P.R. China), Keith Q. T. Zhang (Nanjing University of Posts and Telecommunications, P.R. China), Shi Jin (Southeast University, P.R. China), Hongbo Zhu (Nanjing University of Posts and Telecommunications, P.R. China)	5366
	Green Opportunistic Access for Cognitive Radio Networks: A Minority Game Approach	
	Mouna Elmachkour (ENSIAS, Morocco), Imane Daha Belghiti (University Sidi Mohammed Ben Abdellah-Fes, Morocco), Essaid Sabir (ENSEM/GREENTIC UH2C & ENSEM, Morocco), Abdellatif Kobbane (ENSIAS, University Mohammed V-Souissi & ENSIAS, Morocco), Jalel Ben-Othman (University of Paris 13, France)	5272
	Interference Aided Energy Harvesting in Decode-and-Forward Relaying Systems	33/2
	Yanju Gu (INRS-EMT, University of Quebec, Canada), Sonia Aïssa (INRS, University of Quebec, Canada)	5378
	Energy Efficiency Tradeoff in Downlink and Uplink TDD OFDMA with Simultaneous Wireless Information and Power Transfer	
	Cong Xiong (Georgia Institute of Technology, USA), Lu Lu (Georgia Institute of Technology, USA), Geoffrey Li (Georgia Tech, USA)	5383
Physical L	ayer Security	
,		
	Secure Layered Transmission in Multicast Systems with Wireless Information and Power Transfer	
	Derrick Wing Kwan Ng (Friedrich-Alexander-University Erlangen-Nürnberg, Germany), Robert Schober (University of British Columbia, Canada), Hussein Alnuweiri (Texas A&M University, Qatar)	5389
	Secure MISO Wiretap Channels with Multi-Antenna Passive Eavesdropper via Artificial Fast Fading	
	Hui-Ming Wang (Xi'an Jiaotong University, P.R. China), Tong-Xing Zheng (Xi'an Jiaotong Unviersity, P.R. China), Pengcheng Mu (Xi'an Jiaotong University, P.R. China)	5396
	Secrecy Wireless Information and Power Transfer in Fading Wiretap Channel	
	Hong Xing (King's College London & National University of Singapore, United Kingdom), Liang Liu (National University of Singapore, Singapore), Rui Zhang (National University of Singapore, Singapore)	5402
	Secrecy Outage Probability of Amplify-and-Forward Transmission with Multi-antenna Relay in Presence of Eavesdropper	
	Kyu-Sung Hwang (Kyungil University, Korea), MinChul Ju (KookMin University, Korea)	5408
	A Novel Anti-Spoofing Method Based on Particle Filter for GNSS	
	Shuai Han (Harbin Institute of Technology, P.R. China), Desi Luo (Harbin Institute of Technology, P.R. China), Weixiao Meng (Harbin Institute of Technology, P.R. China), Cheng Li (Memorial University of Newfoundland, Canada)	5413

Relaying: Regenerative Relaying

	Low Complexity Power Allocation Scheme for Regenerative Multi-user Relay Networks	
	Arvind Chakrapani (Samsung R&D, India), Robert Malaney (University of New South Wales, Australia), Jinhong Yuan (University of New South Wales, Australia)	. 5419
	Analysis on Two-Cell Shared Relay Networks With Linear Receivers	
	Kasun T. Hemachandra (University of Alberta, Canada), Norman Beaulieu (University of Alberta, Canada)	5426
	Distributed Precoding for Two-Way Relaying with OFDM	
	Hongzhong Yan (University Of Saskatchewan, Canada), Ha Nguyen (University of Saskatchewan, Canada), Jian Su (University of Saskatchewan, Canada)	. 5432
	Subband Division for Gaussian Relay Channel	
	Zhengchuan Chen (Tsinghua University, P.R. China), Pingyi Fan (Tsinghua University, P.R. China), Khaled B. Letaief (The Hong Kong University of Science and Technology, Hong Kong)	. 5438
	AF Turbo-Coded Selective Relaying with Imperfect Channel State Information	
	Jules Merlin Mouatcho Moualeu (University of the Witwatersrand, South Africa), Walaa Hamouda (Concordia University, Canada), Fambirai Takawira (University of the Witwatersrand, South Africa)	5443
mmWaye	and UWB II	
IIIIIIVave		
	Linear MU-MIMO Pre-coding Algorithms for a Millimeter Wave Communication System Using Hybrid Beam-forming	
	Richard A. Stirling-Gallacher (Samsung Research America - Dallas & Samsung Telecommunications America, USA), Md Saifur Rahman (Samsung Research America - Dallas & Samsung Information Systems America, USA)	. 5449
	Millimeter Wave Wireless Transmissions at E-band Channels with Uniform Linear Antenna	
	Arrays: Beyond the Rayleigh Distance	
	Peng Wang (The University of Sydney, Australia), Yonghui Li (University of Sydney, Australia), Xiaojun Yuan (ShanghaiTech University, P.R. China), Lingyang Song (Peking University, P.R. China), Branka Vucetic (The University of Sydney, Australia)	. 5455
	Distance-Aware Multi-Carrier (DAMC) Modulation in Terahertz Band Communication	
	Chong Han (Georgia Institute of Technology, USA), Ian F. Akyildiz (Georgia Institute of Technology, USA)	. 5461
	Millimeter Wave Multi-beam Antenna Combining for 5G Cellular Link Improvement in New York City	
	Shu Sun (NYU WIRELESS & NYU-Poly, USA), George R MacCartney, Jr. (NYU WIRELESS & NYU-Poly, USA), Mathew Samimi (NYU Poly, USA), Shuai Nie (NYU WIRELESS & NYU-Poly, USA), Theodore Rappaport (New York University & NYU WIRELESS, USA)	. 5468
	Joint Estimation of the Time Delay and the Clock Drift and Offset Using UWB signals	
	Achraf Hassan Mallat (Université catholique de Louvain, Belgium), Luc Vandendorpe (University of Louvain, Belgium)	5474
D0D 0	and December Management	
DZD COMI	nunications and Resource Management	
	Optimal Power Allocation in Channel Estimation for Spatial Modulation	
	Xiping Wu (University of Edinburgh, United Kingdom), Marco Di Renzo (French National Center for Scientific Research (CNRS), France), Harald Haas (The University of Edinburgh, United Kingdom)	5481
	Energy-Efficiency of Multi-hop Device-to-Device Communications Underlaying Cellular Networks	. 5701
	Lili Wei (Intel Corporation, USA), Rose Qingyang Hu (Utah State University, USA), Qian (Clara) Li (Intel Corporation, USA), Geng Wu (Intel Corporation, USA)	5486
	A STATE OF A TITLE COLD OF ACTION, OUR AND A VIOLENCE COLD OF ACTION, OUR AND ASSESSMENT OF A STATE	

	Energy-Efficient Power and Subcarrier Allocation in Multiuser OFDMA Networks	
	Yuning Wang (BUPT, P.R. China), Jianhua Zhang (Beijing University of Posts and Telecommunications, P.R. China), Ping Zhang (Wireless Technology Innovation Lab, Beijing University of Posts and Telecommunications, P.R. China)	5492
	An Efficient Transmission Strategy in 802.11 MAC in Wireless Delay-Tolerant Sensor Network	0
	Xiaoli Zhou (University of Ottawa, Canada), Azzedine Boukerche (University of Ottawa, Canada)	5497
	Device-to-Device Communication in Cellular Networks with Fractional Frequency Reuse	
	Huiling Zhu (University of Kent, United Kingdom), Jiangzhou Wang (University of Kent, United Kingdom)	5503
	Rate and Power Adaptation for Physical-Layer Network Coding with M-QAM Modulation	
	Fanzhao Wang (Northeastern University China, P.R. China), Qingyang Song (Northeastern University, P.R. China), Shiqiang Wang (Imperial College London, United Kingdom), Lei Guo (Northeastern University, P.R. China)	5508
	Relay Selection with Feedback Beamforming Information for NLoS 60GHz MmWave WLANs/ WPANs	
	Hongyun Chu (Southeast University, P.R. China), Pingping Xu (Southeast University, P.R. China)	5514
	Highly Efficient Multi-Hop Transmission Using Intra-Flow Interference Cancellation and MRC	
	Jingze Dai (The University of Electro-Communications, Japan), Yasushi Yamao (The University of Electro-Communications, Japan)	5520
	Subcarrier and Power Optimization for Device-to-Device Underlay Communication using Auction Games	
	Chen Xu (Peking University, P.R. China), Lingyang Song (Peking University, P.R. China), Dalin Zhu (NEC Laboratories China, P.R. China), Ming Lei (NEC Laboratories China, P.R. China)	5526
	Low Complexity Power Allocation for Device-to-Device Communication Underlaying Cellular Networks	
	Wentao Zhao (Nanjing University, P.R. China), Shaowei Wang (Nanjing University, P.R. China)	5532
	When Accumulative Information is Beneficial for Maximizing Energy Efficiency?	
	Chuting Yao (Beihang University, P.R. China), Zhikun Xu (China Mobile Research Institute, P.R. China), Tingting Liu (Beihang University, P.R. China), Chenyang Yang (Beihang University, P.R. China)	5538
	Realizing Wireless Power Transfer in Cellular Networks	5550
	Kaibin Huang (Dept. of Electrical and Electronic Engineering, The University of Hong Kong, Hong Kong), Vincent Lau (Hong Kong University of Science and Technology, Hong Kong)	5544
Cooperativ	ve Communications	
	Differential Capacity Bounds for Distributed Antenna Systems under Low SNR Conditions	
	Ying He (Macquarie University and Institute of Comuting Technology Chinese Academy of Sciences, Australia), Eryk Dutkiewicz (Macquarie University, Australia), Gengfa Fang (Macquarie University, Australia), Jinglin Shi (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)	5550
	Robust Cooperative Beamforming For SC-FDMA Based Multi-Relay Networks	5550
	Peiran Wu (University of British Columbia, Canada), Robert Schober (University of British Columbia, Canada), Vijay Bhargava (University of British Columbia, Canada)	5555
	Application-Driven Beamforming for Video Streaming in MISO Interference Networks	
	Fan Zhang (Hong Kong University of Science & Technology, Hong Kong), Vincent Lau (Hong Kong University of Science and Technology, Hong Kong)	5561
	Adaptive Inter-Cell Coordination for the Distributed Antenna System with Correlated Antenna- Clusters	
	Wei Feng (Tsinghua University, P.R. China), Yanmin Wang (Tsinghua University, P.R. China), Ning Ge (Tsinghua University, P.R. China), Jianhua Lu (Tsinghua University, P.R. China)	5567

	Analysis and Optimization of Distributed Cooperative Multicast for Wireless Multimedia Networks Zijian Mo (SUNY at Buffalo, USA), Weifeng Su (State University of New York at Buffalo, USA), Stella Batalama (State University of New York (SUNY) at Buffalo, USA), John Matyjas (AFRL Rome/NY, USA)	5573
MIMO III		
	Low Complexity Detection Algorithm for Under-Determined MIMO Systems	
	Chen Qian (Tsinghua University, P.R. China), Jingxian Wu (University of Arkansas, USA), Yahong Rosa Zheng (Missouri University of Science and Technology, USA), Zhaocheng Wang (Tsinghua University, P.R. China)	5580
	Novel Precoding Methods for Rayleigh Fading Multiuser TDD-MIMO Systems	
	Ganesan Thiagarajan (Texas Instruments India Ltd & Indian Institute of Science, India), Chandra R Murthy (Indian Institute of Science, India)	5586
	Low-Complexity Iterative Quantum Multi-User Detection in SDMA systems	
	Panagiotis Botsinis (University of Southampton, United Kingdom), Soon Xin Ng (University of Southampton, United Kingdom), Lajos Hanzo (University of Southampton, United Kingdom)	5592
	Optimal Linear Precoding and Postcoding for MIMO Multi-Sensor Noisy Observation Problem	
	Yang Liu (Lehigh University, USA), Tiffany Jing Li (Lehigh University, USA), Xuanxuan Lu (Lehigh University, USA), Chau Yuen (Singapore University of Technology and Design, Singapore)	5598
	Finite-SNR Diversity-Multiplexing Tradeoff for Spatially Correlated Rayleigh MIMO Channels	
	Ammar El Falou (Institut Telecom - Telecom Bretagne, France), Charlotte Langlais (Télécom Bretagne, France), Walaa Hamouda (Concordia University, Canada), Charbel Abdel Nour (Institut Telecom - Telecom Bretagne, France), Catherine Douillard (Institut Telecom -	
	Telecom Bretagne, France)	5604
Estimation	Integer Frequency Offset Estimation and Preamble Identification in WiMAX Systems Michele Morelli (University of Pisa, Italy), Leonardo Marchetti (Università di Pisa, Italy), Marco	
	Moretti (Università di Pisa, Italy)	5610
	Enhanced List-Based Group-Wise Overloaded Receiver with Application to Satellite Reception	
	Zohair Abu-Shaban (University of Luxembourg & Interdisciplinary Centre for Security, Reliability and Trust, Luxemburg), Bhavani Shankar Mysore R (Interdisciplinary Centre for Security, Reliability and Trust & University of Luxembourg, Luxemburg), Hani Mehrpouyan (California State University, USA), Björn Ottersten (University of Luxembourg, Luxemburg)	5616
	A RF Adaptive Least Mean Square Algorithm for Self-interference Cancellation in Co-frequency Co-time Full Duplex Systems	
	Jun Wang (University of Electronic Science and Technology of China, P.R. China), Hongzhi Zhao (UESTC, P.R. China), Youxi Tang (University of Electronic Science and Technology of China, P.R. China)	5622
	Modified Probabilistic Data Association (PDA) Algorithms	
	Milutin Pajovic (Massachusetts Institute of Technology, USA), Kyeong Jin Kim (Mitsubishi Electric Research Laboratories (MERL), USA), Toshiaki Koike-Akino (MERL & Harvard University, USA), Philip Orlik (Mitsubishi Electric Research Laboratories, USA)	5628
	Performance Improvement of UMTS Uplink Beamsteering with Limited Feedback at Higher Terminal Velocity by Designing Adapted Algorithms	
	Simon Schroeter (University of Erlangen-Nuernberg, Germany), Johannes Brendel (University of Erlangen-Nuremberg, Germany), Robert Weigel (University of Erlangen-Nuremberg, Germany), Georg Fischer (University of Erlangen-Nuremberg & Eesy-id, Germany)	5635

Vehicular Communications

Dynamic Environmental Fading in Urban VANETs	
Craig S Cooper (University of Wollongong, Australia), Abhinay Mukunthan (University of Wollongong, Australia), Montserrat Ros (University of Wollongong, Australia), Daniel R Franklin (University of Technology, Sydney, Australia), Mehran Abolhasan (University of Technology Sydney, Australia)	5641
Vehicle-to-Vehicle Channel Models with Large Vehicle Obstructions	
Ruisi He (Beijing Jiaotong University & University of Southern California, P.R. China), Andreas Molisch (University of Southern California, USA), Fredrik Tufvesson (Lund University, Sweden), Zhangdui Zhong (Beijing Jiaotong University, P.R. China), Ai Bo (Beijing Jiaotong University, P.R. China), Tingting Zhang (Harbin Institute of Technology, Shenzhen Graduate School, P.R. China)	5647
Fuzzy Q-learning Based Vertical Handoff Control for Vehicular Heterogeneous Wireless Network	
Yubin Xu (Harbin Institute of Technology, P.R. China), Limin Li (Harbin Institute of Technology, P.R. China), Boon Hee Soong (Nanyang Technological University, Singapore), Cheng Li (Memorial University of Newfoundland, Canada)	5653
On Channel Estimation for 802.11p in Highly Time-Varying Vehicular Channels	
Keerthi Kumar Nagalapur (Chalmers University of Technology, Sweden), Fredrik Brännström (Chalmers University of Technology, Sweden), Erik G Ström (Chalmers University of Technology, Sweden)	5659
A Novel Algorithm to Cache Vehicular Content with Parked Vehicles Applications	
Zhou Su (Waseda University, Japan), Pinyi Ren (Xi'an Jiaotong University, P.R. China),	
Xiaoying Gan (Shanghai Jiao Tong University, P.R. China)	5665
A BER Based Adaptive STFC MB-OFDM UWB System for WBAN Applications Miftadi Sudjai (University of Wollongong, Australia), Le Chung Tran (University of	
Wollongong, Australia)	. 5670
Joint Relay Selection and Transmit Power Control for Wireless Body Area Networks Coexistence	
Jie Dong (National ICT Australia & Australian National University, Australia), David B Smith (National ICT Australia, Australia)	5676
Improved Switched Combining with Cooperative Diversity for Wireless Body Area Networks: Empirical Analysis and Theory	
David B Smith (National ICT Australia, Australia)	. 5682
Smart Spectrum Allocation for Interference Mitigation in Wireless Body Area Networks Samaneh Movassaghi (University of Technology, Sydney, Australia), Mehran Abolhasan	
(University of Technology Sydney, Australia), David B Smith (National ICT Australia, Australia)	5688
Coexistence Improvement of Wearable Body Area Network (WBAN) In Medical Environment	
Sarra Essafi (University Pierre and Marie Curie, Paris, France), Hassine Moungla (University of Paris Descartes & LIPADE Labs, France), Salim Benayoune (ESIGETEL & Ecole Supérieure de Télécommunications, France), Ahmed Mehaoua (University of Paris Descartes, France)	5694
Cooperative Relaying	3034
Fairness-Aware Shared Relay Assignment for Cooperative Communication	
Hongli Xu (University of Science and Technology of China, P.R. China), Liusheng Huang (University of Science and Technology of China, P.R. China), Hou Deng (University of Science	

	Hybrid Cooperation through Full-Duplex Opportunistic Relaying and Max-Link Relay Selection with Transmit Power Adaptation	
	Nikolaos Nomikos (University of the Aegean, Greece), Themistoklis Charalambous (Royal Institute of Technology (KTH), Sweden), Ioannis Krikidis (University of Cyprus, Cyprus), Demosthenes Vouyioukas (University of the Aegean, Greece), Mikael Johansson (Royal Institute of Technology, Sweden)	. 5706
	Performance Evaluation of Full-Duplex AF Relaying with Direct Link under Residual Self- Interference	
	Leonardo Jiménez Rodríguez (McGill University, Canada), Nghi H Tran (University of Akron, USA), Tho Le-Ngoc (McGill University, Canada)	. 5712
	Opportunistic Full-Duplex Relay Selection for Decode-and-Forward Cooperative Networks over Rayleigh Fading Channels	
	Bin Zhong (University of Science and Technology Beijing (USTB), P.R. China), Dandan Zhang (University of Science and Technology Beijing (USTB), P.R. China), Zhongshan Zhang (University of Science and Technology Beijing (USTB), P.R. China), Zhengang Pan (University of Hong Kong, Hong Kong), Keping Long (University of Science and Technology Beijing, P.R. China), Athanasios V. Vasilakos (National Technical University of Athens & Kuwait University, Greece)	. 5717
	Relay Assignment in Multiple SourceDestination Cooperative Networks with Limited Feedback	
	Xuehua Zhang (Concordia University, Canada), Hamid Jafarkhani (University of California, Irvine, USA), Ali Ghrayeb (Texas A&M University at Qatar, Qatar), Mazen Omar Hasna (Qatar University, Qatar)	E722
Interference	e Management	
	Distribution of Uplink Inter-Cell Interference in OFDMA Networks with Power Control Yuanping Zhu (Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences & Shanghai Research Center for Wireless Communications, P.R. China), Jing Xu (Shanghai Institute of Microsystem and Information Technology, and SHRCWC, P.R. China), Zeming Hu (Shanghai Institute of Microsystem and Information Technology & Chinese Academy of Sciences, P.R. China), Jiang Wang (Shanghai Research Center for Wireless Communications, P.R. China), Yang Yang (Shanghai Research Center for Wireless Communications & CAS Shanghai Institute of Microsystem and Information Technology, P.R. China)	5729
	On the Choice of Blind Interference Alignment Strategy for Cellular Systems with Data Sharing	. 3723
	Maximo Morales (Universidad Carlos III de Madrid, Spain), Jorge Plata-Chaves (Katholieke Universiteit Leuven (KU Leuven), Belgium), Dimitris Toumpakaris (University of Patras, Greece), Ana Garcia Armada (Universidad Carlos III de Madrid, Spain)	5735
	Interference Alignment via Message-Passing	
	Maxime Guillaud (Vienna University of Technology, Austria), Mohsen Rezaee (Vienna University of Technology, Austria), Gerald Matz (Vienna University of Technology, Austria)	. 5741
	User-Centric Intercell Interference Coordination in Small Cell Networks	
	Chang Li (Hong Kong University of Science and Technology, Hong Kong), Jun Zhang (The Hong Kong University of Science and Technology, Hong Kong), Khaled B. Letaief (The Hong	

Kong University of Science and Technology, Hong Kong)

MIMO-OFDM Systems

Resource Allocation for Spatial-Frequency Domain Based Interference Alignment Scheme in

Performance Analysis

Performance Analysis of Incremental Redundancy Hybrid ARQ in Mobile Ad Hoc Networks Haichuan Ding (Beijing Institute of Technology, P.R. China), Shaodan Ma (University of	
Macau, P.R. China), Chengwen Xing (Beijing Institute of Technology & University of Hong Kong, P.R. China), Zesong Fei (Beijing Institute of Technology, P.R. China)	5759
Uplink Coverage and Spatial Blocking in Poisson Cellular Networks Yeqing Hu (Monash University, Australia), Yi Hong (Monash University, Australia), Jamie	5765
Evans (Monash University, Australia)	5/65
Mihaela-Diana Dianu (RWTH Aachen University, Germany), Janne Riihijärvi (RWTH Aachen University, Germany), Marina Petrova (RWTH Aachen University, Germany)	5771
Stochastic Geometric Performance Analysis for Carrier Aggregation in LTE-A Systems	
Ran Zhang (University of Waterloo, Canada), Miao Wang (University of Waterloo, Canada), Zhongming Zheng (University of Waterloo, Canada), Sherman Shen (University of Waterloo, Canada), Liang-Liang Xie (University of Waterloo, Canada)	
Analysis of Uplink Transmissions in Cellular Networks: A Stochastic Geometry Approach	
Hesham ElSawy (King Abdullah University of Science and Technology (KAUST), Saudi Arabia Ekram Hossain (University of Manitoba, Canada)	
Network Coding	
One-Bit Soft Forwarding for Network Coded Uplink Channels with Multiple Sources	
Jun Li (University of Sydney, Australia), Zihuai Lin (University of Sydney, Australia), Branka Vucetic (The University of Sydney, Australia), Ming Xiao (Royal Institute of Technology, Sweden), Wen Chen (Shanghai Jiao Tong University, P.R. China)	
The Design of Degree Distribution for Distributed Fountain Codes in Wireless Sensor Networks	
Jing Yue (The University of Sydney, Australia), Zihuai Lin (University of Sydney, Australia), Branka Vucetic (The University of Sydney, Australia), Pei Xiao (University of Surrey, United Kingdom)	5796
PRAC: Exploiting Partial Packets without Cross-layer or Feedback Information	
Georgios Angelopoulos (Massachusetts Institute of Technology, USA), Anantha Chandrakasa (Massachusetts Institute of Technology, USA), Muriel Médard (MIT, USA)	
Delay-Tolerant Networks with Network Coding: How Well Can We Simulate Real Devices?	
Yuanzhu Chen (Memorial University of Newfoundland, Canada), Xu Liu (Memorial University of Newfoundland, Canada), Walter Taylor (Dartmouth College, USA), Jason Moore (Dartmouth College, USA)	
Network Coded Soft Forwarding for Multiple Access Relay Channels with Compressive Sensing	
Yiwen Li (The University of Sydney, Australia), Jun Li (University of Sydney, Australia), Zihu Lin (University of Sydney, Australia), Yonghui Li (University of Sydney, Australia), Branka Vucetic (The University of Sydney, Australia)	
Relaying II	
Ergodic Rate Analysis for Multi-pair Two-way Relay Large-scale Antenna System Liang Xuesong (Nanjing University of Posts and Telecommunications, P.R. China), Shi Jin	
(Southeast University, P.R. China), Xiqi Gao (Southeast University, P.R. China), Kai Kit Won (University College London, United Kingdom)	
Physical-Layer Network Coding Aided Bi-directional Cooperative Relays for Transmitted Reference Pulse Cluster UWB Systems	
Yongyu Dai (University of Victoria, Canada), Leyuan Pan (University of Victoria, Canada),	5825

Adaptive Mode Selection for Bidirectional Relay Networks - Fixed Rate Transmission Vahid Jamali (Friedrich-Alexander-University Erlangen-N¨urnberg, Germany), Nikola Zlatanov (University of British Columbia, Canada), Robert Schober (University of British Columbia,	
Canada)AF Relaying for Millimeter Wave Communication Systems with Hybrid RF/Baseband MIMO	5831
Processing	
Junho Lee (KAIST, Korea), Yong H. Lee (KAIST, Korea)	5838
Cognitive Transmission and Performance Analysis for Amplify-and-Forward Two-Way Relay Networks	
Gongpu Wang (Beijing Jiaotong University, P.R. China), Yulong Zou (Nanjing University of Posts and Telecommunications, P.R. China), Jianhua Lu (Tsinghua University, P.R. China), Chintha Tellambura (University of Alberta, Canada)	5843
ireless Channels and Propagation	
A Generalized Diffuse Scatter Plus Line-of-Sight Fading Channel Model	
Norman Beaulieu (University of Alberta, Canada), Seyed Ali Saberali (University of Alberta, Canada)	5849
A Semi-Empirical MIMO Channel Model for High-Speed Railway Viaduct Scenarios	
Tao Zhou (Beijing Jiaotong University & Institute of Broadband Wireless Mobile Communications, P.R. China), Cheng Tao (Beijing Jiaotong University, P.R. China), Liu Liu (Bejing Jiaotong University, P.R. China), Zhenhui Tan (Beijing JiaoTong University, Beijing, P.R. China)	5854
Estimating Information Rates of Bernoulli-Gaussian Impulsive Noise Channels in Rayleigh Fading	
Hung Vu (University of Akron, USA), Nghi H Tran (University of Akron, USA), Truyen Nguyen (University of Akron, USA), Subramaniya Hariharan (University of Akron, USA)	5859
Kronecker Product Correlation Model and Limited Feedback Codebook Design in a 3D Channel Model	
Dawei Ying (Purdue University, USA), Frederick W. Vook (Nokia Solutions and Networks, USA), Timothy A. Thomas (Nokia Solutions and Networks, USA), David Love (Purdue University, USA), Amitava Ghosh (Nokia Solutions and Networks, USA)	5865
Impact of The Path Loss Model on the Spatial Structure of Shadow Fading	
Nikos Perpinias (RWTH Aachen University, Germany), Alexandros Palaios (RWTH Aachen University, Germany), Janne Riihijärvi (RWTH Aachen University, Germany), Petri Mähönen (RWTH Aachen University, Germany)	5871
eatured Wireless Communications: RFID, 60GHz and High Mobility	
BER of IEEE 802.11ad OFDM Radios vs. Carrier Frequency in Real 60 GHz Indoor Channels	
Nikola Rendevski (University of L'Aquila, Macedonia, the former Yugoslav Republic of), Dajana Cassioli (University of L'Aquila, Italy)	5878
Rotating Non-Uniform and High-Dimensional Constellations Using Geodesic Flow on Lie Groups	5004
David Karpuk (Aalto University, Finland), Camilla Hollanti (Aalto University, Finland)	5884
N-continuous Symbol Padding OFDM for Sidelobe Suppression Hikaru Kawasaki (Osaka Prefecture University, Japan), Masaya Ohta (Osaka Prefecture	
University, Japan), Katsumi Yamashita (Osaka Prefecture University, Japan)	5890
Markov Chain Based Channel Characterization for High Speed Railway in Viaduct Scenarios	
Liu Liu (Bejing Jiaotong University, P.R. China), Cheng Tao (Beijing Jiaotong University, P.R. China), Rongchen Sun (Beijing Jiaotong University, P.R. China), Houjin Chen (Beijing Jiaotong University, P.R. China), Zihuai Lin (University of Sydney, Australia)	5806
A novel communication method for semi-passive RFID based sensors	Joso
Prasanna Kalansuriya (Massachusetts Institute of Technology, USA), Rahul Bhattacharyya (Massachusetts Institute of Technology, USA), Sanjay Sarma (MIT Auto-ID Center, USA)	5902

Resource Allocation and Interference Management for Adaptive Modulation and Coding-based OFDMA Cognitive Radio Networks Arman Shojaeifard (University of Manchester, United Kingdom), Hadi Saki (King's College London & Centre for Telecommunications Research, United Kingdom), Mohammad Mirtavoosi Mahyari (King's College London, United Kingdom), Mohammad Shikh-Bahaei (Kings college London, United Kingdom)	. 5908
Matrix Division Multiple Access for Mini Centralized Network	
Renhui Xu (Nanjing Institute of Communication Engineering, P.R. China), Hai Wang (Nanjing Institute of Communications Engineering, P.R. China), Ming Chen (Southeast University, P.R. China), Chang Tian (Institute of Communications Engineering, P.R. China)	5914
Maximum Doppler Diversity Transmissions for High Mobility Systems with Imperfect Channel State Information	
Weixi Zhou (Southwest Jiaotong University, P.R. China), Jingxian Wu (University of Arkansas, USA), Pingzhi Fan (Southwest Jiaotong Universityiversity, P.R. China)	5920
Analysis of Rate Optimized Throughput for ARQ in Fading Interference Channels Peter Larsson (KTH, Sweden), Lars K. Rasmussen (KTH Royal Institute of Technology, Sweden), Mikael Skoglund (KTH Royal Institute of Technology, Sweden)	5926
Comprehensive Imperfection Mitigation for Precoded OFDM Systems Xiaojing Huang (CSIRO Computational Informatics, Australia), Jian A. Zhang (CSIRO, Australia), Y Jay Guo (CSIRO, Australia)	5932
Modeling Anti-collision Protocols for RFID Systems with Multiple Access Interference Piergiuseppe Di Marco (Royal Institute of Technology, Sweden), Fortunato Santucci	
(University of l'Aquila, Italy), Carlo Fischione (KTH, Sweden)	5938
·5XX]h]cbU``DUdYfg	
``Cj YfWca]b[`I gYf`GY`Z]g\bYgg`]b`8G5`GmghYag`H\fci[\`7fYX]h\6UgYX`FYgcifWY`5``cWUh]cb `HUaUfU`5`G\UaaUf]z`fCfY[cb`GhUhY`I b]j Yfg]lmtz`6YW\]f` <uaxuci]z`ac\gyb`;i]nub]` `fEUhUf`I b]j Yfg]lmtz`5aaUf`FUmYg`fl7]gWc`GmghYagtSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS</uaxuci]z`ac\gyb`;i]nub]` 	S'' %
`@UhYbh`GYbh]a Ybh`8YhYWh]cb`]b`Cb`]bY`GcV]U``BYhk cf_g. '5`7ca a i b]WUh]cbg!cf]YbhYX`J]Yk `Fc\]h`BY[]ž`fl7UfbY[]Y`AY``cb`I b]j Yfg]lmtž`J]bUmI XUmDfUV\i ž`fl b]j Yfg]lmcZ'Dcfhctž `A][iY``FcXf][iYg`fl b]j Yfg]lmi7c``Y[Y`@cbXcbtSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	S'' +),
`5`< <i>c`]gh]W=cH! VUgYX`A UbU[Ya Ybh'D`UhZcfa `Zcf`Ga Ufh'9bj]fcba Ybhg</i> `A "`J]Wcf]U`A cfYbcž'>cgY`GUbHJž'fGdUb]g\ `5]f`: cfW'5VWXYa mž'GdU]bŁž'A][i Y``5"`NUa cfUž 5bhcb]cž': "`G_Ufa Y`Už'fI b]j Yfg]hmcZA i fWJUž'GdU]bŁSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	S'' , &'