

IEEE Communications Society
Publications Contents Digest
February/2017





Direct links to magazine and journal abstracts and full paper pdfs via IEEE Xplore

ComSoc Vice President – Publications – Nelson Fonseca

Director – Journals – Khaled B. Letaief

Director – Magazines – Raouf Boutaba

Magazine Editors

EIC, *IEEE Communications Magazine* – Osman Gebizlioglu

AEIC, *IEEE Communications Magazine* – Zoran Zvonar

EIC, *IEEE Network Magazine* – Nei Kato

AEIC, *IEEE Network Magazine* – David Soldani

EIC, *IEEE Wireless Communications Magazine* – Hsiao-Hwa Chen

AEIC, *IEEE Wireless Communications Magazine* – Hamid Gharavi

Editor, *The Global Communications Newsletter* – Stefano Bregni

Editors, *Design and Implementation Series* – Vijay K. Gurbani | Salvatore Loreto | Ravi Subrahmanyam

Area Co-Editors, Optical Communications Series – Osman Gebizlioglu | Vijay Jain

Area Co-Editor, Radio Communications Series – Thomas Alexander | Amitabh Mishra

Journal Editors

EIC, *IEEE Transactions on Communications* – Naofal Al-Dhahir

EIC, *IEEE Journal on Selected Areas In Communications (J-SAC)* – Muriel Medard

Co-EICs, *IEEE/OSA Journal of Optical Communications & Networking (JOCN)* – Ori Gerstel | Pat Iannone

EIC, *IEEE/ACM Transactions on Networking* – R. Srikant

EIC, *IEEE Communications Letters* – O. A. Dobre

EIC, *Wireless Communications Letters* – Wei Zhang

EIC, *IEEE Transactions on Network & Service Management (TNSM)* – Rolf Stadler

EIC, *IEEE Transactions on Wireless Communications* – Jeff Andrews

EIC, *IEEE Journal of Communications & Networks (JCN)* – Vince Poor

Co-EIC, *IEEE/KICS Journal of Communications & Networks (JCN)* – Jong-Seon No

Editor, *IEEE Communications Surveys & Tutorials* – Ekram Hossain

EIC, *IEEE Transactions on Cognitive Communications and Networking* – Michele Zorzi

Members of Steering Committees for Co-Sponsored Journals

IEEE/OSA Journal of Lightwave Technology – Karen Liu | Pat Trischitta

IEEE/OSA Journal of Optical Communications & Networking – Vincent Chan | Nim Cheung | Hideo Kuwahara |

Jane Simmons

IEEE/ACM Transactions on Networking – Marco Ajmone Marsan | Anurag Kumar | Jennifer Yates

IEEE Transactions on Mobile Computing – Prasant Mohapatra | Chiara Petrioli

IEEE Transactions on Multimedia – Vijay Bhargava | Vivek Goyal | Jianwei Huang

IEEE Transactions on Wireless Communications – Gerhard Fettweis | Hamid Jafarkhani | Chengshan Xiao

IEEE Wireless Communications Letters – Costas Georghiadis | Gerhard Fettweis | George Ginis | Sennur Ulukus

Submission and editorial instructions can be found on each publication's home page.

For IEEE Communications Society membership and subscription information, please visit www.comsoc.org

IEEE Communications Society

3 Park Avenue

New York, NY 10016 USA

212 705 8900

Front Cover
PDF (732 KB)

IEEE ComSoc Membership
PDF (528 KB)

Table of Contents
PDF (294 KB)

Remcom
PDF (549 KB)

Communications, ComSoc, and Big Data: What and What Next
Harvey Freeman ; David Belanger
PDF (1002 KB)

History of Communications/Radio Wave Propagation from Marconi to MIMO
J. Bach Andersen
PDF (628 KB)

Rohde & Schwarz
PDF (558 KB)

Conference Preview/IEEE ICC 2017
PDF (67 KB)

Global Communications Newsletter
Stefano Bregni ; Takaya Yamazato ; Vasile Bota ; Liangping Ma
PDF (2102 KB)

Conference Calendar
PDF (4562 KB)

People-Centric Internet of Things
Jorge Sa Silva ; Pei Zhang ; Trevor Pering ; Fernando Boavida ; Takahiro Hara ; Nicolas C. Liebau
PDF (554 KB)

COIN: Opening the Internet of Things to People's Mobile Devices
Maria Laura Stefanizzi ; Luca Mottola ; Luca Mainetti ; Luigi Patrono
PDF (543 KB)

Butler, Not Servant: A Human-Centric Smart Home Energy Management System
Siyun Chen ; Ting Liu ; Feng Gao ; Jianting Ji ; Zhanbo Xu ; Buyue Qian ; Hongyu Wu ; Xiaohong Guan
PDF (408 KB)

Smart Home: Cognitive Interactive People-Centric Internet of Things
Shuo Feng ; Peyman Setoodeh ; Simon Haykin
PDF (184 KB)

The Experience of Using the IES Cities Citizen-Centric IoT Platform
Stefanos Vatsikas ; Georgios Kalogridis ; Tim Lewis ; Mahesh Sooriyabandara
PDF (771 KB)

Exploiting Density to Track Human Behavior in Crowded Environments
Claudio Martella ; Marco Cattani ; Maarten van Steen
PDF (311 KB)

IEEE WCET
PDF (484 KB)

Gesture Detection Using Passive RFID Tags to Enable People-Centric IoT Applications
Raul Parada ; Joan Melia-Segui
PDF (406 KB)

Human Neuro-Activity for Securing Body Area Networks: Application of Brain-Computer Interfaces to People-Centric Internet of Things
Juan F. Valenzuela-Valdes ; Miguel Angel Lopez ; Pablo Padilla ; Jose L Padilla ; Jesus Minguillon
PDF (178 KB)

Practical Perspectives on IoT in 5G Networks: From Theory to Industrial Challenges and Business Opportunities
Dusit Niyato ; Marco Maso ; Dong In Kim ; Arifon Xhafa ; Michele Zorzi ; Ashutosh Dutta
PDF (2208 KB)

Latency Critical IoT Applications in 5G: Perspective on the Design of Radio Interface and Network Architecture
Philipp Schulz ; Maximilian Matthe ; Henrik Klessig ; Meryem Simsek ; Gerhard Fettweis ; Junaid Ansari ; Shehzad Ali Ashraf ; Bjoern Almeroth ; Jens Voigt ; Ines Riedel ; Andre Puschmann ; Andreas Mitschele-Thiel ; Michael Muller ; Thomas Elste ; Marcus Windisch
PDF (220 KB)

Effects of Heterogeneous Mobility on D2D- and Drone-Assisted Mission-Critical MTC in 5G
Antonino Orsino ; Aleksandr Ometov ; Gabor Fodor ; Dmitri Moltchanov ; Leonardo Militano ; Sergey Andreev ; Osman N. C. Yilmaz ; Tuomas Tirronen ; Johan Torsner ; Giuseppe Araniti ; Antonio Iera ; Mischa Dohler ; Yevgeni Koucheryav
PDF (1299 KB)

IoT Connectivity in Radar Bands: A Shared Access Model Based on Spectrum Measurements
Zaheer Khan ; Janne J. Lehtomaki ; Stefano Iellamo Iellamo ; Risto Vuhtoniemi ; Ekram Hossain ; Zhu Han
PDF (794 KB)

Efficient IoT Gateway over 5G Wireless: A New Design with Prototype and Implementation Results
Navrati Saxena ; Abhishek Roy ; Bharat J. R. Sahu ; HanSeok Kim
PDF (982 KB)

Coding for Caching in 5G Networks
Yasser Fadlallah ; Antonia M. Tulino ; Dario Barone ; Giuseppe Vettigli ; Jaime Llorca ; Jean-Marie Gorce
PDF (1535 KB)

Internet of Things: Part 2

Christos Verikoukis ; Roberto Minerva ; Mohsen Guizani ; Soumya Kanti Datta ; Yen-Kuang Chen ; Hausi A. Muller
PDF (488 KB)

Securing the Internet of Things in a Quantum World

Chi Cheng ; Rongxing Lu ; Albrecht Petzoldt ; Tsuyoshi Takagi
PDF (342 KB)

Game Theoretic Mechanisms for Resource Management in Massive Wireless IoT Systems

Prabodini Semasinghe ; Setareh Maghsudi ; Ekram Hossain
PDF (960 KB)

UAV-Based IoT Platform: A Crowd Surveillance Use Case

Naser Hossein Motlagh ; Miloud Bagaa ; Tarik Taleb
PDF (1184 KB)

Business Development in the Internet of Things: A Matter of Vertical Cooperation

Amirhossein Ghanbari ; Andres Laya ; Jesus Alonso-Zarate ; Jan Markendahl
PDF (277 KB)

Advances in Optical Communications Technologies

Xiang Liu ; Zuqing Zhu
PDF (165 KB)

Call for Papers

PDF (26 KB)

Laser-Diode-Based Visible Light Communication: Toward Gigabit Class Communication

Fahad Zafar ; Masduzzaman Bakaul ; Rajendran Parthiban
PDF (877 KB)

Network Hardware Virtualization for Application Provisioning in Core Networks

Ashwin Gumaste ; Tamal Das ; Kandarp Khandwala ; Inder Monga
PDF (223 KB)

A Closer Look at ROADM Contention

Jane M. Simmons
PDF (237 KB)

Call for Papers

PDF (24 KB)

IEEE TRANSACTIONS ON COMMUNICATIONS

A PUBLICATION OF THE IEEE COMMUNICATIONS SOCIETY



FEBRUARY 2017

VOLUME 65

NUMBER 2

IECMBT

(ISSN 0090-6778)

Table of contents
PDF (319 KB)

IEEE Communications Society
PDF (154 KB)

On the Equivalence of Cubic Permutation Polynomial and ARP Interleavers for Turbo Codes

Lucian Trifina ; Daniela Tarniceriu
PDF (1255 KB)

Practical Encoder and Decoder for Power Constrained QC LDPC-Lattice Codes

Hassan Khodaiemehr ; Mohammad-Reza Sadeghi ; Amin Sakzad
PDF (856 KB)

Non-Uniform Window Decoding Schedules for Spatially Coupled LDPC Codes

Najeeb Ul Hassan ; Ali E. Pusane ; Michael Lentmaier ; Gerhard P. Fettweis ; Daniel J. Costello
PDF (1541 KB)

Performance of LDPC Decoders With Missing Connections

Linjia Chang ; Avhishek Chatterjee ; Lav R. Varshney
PDF (1047 KB)

Edge-Based Dynamic Scheduling for Belief-Propagation Decoding of LDPC and RS Codes

Chaudhry Adnan Aslam ; Yong Liang Guan ; Kui Cai
PDF (1877 KB)

LDPC Lattice Codes for Full-Duplex Relay Channels

Hassan Khodaiemehr ; Dariush Kiani ; Mohammad-Reza Sadeghi
PDF (841 KB)

Secrecy Performance Analysis of Cognitive Decode-and-Forward Relay Networks in Nakagami- m Fading Channels

Rui Zhao ; Yi Yuan ; Lisheng Fan ; Yu-Cheng He
PDF (1301 KB)

Two-Way Incremental Relaying With Symbol-Based Network Coding: Performance Analysis and Optimal Thresholds

Ali H. Bastami
PDF (1292 KB)

Tightness of Jensen's Bounds and Applications to MIMO Communications

Jide Yuan ; Michail Matthaiou ; Shi Jin ; Feifei Gao
PDF (1420 KB)

A Novel Hybrid Beamforming Algorithm With Unified Analog Beamforming by Subspace Construction Based on Partial CSI for Massive MIMO-OFDM Systems

Dengkui Zhu ; Boyu Li ; Ping Liang
PDF (1132 KB)

Hybrid Iterative Space-Time Equalization for Multi-User mmW Massive MIMO Systems

Roberto Magueta ; Daniel Castanheira ; Adão Silva ; Rui Dinis ; Atílio Gameiro
PDF (1285 KB)

Low Complexity Iterative Receiver Design for Sparse Code Multiple Access

Fan Wei ; Wen Chen
PDF (1662 KB)

HARQ and AMC: Friends or Foes?

Redouane Sassioui ; Mohammed Jabi ; Leszek Szczecinski ; Long Bao Le ; Mustapha Benjillali ; Benoit Pelletier
PDF (1528 KB)

Broadcast Coded Slotted ALOHA: A Finite Frame Length Analysis

Mikhail Ivanov ; Fredrik Brännström ; Alexandre Graell i Amat ; Petar Popovski
PDF (1705 KB)

Performance Evaluation of Leader-Follower-Based Mobile Molecular Communication Networks for Target Detection Applications

Tadashi Nakano ; Yutaka Okaie ; Shouhei Kobayashi ; Takako Koujin ; Chen-Hao Chan ; Yu-Hsiang Hsu ; Takuya Obuchi ; Takahiro Hara ; Yasushi Hiraoka ; Tokuko Haraguchi
PDF (4461 KB)

On Optimality of Myopic Policy in Multi-Channel Opportunistic Access

Kehao Wang ; Lin Chen ; Jihong Yu
PDF (701 KB)

On Frame Asynchronous Coded Slotted ALOHA: Asymptotic, Finite Length, and Delay Analysis

Erik Sandgren ; Alexandre Graell i Amat ; Fredrik Brännström
PDF (1563 KB)

A Relation Between Network Computation and Functional Index Coding Problems

Anindya Gupta ; B. Sundar Rajan
PDF (1196 KB)

Generalized Solution for the Demodulation of Reaction Shift Keying Signals in Molecular Communication Networks

Hamdan Awan ; Chun Tung Chou
PDF (1766 KB)

Interference-Aware Energy Efficiency Maximization in 5G Ultra-Dense Networks

Chungang Yang ; Jiandong Li ; Qiang Ni ; Alagan Anpalagan ; Mohsen Guizani
PDF (1054 KB)

Two-Way Visible Light Communication and Illumination With LEDs

Shuai Li ; Ashish Pandharipande ; Frans M. J. Willems
PDF (1744 KB)

Quadratic Extension Field Codes for Free Space Optical Intensity Communications

Lina Mroueh ; Jean-Claude Belfiore
PDF (1016 KB)

Secrecy Performance Optimization for Wireless Powered Communication Networks With an Energy Harvesting Jammer

Jihwan Moon ; Hoon Lee ; Changick Song ; Inkyu Lee
PDF (1147 KB)

Secure Transmission in MISOME Wiretap Channel With Multiple Assisting Jammers: Maximum Secrecy Rate and Optimal Power Allocation

Huici Wu ; Xiaofeng Tao ; Zhu Han ; Na Li ; Jin Xu
PDF (1949 KB)

Random Linear Network Coding for Wireless Layered Video Broadcast: General Design Methods for Adaptive Feedback-Free Transmission

Mohammad Esmaeilzadeh ; Parastoo Sadeghi ; Neda Aboutorab
PDF (1722 KB)

Fundamental Limits of Coded Caching: Improved Delivery Rate-Cache Capacity Tradeoff

Mohammad Mohammadi Amiri ; Deniz Gündüz
PDF (627 KB)

A Spectral Compressive Resource Allocation Technique for PLC Systems

Guilherme R. Colen ; Lucas Giroto de Oliveira ; A. J. Han Vinck ; Moises V. Ribeiro
PDF (1706 KB)

Novel Water-Filling for Maximum Throughput of Power Grid, MIMO, and Energy Harvesting Coexisting System With Mixed Constraints

Peter He ; Lian Zhao ; Bala Venkatesh
PDF (890 KB)

Transmit Beamforming and Power Control for Optimizing the Outage Probability Fairness in MISO Networks

Xiangping Zhai ; Chee Wei Tan ; Yichao Huang ; Bhaskar D. Rao
PDF (1325 KB)

Interference Alignment With Finite Extensions in Partially Connected Networks

Wei Liu ; Jing Cai ; Jiandong Li ; Min Sheng
PDF (877 KB)

On Adaptive Power Control for Energy Harvesting Communication Over Markov Fading Channels

Masoud Badiei Khuzani ; Hamidreza Ebrahimzadeh Saffar ; Patrick Mitran
PDF (1014 KB)

Beamforming Design for Wireless Information and Power Transfer Systems: Receive Power-Splitting Versus Transmit Time-Switching

Ali Arshad Nasir ; Hoang Duong Tuan ; Duy Trong Ngo ; Trung Q. Duong ; H. Vincent Poor
PDF (1397 KB)

Joint Transceiver Designs for Full-Duplex $\kappa\mu$ -Pair MIMO Interference Channel With SWIPT

Ming-Min Zhao ; Yunlong Cai ; Qingjiang Shi ; Mingyi Hong ; Benoit Champagne
PDF (2417 KB)

Traffic Off-Loading With Energy-Harvesting Small Cells and Coded Content Caching

Tao Li ; Mehdi Ashraphijuo ; Xiaodong Wang ; Pingyi Fan
PDF (1616 KB)

A Hybrid Energy Sharing Framework for Green Cellular Networks

Muhammad Junaid Farooq ; Hakim Ghazzai ; Abdullah Kadri ; Hesham ElSawy ; Mohamed-Slim Alouini
PDF (1785 KB)

On High-Order Capacity Statistics of Spectrum Aggregation Systems Over $\kappa - \mu$ and $k - \mu$ Shadowed Fading Channels

Jiayi Zhang ; Xiaoyu Chen ; Kostas P. Peppas ; Xu Li ; Ying Liu
PDF (1208 KB)

Multibeam Detection in Multibeam Satellite Systems: Theoretical Analysis and Practical Schemes

Giulio Colavolpe ; Andrea Modenini ; Amina Piemontese ; Alessandro Ugolini
PDF (1981 KB)

Exploiting Full-Duplex Receivers for Achieving Secret Communications in Multiuser MISO Networks

Berk Akgun ; Onur Ozan Koyluoglu ; Marwan Krunz
PDF (1068 KB)

IEEE Communications Society

PDF (81 KB)

IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS

A PUBLICATION OF THE IEEE COMMUNICATIONS SOCIETY



JANUARY 2017

VOLUME 35

NUMBER 1

ISACEM

(ISSN 0733-8716)

Table of contents
PDF (414 KB)

IEEE Journal on Selected Areas in Communications
PDF (92 KB)

Guest Editorial Spectrum Sharing and Aggregation for Future Wireless Networks, Part III
Theodoros A. Tsiftsis ; Guoru Ding ; Yulong Zou ; George K. Karagiannidis ; Zhu Han ; Lajos Hanzo
PDF (475 KB)

The Value of Side-Information in Secondary Spectrum Markets
Arnob Ghosh ; Saswati Sarkar ; Randall Berry
PDF (1696 KB)

Full-Duplex-Based Rate/Mode Adaptation Strategies for Wi-Fi/LTE-U Coexistence: A POMDP Approach
Mohammed Hirzallah ; Wessam Afifi ; Marwan Krunz
PDF (2017 KB)

Energy-Efficient Bandwidth Aggregation for Delay-Constrained Video Over Heterogeneous Wireless Networks
Jiyan Wu ; Bo Cheng ; Ming Wang ; Junliang Chen
PDF (3738 KB)

Overlay Spectrum Sharing Using Improper Gaussian Signaling
Osama Amin ; Walid Abediseid ; Mohamed-Slim Alouini
PDF (1245 KB)

Throughput and Fairness Analysis of Wi-Fi and LTE-U in Unlicensed Band
Xijun Wang ; Tony Q. S. Quek ; Min Sheng ; Jiandong Li
PDF (1966 KB)

Auction-Based Competition Between LTE Unlicensed and Wi-Fi
Haoran Yu ; George Iosifidis ; Jianwei Huang ; Leandros Tassiulas
PDF (1612 KB)

Co-Primary Spectrum Sharing for Inter-Operator Device-to-Device Communication
Byungjin Cho ; Konstantinos Koufos ; Riku Jäntti ; Seong-Lyun Kim
PDF (1073 KB)

Efficient 3D Resource Management for Spectrum Aggregation in Cellular Networks
Weijia Han ; Chuan Huang ; Jiandong Li ; Xiao Ma ; Liang Wang
PDF (1819 KB)

Small-Macro Cell Cooperation for HetNet Uplink Transmission: Spectral Efficiency and Reliability Analyses
Ahmad Abu Al Haija ; Chintha Tellambura
PDF (1493 KB)

Spectrum Sharing for Drone Networks
Chiya Zhang ; Wei Zhang
PDF (1175 KB)

Heterogeneous Networks in Shared Spectrum Access Communications
Mirza Golam Kibria ; Gabriel Porto Villardi ; Kien Nguyen ; Kentaro Ishizu ; Fumihide Kojima
PDF (2217 KB)

Sparse Frequency Domain Spectrum Sensing and Sharing Based on Cyclic Prefix Autocorrelation
Sener Dikmese ; Zobia Ilyas ; Paschalis C. Sofotasios ; Markku Renfors ; Mikko Valkama
PDF (2921 KB)

P^2 -SAS: Privacy-Preserving Centralized Dynamic Spectrum Access System
Yanzhi Dou ; Kexiong Zeng ; He Li ; Yaling Yang ; Bo Gao ; Kui Ren ; Shaoqian Li
PDF (2523 KB)

Multipath Streaming: Fundamental Limits and Efficient Algorithms
Richard Combes ; Habib B. A. Sidi ; Salah-Eddine Elayoubi
PDF (1193 KB)

Cost-Reliability Tradeoff in Licensed and Unlicensed Spectra Interoperable Networks With Guaranteed User Data Rate Requirements
Hao Song ; Xuming Fang ; Cheng-Xiang Wang
PDF (2357 KB)

A Filter-Bank Transceiver Architecture for Massive Non-Contiguous Carrier Aggregation
Stelios Stefanatos ; Fotis Foukalas
PDF (1448 KB)

Clustering-Based Spectrum Sharing Strategy for Cognitive Radio Networks
Jingyi Dai ; Shaowei Wang
PDF (1904 KB)

Non-Orthogonal Multiple Access for 5G Systems
[PDF \(1000 KB\)](#)

Localisation, Communication and Networking with LVC
[PDF \(817 KB\)](#)

**Special Issue on Emerging Technologies in Software-driven
Communication**
[PDF \(1687 KB\)](#)

Information for authors
[PDF \(59 KB\)](#)

IEEE Open Access Publishing
[PDF \(1327 KB\)](#)

Introducing IEEE Collabratec
[PDF \(672 KB\)](#)

Member Get-A-Member (MGM) Program
[PDF \(3436 KB\)](#)

IEEE Communications Society Information
[PDF \(99 KB\)](#)

IEEE COMMUNICATIONS LETTERS

A PUBLICATION OF THE IEEE COMMUNICATIONS SOCIETY



FEBRUARY 2017

VOLUME 21

NUMBER 2

ICLEF6

(ISSN 1558-2558)

Table of contents
PDF (285 KB)

IEEE Communications Society
PDF (82 KB)

A Polynomial Formula for Finite-Length BATS Code Performance

Huakai Zhao ; Shenghao Yang ; Guangliang Dong
PDF (215 KB)

A New Method for the Decoding Delay Distributions of Random Linear Coding Schemes

Xubo Zhao ; Xiaoping Li ; Tongjiang Yan ; Rengang Shi
PDF (332 KB)

Improved Hard-Reliability Based Majority-Logic Decoding for Non-Binary LDPC Codes

Saedong Yeo ; In-Cheol Park
PDF (344 KB)

Improved Penalty Functions of ADMM Penalized Decoder for LDPC Codes

Biao Wang ; Jianjun Mu ; Xiaopeng Jiao ; Zhongfei Wang
PDF (570 KB)

On Rate Region of Caching Problems With Non-Uniform File and Cache Sizes

Congduan Li
PDF (544 KB)

On Selection Combiner Output Multivariate Distributions in Correlated Generalized-Rician Fading

Khoa N. Le
PDF (536 KB)

Millimeter-Wave Channel Modeling Based on A Unified Propagation Graph Theory

Jiajing Chen ; Xuefeng Yin ; Li Tian ; Myung-Don Kim
PDF (728 KB)

Circular Folding Cooperative Power Spectral Density Split Cancellation Algorithm for Spectrum Sensing

Roberto C. D. V. Bomfin ; Rausley A. A. de Souza ; Dayan A. Guimarães
PDF (490 KB)

Enabling Energy Efficient Molecular Communication via Molecule Energy Transfer

Yansha Deng ; Weisi Guo ; Adam Noel ; Arumugam Nallanathan ; Maged ElKashlan
PDF (277 KB)

Magnetic Nanoparticle Based Interface for Molecular Communication Systems

Steven Kisseleff ; Robert Schober ; Wolfgang H. Gerstacker
PDF (631 KB)

Virtual Selfishness Queue and Its Application

Li Feng ; Qinghai Yang ; Jinglei Li
PDF (242 KB)

A General Framework for Asynchronous Communication

R. M. Sundaram ; Devendra Jalihal ; Venkatesh Ramaiyan
PDF (253 KB)

TRIP: A Tussle-Resistant Internet Pricing Mechanism

Lijia Xie ; Yao Zhang ; Zhiming Zheng ; Xiao Zhang
PDF (444 KB)

Expansion Model for the Controller Placement Problem in Software Defined Networks

Afrim Sallahi ; Marc St-Hilaire
PDF (474 KB)

Ternary Bloom Filter Replacing Counting Bloom Filter

Hyesook Lim ; Jungwon Lee ; Hayoung Byun ; Changhoon Yim
PDF (508 KB)

New Distance-Adaptive Modulation Scheme for Elastic Optical Networks

Lucas R. Costa ; André C. Drummond
PDF (991 KB)

Quaternion Modulation for Dual-Polarized Antennas

Jian-Feng Gu ; Ke Wu
PDF (398 KB)

Modulation Design for MIMO-CoMP HARQ

Wenhao Wu ; Hans Mittelmann ; Zhi Ding
PDF (605 KB)

Orthogonal Binary Modulation Division for Two-User Uplink Massive MIMO Systems With Noncoherent ML Detection

Gangtao Han ; Zheng Dong ; Jian-Kang Zhang ; Xiaomin Mu
PDF (325 KB)

Single-Carrier Frequency-Domain Equalization With Index Modulation

Miyu Nakao ; Takumi Ishihara ; Shinya Sugiura
PDF (392 KB)

Security Analysis of an ID-Based Two-Server Password-Authenticated Key Exchange

Lin Zhang ; Zhenfeng Zhang
PDF (238 KB)

Analysis of the Power Outage Effects in RFID

Javier Vales-Alonso ; Juan Pedro Muñoz-Gea ; Juan J. Alcaraz ; F. J. González-Castaño
PDF (555 KB)

Bandwidth Adaptation by Squeezing Idle Traffic in Browsers: An Active Window Detection Based Approach for Next Generation Networks

Muhammad Basit Shahab ; Muhammad Arslan Usman ; Soo Young Shin
PDF (640 KB)

Residual Self-Interference Analysis for Full-Duplex OFDM Transceivers Under Phase Noise and I/Q Imbalance

L. Samara ; M. Mokhtar ; Ö. Özdemir ; R. Hamila ; T. Khattab
PDF (369 KB)

An LPC-Based Fronthaul Compression Scheme

Leonardo Ramalho ; Maria Nilma Fonseca ; Aldebaro Klautau ; Chenguang Lu ; Miguel Berg ; Elmar Trojer ; Stefan Höst
PDF (970 KB)

An Eigendecomposition-Based Approach to Blind Beamforming in a Multipath Environment

Liang Zhang ; Bin Liao ; Lei Huang ; Chongtao Guo
PDF (370 KB)

Secrecy Outage Performance of a Cooperative Cognitive Relay Network

Pratik Chakraborty ; Shankar Prakriya
PDF (496 KB)

Estimation of Symbol Timing in Physical-Layer Network Coding With Arrival Time Differences

Xiaoyu Dang ; Zhun Huang ; Qiang Li ; Xiangbin Yu
PDF (607 KB)

Distributed Power Control-Based Connectivity Reconstruction Game in Wireless Localization

Woong-Hee Lee ; Jeongsik Choi ; Jae-Hyun Lee ; Yong-Hwa Kim ; Seong-Cheol Kim
PDF (434 KB)

The Gaussian Diamond-Wiretap Channel With Rate-Limited Relay Cooperation

Si-Hyeon Lee ; Ashish Khisti
PDF (405 KB)

Approximation of Multi-Hop Relay to Dual-Hop Relay and Its Error Performance Analysis

Sungmook Lim ; Kyunbyoung Ko
PDF (584 KB)

Effect of Densification on Cellular Network Performance With Bounded Pathloss Model

Junyu Liu ; Min Sheng ; Lei Liu ; Jiandong Li
PDF (343 KB)

Clustered NFV Service Chaining Optimization in Mobile Edge Clouds

Yeonghun Nam ; Sooeun Song ; Jong-Moon Chung
PDF (512 KB)

Distributed Medium Access Control Protocol for Successive Interference Cancellation-Based Wireless Ad Hoc Networks

Mehmet Kontik ; Sinem Coleri Ergen
PDF (428 KB)

Baseband Unit Pool Planning for Cloud Radio Access Networks: An Approximation Algorithm

Sheng Xu ; Shaowei Wang
PDF (899 KB)

A Game Theoretic Framework for Device Association in Heterogeneous Cellular Networks With H2H/IoT Co-Existence

M. K. Elhattab ; Mahmoud M. Elmesalawy ; I. I. Ibrahim
PDF (1295 KB)

Load-Aware Energy Efficiency Optimization in Dense Small Cell Networks

Shie Wu ; Zhimin Zeng ; Hailun Xia
PDF (747 KB)

Spatiotemporal Mobility Prediction in Proactive Self-Organizing Cellular Networks

Hasan Farooq ; Ali Imran
PDF (585 KB)

Building an SDN Enterprise WLAN Based on Virtual APs

Luis Sequeira ; Juan Luis de la Cruz ; José Ruiz-Mas ; Jose Saldana ; Julián Fernandez-Navajas ; José Almodovar
PDF (803 KB)

Power Allocation in an Asymmetric Wireless Sensor Network

Weimei Jiang ; Xin He ; Tad Matsumoto
PDF (535 KB)

Relay Selection in Underwater Acoustic Cooperative Networks: A Contextual Bandit Approach

Xinbin Li ; Jiajia Liu ; Lei Yan ; Song Han ; Xinpeng Guan
PDF (915 KB)

A Cross-Layer Bandwidth Allocation Scheme for HTTP-Based Video Streaming in LTE Cellular Networks

Stefania Colonnese ; Francesca Cuomo ; Tommaso Melodia ; Izhak Rubin
PDF (526 KB)

Modeling and Analyzing the Optimal Contention Window Size for Distributed Synchronization in Ad Hoc Networks

Lei Lei ; Shengsuo Cai ; Xiaoming Chen ; Xiaoqin Song
PDF (549 KB)

GNSS Carrier Phase Tracking With Discrete Wavelet Transform Filtering Under Ionospheric Scintillation

Hang Ruan ; Lei Zhang ; Yiran Luo ; Teng Long
PDF (1344 KB)

Joint Mode Selection and Resource Allocation for Relay-Based D2D Communications

Tuong Duc Hoang ; Long Bao Le ; Tho Le-Ngoc
PDF (475 KB)

Asynchronous NOMA for Downlink Transmissions

Jianxiang Cui ; Guangliang Dong ; Shengli Zhang ; Haitao Li ; Guinian Feng
PDF (422 KB)

Fast Gaussian Process Regression for Multiuser Detection in DS-CDMA

Dinh-Mao Bui ; Sungyoung Lee
PDF (267 KB)

Advanced Frame Structures for Hybrid Spectrum Access Strategy in Cognitive Radio Communication Systems

Prabhat Thakur ; Alok Kumar ; S. Pandit ; G. Singh ; S. N. Satashia
PDF (719 KB)

DOA Estimation in MIMO Radar With Non-Perfectly Orthogonal Waveforms

Guimei Zheng
PDF (824 KB)

Upper Bound Analysis of the Handover Performance in HetNets

Irene Pappalardo ; Andrea Zanella ; Michele Zorzi
PDF (524 KB)

WidthSense: Wi-Fi Discovery via Distance-Based Correlation Analysis

Jaehyuk Choi
PDF (764 KB)

Efficient Detection of Spatial Modulation OFDM Systems With Multiple Carrier Frequency Offsets

Yan Zhao ; Yue Xiao ; Binhong Dong ; Ping Yang ; Lixia Xiao ; Wei Xiang
PDF (415 KB)

Exploiting Temporal Channel Correlation in Data-Assisted Massive MIMO Uplink Detection

Yang Li ; Rui Wang ; Yifan Chen ; Shihua Zhu
PDF (313 KB)

Downlink Beamforming for SWIPT Multi-User MISO Underlay Cognitive Radio Networks

Lina Mohjazi ; Imtiaz Ahmed ; Sami Muhaidat ; Mehrdad Dianati ; Mahmoud Al-Qutayri
PDF (299 KB)

Hybrid Analog-Digital Millimeter-Wave MU-MIMO Transmission With Virtual Path Selection

Ang Li ; Christos Masouros
PDF (615 KB)

Optimization of Hybrid Cache Placement for Collaborative Relaying

Gan Zheng ; Himel A. Suraweera ; Ioannis Krikidis
PDF (337 KB)

IEEE Communications Society

PDF (73 KB)

IEEE COMMUNICATIONS SURVEYS & TUTORIALS

A PUBLICATION OF THE IEEE COMMUNICATIONS SOCIETY



FIRST QUARTER 2017

VOLUME 19

NUMBER 1

ICSTCF

(ISSN 1553-877X)

Table of contents
PDF (368 KB)

Editorial: First Quarter 2017 IEEE Communications Surveys and Tutorials
Ying-Dar Lin
PDF (105 KB)

Coexistence of LTE-LAA and Wi-Fi on 5 GHz With Corresponding Deployment Scenarios: A Survey
Bolin Chen ; Jiming Chen ; Yuan Gao ; Jie Zhang
PDF (4006 KB)

Fundamental Green Tradeoffs: Progresses, Challenges, and Impacts on 5G Networks
Shunqing Zhang ; Qingqing Wu ; Shugong Xu ; Geoffrey Ye Li
PDF (2397 KB)

Optical Communication in Space: Challenges and Mitigation Techniques
Hemani Kaushal ; Georges Kaddoum
PDF (3122 KB)

A Survey on Legacy and Emerging Technologies for Public Safety Communications
Abhaykumar Kumbhar ; Farshad Koohifar ; İsmail Güvenç ; Bruce Mueller
PDF (4903 KB)

Advances on Exploiting Polarization in Wireless Communications: Channels, Technologies, and Applications
Caili Guo ; Fangfang Liu ; Shuo Chen ; Chunyan Feng ; Zhimin Zeng
PDF (4387 KB)

Modeling and Analysis of Cellular Networks Using Stochastic Geometry: A Tutorial
Hesham ElSawy ; Ahmed Sultan-Salem ; Mohamed-Slim Alouini ; Moe Z. Win
PDF (2745 KB)

A Survey of Underwater Optical Wireless Communications
Zhaoquan Zeng ; Shu Fu ; Huihui Zhang ; Yuhang Dong ; Julian Cheng
PDF (2926 KB)

An Overview on Resource Allocation Techniques for Multi-User MIMO Systems
Eduardo Castañeda ; Adão Silva ; Atílio Gameiro ; Marios Kountouris
PDF (2864 KB)

QoE in Video Transmission: A User Experience-Driven Strategy
Tiesong Zhao ; Qian Liu ; Chang Wen Chen
PDF (1238 KB)

Topology Discovery in Software Defined Networks: Threats, Taxonomy, and State-of-the-Art
Suleman Khan ; Abdullah Gani ; Ainuddin Wahid Abdul Wahab ; Mohsen Guizani ; Muhammad Khurram Khan
PDF (2485 KB)

Software Defined Networking Architecture, Security and Energy Efficiency: A Survey
Danda B. Rawat ; Swetha R. Reddy
PDF (2368 KB)

Physical Layer Security for Next Generation Wireless Networks: Theories, Technologies, and Challenges
Yiliang Liu ; Hsiao-Hwa Chen ; Liangmin Wang
PDF (2735 KB)

BGP Anomaly Detection Techniques: A Survey
Bahaa Al-Musawi ; Philip Branch ; Grenville Armitage
PDF (2889 KB)

Survey of Security Advances in Smart Grid: A Data Driven Approach
Song Tan ; Debraj De ; Wen-Zhan Song ; Junjie Yang ; Sajal K. Das
PDF (2802 KB)

Standardization and Security for Smart Grid Communications Based on Cognitive Radio Technologies—A Comprehensive Survey
Trong Nghia Le ; Wen-Long Chin ; Hsiao-Hwa Chen
PDF (1885 KB)

A Survey on Smart Grid Cyber-Physical System Testbeds
Mehmet Hazar Cintuglu ; Osama A. Mohammed ; Kemal Akkaya ; A. Selcuk Uluagac
PDF (2967 KB)

Identifying Propagation Sources in Networks: State-of-the-Art and Comparative Studies
Jiaojiao Jiang ; Sheng Wen ; Shui Yu ; Yang Xiang ; Wanlei Zhou
PDF (3586 KB)

A Survey of Standards for Machine-to-Machine and the Internet of Things
Vangelis Gazis
PDF (4405 KB)

Network Flow Watermarking: A Survey

Alfonso Iacovazzi ; Yuval Elovici

PDF (1522 KB)

Networking for Big Data: A Survey

Shui Yu ; Meng Liu ; Wanchun Dou ; Xiting Liu ; Sanming Zhou

PDF (1043 KB)

A Survey of Multi-Objective Optimization in Wireless Sensor Networks: Metrics, Algorithms, and Open Problems

Zesong Fei ; Bin Li ; Shaoshi Yang ; Chengwen Xing ; Hongbin

Chen ; Lajos Hanzo

PDF (4477 KB)

MAC Protocols With Wake-Up Radio for Wireless Sensor Networks:

A Review

Fatima Zahra Djiroun ; Djamel Djenouri

PDF (3428 KB)

De-Ossifying the Internet Transport Layer: A Survey and Future Perspectives

Giorgos Papastergiou ; Gorry Fairhurst ; David Ros ; Anna Brunstrom ; Karl-Johan Grinnemo ; Per Hurtig ; Naeem Khademi ; Michael Tüxen ; Michael Welzl ; Dragana Damjanovic ; Simone Mangiante

PDF (1910 KB)

A Survey on Data Center Networking (DCN): Infrastructure and Operations

Wenfeng Xia ; Peng Zhao ; Yonggang Wen ; Haiyong Xie

PDF (1509 KB)

A Comparative Survey of VANET Clustering Techniques

Craig Cooper ; Daniel Franklin ; Montserrat Ros ; Farzad Safaei ;

Mehran Abolhasan

PDF (2541 KB)

IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS

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



JANUARY 2017

VOLUME 16

NUMBER 1

ITWCAX

(ISSN 1536-1276)

Table of contents
PDF (242 KB)

IEEE Transactions on Wireless Communications
PDF (83 KB)

Overviewing the State of the Transactions: An Editorial by the
Outgoing Editor-in-Chief
Jeffrey G. Andrews
PDF (699 KB)

A Message From the New Editor-in-Chief
Martin Haenggi
PDF (1399 KB)

**Closed-Form Performance Bounds for Stochastic Geometry-
Based Cellular Networks**
Hieu Duy Nguyen ; Sumei Sun
PDF (1217 KB)

**Harnessing Partial Packets in Wireless Networks: Throughput
and Energy Benefits**
Georgios Angelopoulos ; Muriel Médard ; Anantha P.
Chandrakasan
PDF (1747 KB)

**Max-Min Utility Optimization in Load Coupled Interference
Networks**
Renato Luís Garrido Cavalcante ; Martin Kasparick ; Sławomir
Stańczak
PDF (1093 KB)

**Policy Optimization for Content Push via Energy Harvesting
Small Cells in Heterogeneous Networks**
Jie Gong ; Sheng Zhou ; Zhenyu Zhou ; Zhisheng Niu
PDF (1208 KB)

**Sensing Time Optimization and Power Control for Energy
Efficient Cognitive Small Cell With Imperfect Hybrid Spectrum
Sensing**
Haijun Zhang ; Yani Nie ; Julian Cheng ; Victor C. M. Leung ;
Arumugam Nallanathan
PDF (1385 KB)

**Event-Trigger Based Robust-Optimal Control for Energy
Harvesting Transmitter**
Yirui Cong ; Xiangyun Zhou
PDF (871 KB)

**Throughput-Efficient Channel Allocation Algorithms in Multi-
Channel Cognitive Vehicular Networks**
You Han ; Eylem Ekici ; Haris Kremo ; Onur Altintas
PDF (912 KB)

**Timestamp Free Synchronization With Sub-Tick Accuracy in
the Presence of Discrete Clocks**
Bernhard Etlzinger ; Nino Palaoro ; Werner Haselmayr ; Branislav
Rudić ; Andreas Springer
PDF (1268 KB)

**Dual-Hop FSO Transmission Systems Over Gamma-Gamma
Turbulence With Pointing Errors**
Emna Zedini ; Hamza Soury ; Mohamed-Slim Alouini
PDF (1123 KB)

**Design and Analysis of Transmit Beamforming for Millimeter
Wave Base Station Discovery**
Chunshan Liu ; Min Li ; Iain B. Collings ; Stephen V. Hanly ; Philip
Whiting
PDF (2068 KB)

**Self-Energy Recycling for RF Powered Multi-Antenna Relay
Channels**
Duckdong Hwang ; Keum Cheol Hwang ; Dong In Kim ; Tae-Jin
Lee
PDF (1539 KB)

**Nonlinear Equalization Approaches for Physical Layer Network
Coding**
Armin Schmidt ; Robert Schober ; Wolfgang H. Gerstacker
PDF (1349 KB)

**Optimal Cross-Layer Design for Energy Efficient D2D Sharing
Systems**
Abdulrahman Alabbasi ; Basem Shihada
PDF (1966 KB)

Another Look in the Analysis of Cooperative Spectrum Sensing over Nakagami- m Fading Channels

Debasish Bera ; Indrajit Chakrabarti ; Sant S. Pathak ; George K. Karagiannis
PDF (1399 KB)

Joint Load Balancing and Interference Management for Small-Cell Heterogeneous Networks With Limited Backhaul Capacity

Ho Huu Minh Tam ; Hoang Duong Tuan ; Duy Trong Ngo ; Trung Q. Duong ; H. Vincent Poor
PDF (1412 KB)

Robust Resource Allocation to Enhance Physical Layer Security in Systems With Full-Duplex Receivers: Active Adversary

Mohammad Reza Abedi ; Nader Mokari ; Hamid Saeedi ; Halim Yanikomeroglu
PDF (2018 KB)

Defining Spatial Secrecy Outage Probability for Exposure Region-Based Beamforming

Yuanrui Zhang ; Youngwook Ko ; Roger Woods ; Alan Marshall
PDF (1987 KB)

Sum Throughput Maximization for Multi-User MIMO Cognitive Wireless Powered Communication Networks

Jaemin Kim ; Hoon Lee ; Changick Song ; Taeseok Oh ; Inkyu Lee
PDF (1363 KB)

Iterative Multi-Level Soft Frequency Reuse With Load Balancing for Heterogeneous LTE-A Systems

Giovanni Giambene ; Van Anh Le ; Thomas Bourgeau ; Hakima Chaouchi
PDF (1759 KB)

Single Sensor Path Design for Best Emitter Localization via Convex Optimization

Elad Tzoref ; Anthony J. Weiss
PDF (1740 KB)

Generalized Multicast Multibeam Precoding for Satellite Communications

Vahid Joroughi ; Miguel Ángel Vázquez ; Ana I. Pérez-Neira
PDF (1438 KB)

Buffer-Aided Relaying With Discrete Transmission Rates for the Two-Hop Half-Duplex Relay Network

Wayan Wicke ; Nikola Zlatanov ; Vahid Jamali ; Robert Schober
PDF (1139 KB)

Modeling and Analysis of Energy Efficiency and Interference for Cellular Relay Deployment

Fanny Parzysz ; Mai Vu ; François Gagnon
PDF (1799 KB)

Rate Aware Instantly Decodable Network Codes

Ahmed Douik ; Sameh Sorour ; Tareq Y. Al-Naffouri ; Mohamed-Slim Alouini
PDF (1292 KB)

A Unified Moment-Based Approach for the Evaluation of the Outage Probability With Noise and Interference

Nadhir Ben Rached ; Abla Kammoun ; Mohamed-Slim Alouini ; Raul Tempone
PDF (1237 KB)

Context-Aware Proactive Content Caching With Service Differentiation in Wireless Networks

Sabrina Müller ; Onur Atan ; Mihaela van der Schaar ; Anja Klein
PDF (2137 KB)

GT-QoSec: A Game-Theoretic Joint Optimization of QoS and Security for Differentiated Services in Next Generation Heterogeneous Networks

Zubair Md. Fadlullah ; Chao Wei ; Zhiguo Shi ; Nei Kato
PDF (2158 KB)

QoS-Aware Enhanced-Security for TDMA Transmissions from Buffered Source Nodes

Ahmed El Shafie ; Trung Q. Duong ; Naofal Al-Dhahir
PDF (1216 KB)

Resource Allocation Algorithms Supporting Coexistence of Cognitive Vehicular and IEEE 802.22 Networks

You Han ; Eylem Ekici ; Haris Kremo ; Onur Altintas
PDF (959 KB)

Forward and Backhaul Link Optimization for Energy Efficient OFDMA Small Cell Networks

Gaofeng Nie ; Hui Tian ; Cigdem Sengul ; Ping Zhang
PDF (2189 KB)

Multi-User Scheduling of the Full-Duplex Enabled Two-Way Relay Systems

Cheng Li ; Bin Xia ; Shihai Shao ; Zhiyong Chen ; Youxi Tang
PDF (1620 KB)

Uplink Waveform Channel With Imperfect Channel State Information and Finite Constellation Input

Tan Tai Do ; Tobias J. Oechtering ; Su Min Kim ; Mikael Skoglund ; Gunnar Peters
PDF (1148 KB)

Joint Mode Selection and Interference Management in Device-to-Device Communications Underlaid MIMO Cellular Networks

Hsin-Jui Chou ; Ronald Y. Chang
PDF (1469 KB)

Training Signal Design for Correlated Massive MIMO Channel Estimation

Mojtaba Soltanalian ; Mohammad Mahdi Naghsh ; Nafiseh Shariati ; Petre Stoica ; Babak Hassibi
PDF (1388 KB)

Modeling Delay Timer Algorithm for Handover Reduction in Heterogeneous Radio Access Networks

Chia-Peng Lee ; Phone Lin
PDF (2280 KB)

Reward Rate Maximization and Optimal Transmission Policy of EH Device With Temporal Death in EH-WSNs

Shengda Tang ; Liansheng Tan
PDF (1247 KB)

Eigenvalue-Based Multiple Antenna Spectrum Sensing: Higher Order Moments

Saeid Sedighi ; Abbas Taherpour ; Saeed Gazor ; Tamer Khattab
PDF (2993 KB)

A Low-Complexity Graph-Based LMMSE Receiver for MIMO ISI Channels With M -QAM Modulation

Pinar Sen ; Ali Özgür Yılmaz
PDF (1183 KB)

Bounds for Eigenvalues of Spatial Correlation Matrices With the Exponential Model in MIMO Systems

Hyeonyong Lim ; Yeonsoo Jang ; Dongweon Yoon
PDF (1061 KB)

Distributed Interference and Energy-Aware Power Control for Ultra-Dense D2D Networks: A Mean Field Game

Chungang Yang ; Jiandong Li ; Prabodini Semasinghe ; Ekram Hossain ; Samir M. Perlaza ; Zhu Han
PDF (1514 KB)

Energy Efficient Resource Allocation for Multiuser Relay Networks

Keshav Singh ; Ankit Gupta ; Tharmalingam Ratnarajah
PDF (1296 KB)

Distributed Dynamic Resource Allocation for Cooperative Cognitive Radio Networks With Multi-Antenna Relay Selection

Jeroen Van Hecke ; Paolo Del Fiorentino ; Vincenzo Lottici ; Filippo Giannetti ; Luc Vandendorpe ; Marc Moeneclaey
PDF (1620 KB)

Distributed Resource Allocation Assisted by Intercell Interference Mitigation in Downlink Multicell MC DS-CDMA Systems

Jia Shi ; Zhengyu Song ; Qiang Ni
PDF (1302 KB)

Exploiting Adversarial Jamming Signals for Energy Harvesting in Interference Networks

Jing Guo ; Nan Zhao ; F. Richard Yu ; Xin Liu ; Victor C. M. Leung
PDF (2344 KB)

Relay Selection Analysis for an Opportunistic Two-Hop Multi-User System in a Poisson Field of Nodes

Alberto Zanella ; Alessandro Bazzi ; Barbara M. Masini
PDF (1213 KB)

Radio-Channel Characterization of Smart Grid Substations in the 2.4-GHz ISM Band

Ruben M. Sandoval ; Antonio-Javier Garcia-Sanchez ; Jose-Maria Molina-Garcia-Pardo ; Felipe Garcia-Sanchez ; Joan Garcia-Haro
PDF (3540 KB)

Mode Division Multiplexing Communication Using Microwave Orbital Angular Momentum: An Experimental Study

Weite Zhang ; Shilie Zheng ; Xiaonan Hui ; Ruofan Dong ; Xiaofeng Jin ; Hao Chi ; Xianmin Zhang
PDF (3046 KB)

Physical-Layer Security for Spectrum Sharing Systems

Yulong Zou
PDF (917 KB)

Power Control for D2D Underlay Cellular Networks With Channel Uncertainty

Amen Memmi ; Zouheir Rezki ; Mohamed-Slim Alouini
PDF (1479 KB)

Relaying and Radio Resource Partitioning for Machine-Type Communications in Cellular Networks

Utku Tefek ; Teng Joon Lim
PDF (1353 KB)

IEEE Communications Society

PDF (78 KB)

Blank page

PDF (3 KB)

IEEE

WIRELESS COMMUNICATIONS LETTERS

A PUBLICATION OF THE IEEE COMMUNICATIONS SOCIETY, THE IEEE SIGNAL PROCESSING SOCIETY, AND THE IEEE VEHICULAR TECHNOLOGY SOCIETY



FEBRUARY 2017

VOLUME 6

NUMBER 1

IWCLAF

ISSN (2162-2345)

Table of contents
PDF (273 KB)

IEEE Wireless Communications Letters
PDF (71 KB)

Exemplary Reviewers 2016
PDF (71 KB)

Estimation of Received Signal Strength Distribution for Smart Meters With Biased Measurement Data Set
Mathias Rønholdt Kielgast ; Anders Charly Rasmussen ; Mathias Hjorth Laursen ; Jimmy Jessen Nielsen ; Petar Popovski ; Rasmus Krigslund
PDF (774 KB)

Improved Performance Bounds for Finite-Block-Length Network Coded Systems With Polluted Packet Recycling
Muhammad Danish Qureshi ; Wai Ho Mow
PDF (682 KB)

Coverage Analysis in Downlink Poisson Cellular Network With κ - μ Shadowed Fading
Sudharsan Parthasarathy ; Radha Krishna Ganti
PDF (428 KB)

Joint Sparse Graph-Detector Design for Downlink MIMO-SCMA Systems
Yang Du ; Binhong Dong ; Zhi Chen ; Pengyu Gao ; Jun Fang
PDF (663 KB)

A Low Complexity Pilot Scheduling Algorithm for Massive MIMO
Jung-Chieh Chen ; Chao-Kai Wen ; Shi Jin ; Kai-Kit Wong
PDF (613 KB)

A Dynamic Hop-Aware Buffer Management Scheme for Multi-Hop Ad Hoc Networks
Hassan Al-Mahdi ; Mohamed A. Kalil
PDF (819 KB)

A Reliable and Energy-Efficient Opportunistic Routing Protocol for Dense Lossy Networks
Ming Zhao ; Arun Kumar ; Peter Han Joo Chong ; Rongxing Lu
PDF (466 KB)

A Unified Base Station Switching Framework Considering Both Uplink and Downlink Traffic
Eunsung Oh ; Kyuho Son
PDF (422 KB)

Quantifying the Memory Effects of Power Amplifiers: EVM Closed-Form Derivations of Multicarrier Signals
Ali Cheaito ; Matthieu Crussière ; Jean-François Héland ; Yves Louët
PDF (317 KB)

Complex Minkowski Reduction and a Relaxation for Near-Optimal MIMO Linear Equalization
Liqin Ding ; Yang Wang ; Jiliang Zhang
PDF (511 KB)

Denoise-and-Forward Two-Path Successive Relaying With DBPSK Modulation
Jie Fan ; Lixin Li ; Huisheng Zhang ; Wei Chen
PDF (500 KB)

Spectral Efficiency Bounds for Interference-Limited SVD-MIMO Cellular Communication Systems
Jinseok Choi ; Jeonghun Park ; Brian L. Evans
PDF (374 KB)

A Low-Complexity Detector for BPPM Systems Under Additive Gaussian Mixture Noise
Vasileios G. Ataloglou ; Georgia D. Ntouni ; Vasileios M. Kapinas ; George K. Karagiannidis
PDF (582 KB)

Distributed Scheduling Schemes in Energy Harvesting Multiple Access
Sakshi Kapoor ; Sibi Raj Bhaskaran Pillai
PDF (285 KB)

Massive MIMO Pilot Retransmission Strategies for Robustification Against Jamming
Tan Tai Do ; Hien Quoc Ngo ; Trung Q. Duong ; Tobias J. Oechtering ; Mikael Skoglund
PDF (359 KB)

Joint Space Time Block Code and Modulation Classification for MIMO Systems
Özgür Bayer ; Mengüç Öner
PDF (398 KB)

Fair Non-Orthogonal Multiple Access for Visible Light Communication Downlinks
Zhaohui Yang ; Wei Xu ; Yiran Li
PDF (277 KB)

A Semi-Blind Channel Estimation Algorithm for Massive MIMO Systems
Khushboo Mawatwal ; Debarati Sen ; Rajarshi Roy
PDF (484 KB)

Zero-Forcing Precoding Performance in Multiuser MIMO Systems With Heterogeneous Ricean Fading
Harsh Tataria ; Peter J. Smith ; Larry J. Greenstein ; Pawel A. Dmochowski
PDF (1453 KB)

BER of MIMO-BICM System at Current Detection/Decoding Cycle
Namshik Kim ; Jinwoo Kim ; Seung-Chan Lim ; Hyuncheol Park
PDF (335 KB)

Censored Multipath Component Cross-Polarization Ratio Modeling
Aki Karttunen ; Carl Gustafson ; Andreas F. Molisch ; Jan Järveläinen ; Katsuyuki Haneda
PDF (519 KB)

Maximum Throughput of CSMA Networks With Capture
Xinghua Sun
PDF (414 KB)

Energy Efficiency Region for Gaussian MISO Channels With Integrated Services
Weidong Mei ; Zhi Chen ; Jun Fang
PDF (385 KB)

Optimization of Watchdog Selection in Wireless Sensor Networks
Md. Mahmud Hasan ; Hussein T. Mouftah
PDF (1626 KB)

A Proposed Network Balance Index for Heterogeneous Networks
Yifei Huang ; Salman Durrani ; Pawel Dmochowski ; Xiangyun Zhou
PDF (292 KB)

Power Control in Interference Channels With Class A Impulse Noise
Erik Axell ; Patrik Eliardsson ; Sara Örn Tengstrand ; Kia Wiklundh
PDF (585 KB)

Enhanced Physical Layer Security in D2D Spectrum Sharing Networks
Wei Wang ; Kah Chan Teh ; Kwok Hung Li
PDF (339 KB)

Counting Geodesic Paths in 1-D VANETs
Georgie Knight ; Alexander P. Kartun-Giles ; Orestis Georgiou ; Carl P. Dettmann
PDF (341 KB)

Correlated Interference From Uncorrelated Users in Bounded Ad Hoc Networks With Blockage
Konstantinos Koufos ; Carl P. Dettmann ; Justin P. Coon
PDF (368 KB)

Optimal User Loading in Massive MIMO Systems With Regularized Zero Forcing Precoding
Sungwoo Park ; Jeonghun Park ; Ali Yazdan ; Robert W. Heath
PDF (487 KB)

Performance Analysis of OFDM-Based Nonlinear AF Multiple-Relay Systems
Nagendra Kumar ; Sanjeev Sharma ; Vimal Bhatia
PDF (300 KB)

Quasi-Orthogonal Combining for Reducing RF Chains in Massive MIMO Systems
Abhay Kumar Sah ; A. K. Chaturvedi
PDF (551 KB)

Nearest-Neighbor and Contact Distance Distributions for Thomas Cluster Process
Mehrnaz Afshang ; Chiranjib Saha ; Harpreet S. Dhillon
PDF (269 KB)

Wireless Energy Harvesting in Cognitive Massive MIMO Systems With Underlay Spectrum Sharing
Hayder Al-Hraishawi ; Gayan Amarasuriya Aruma Baduge
PDF (410 KB)

Many-to-Many Matching With Externalities for Device-to-Device Communications
Jingjing Zhao ; Yuanwei Liu ; Kok Keong Chai ; Yue Chen ; Maged Elkashlan
PDF (390 KB)

IEEE Communications Society Information
PDF (68 KB)

IEEE TRANSACTIONS ON MOBILE COMPUTING

A joint publication of the



IEEE Computer Society



IEEE Circuits and Systems Society



IEEE Signal
Processing Society



IEEE Communications Society

Indexed in ISI

February 2017

A Weighted Crowdsourcing Approach for Network Quality Measurement in Cellular Data Networks

Yaliang Li ; Jing Gao ; Patrick P. C. Lee ; Lu Su ; Caifeng He ; Cheng He ; Fan Yang ; Wei Fan
PDF (1167 KB)

Apprenticeship Learning Based Spectrum Decision in Multi-Channel Wireless Mesh Networks with Multi-Beam Antennas

Yeqing Wu ; Fei Hu ; Sunil Kumar ; John D. Matyjas ; Qingquan Sun ; Yingying Zhu
PDF (867 KB)

ARM: Anonymous Rating Mechanism for Discrete Power Control

Shuqin Li ; Ziyu Shao ; Jianwei Huang
PDF (758 KB)

Deploy-As-You-Go Wireless Relay Placement: An Optimal Sequential Decision Approach Using the Multi-Relay Channel Model

Arpan Chattopadhyay ; Abhishek Sinha ; Marceau Coupechoux ; Anurag Kumar
PDF (600 KB)

Effective Static and Adaptive Carrier Sensing for Dense Wireless CSMA Networks

Chi-Kin Chau ; Ivan W. H. Ho ; Zhenhui Situ ; Soung Chang Liew ; Jiali Zhang
PDF (938 KB)

Experimental Evaluation of Impulsive Ultrasonic Intra-Body Communications for Implantable Biomedical Devices

G. Enrico Santagati ; Tommaso Melodia
PDF (1181 KB)

GRfid: A Device-Free RFID-Based Gesture Recognition System

Yongpan Zou ; Jiang Xiao ; Jinsong Han ; Kaishun Wu ; Yun Li ; Lionel M. Ni
PDF (1358 KB)

InfraSee: An Unobtrusive Alertness System for Pedestrian Mobile Phone Users

Xuefeng Liu ; Jiannong Cao ; Jiaqi Wen ; Shaojie Tang
PDF (3590 KB)

Maximum Link Activation with Cooperative Transmission and Interference Cancellation in Wireless Networks

Qing He ; Di Yuan ; Anthony Ephremides
PDF (588 KB)

Medium Access Control for Wireless Body Area Networks with QoS Provisioning and Energy Efficient Design

Bin Liu ; Zhisheng Yan ; Chang Wen Chen
PDF (620 KB)

NoPSM: A Concurrent MAC Protocol over Low-Data-Rate Low-Power Wireless Channel without PRR-SINR Model

Haiming Chen ; Zhaoliang Zhang ; Li Cui ; Changcheng Huang
PDF (2107 KB)

On the Design of a Reward-Based Incentive Mechanism for Delay Tolerant Networks

Tatiana Seregina ; Olivier Brun ; Rachid El-Azouzi ; Balakrishna J. Prabhu
PDF (931 KB)

Pallas: Self-Bootstrapping Fine-Grained Passive Indoor Localization Using WiFi Monitors

Chengwen Luo ; Long Cheng ; Mun Choon Chan ; Yu Gu ; Jianqiang Li ; Zhong Ming
PDF (1541 KB)

Performance Analysis of Mobile Data Offloading in Heterogeneous Networks

Fidan Mehmeti ; Thrasyvoulos Spyropoulos
PDF (1543 KB)

Robotic Message Ferrying for Wireless Networks Using Coarse-Grained Backpressure Control

Shangxing Wang ; Andrea Gasparri ; Bhaskar Krishnamachari
PDF (703 KB)

RT-Fall: A Real-Time and Contactless Fall Detection System with Commodity WiFi Devices

Hao Wang ; Daqing Zhang ; Yasha Wang ; Junyi Ma ; Yuxiang Wang ; Shengjie Li
PDF (1991 KB)

Soft Hint Enabled Adaptive Visible Light Communication over Screen-Camera Links

Wan Du ; Jansen Christian Liando ; Mo Li
PDF (801 KB)

Two-Sided Matching Based Cooperative Spectrum Sharing

Lin Gao ; Lingjie Duan ; Jianwei Huang
PDF (835 KB)

Understanding Smartphone Sensor and App Data for Enhancing the Security of Secret Questions

Peng Zhao ; Kaigui Bian ; Tong Zhao ; Xintong Song ; Jung-Min "Jerry" Park ; Xiaoming Li ; Fan Ye ; Wei Yan
PDF (1025 KB)

Virtual Multipath Attack and Defense for Location Distinction in Wireless Networks

Song Fang ; Yao Liu ; Wenbo Shen ; Haojin Zhu ; Tao Wang
PDF (1271 KB)

WiFall: Device-Free Fall Detection by Wireless Networks

Yuxi Wang ; Kaishun Wu ; Lionel M. Ni
PDF (1636 KB)

2016 Reviewers List

PDF (61 KB)

Networking

Table of Contents

PDF (540 KB)

IEEE/ACM Transactions on Networking publication information

PDF (77 KB)

Incentivizing Sharing in Realtime D2D Streaming Networks: A Mean Field Game PerspectiveJian Li ; Rajarshi Bhattacharyya ; Suman Paul ; Srinivas Shakkottai ; Vijay Subramanian
PDF (2013 KB)**A New Constant Factor Approximation to Construct Highly Fault-Tolerant Connected Dominating Set in Unit Disk Graph**Wei Wang ; Bei Liu ; Donghyun Kim ; Deying Li ; Jingyi Wang ; Wei Gao
PDF (2476 KB)**The Value-of-Information in Matching With Queues**Longbo Huang
PDF (1032 KB)**Enabling Network Anti-Inference via Proactive Strategies: A Fundamental Perspective**Zhuo Lu ; Cliff Wang
PDF (1123 KB)**Radio Frequency Traffic Classification Over WLAN**Joe Kornyscky ; Omar Abdul-Hameed ; Ahmet Kondo ; Brian C. Barber
PDF (3273 KB)**From Rateless to Hopless**Zhenjiang Li ; Wan Du ; Yuanqing Zheng ; Mo Li ; Dapeng Wu
PDF (2053 KB)**Information-Centric Multilayer Networking: Improving Performance Through an ICN/WDM Architecture**Mays F. AL-Naday ; Nikolaos Thomos ; Martin J. Reed
PDF (1892 KB)**Optimally Approximating the Coverage Lifetime of Wireless Sensor Networks**Ashwin Pananjady ; Vivek Kumar Bagaria ; Rahul Vaze
PDF (1981 KB)**Adaptive Influence Maximization in Dynamic Social Networks**Guangmo Tong ; Weili Wu ; Shaojie Tang ; Ding-Zhu Du
PDF (2320 KB)**Delay Network Tomography Using a Partially Observable Bivariate Markov Chain**Neshat Etemadi Rad ; Yariv Ephraim ; Brian L. Mark
PDF (1434 KB)**Tunable QoS-Aware Network Survivability**Jose Yallouz ; Ariel Orda
PDF (1548 KB)**Correctness of Routing Vector Protocols as a Property of Network Cycles**João Luís Sobrinho
PDF (962 KB)**Scheduling in Densified Networks: Algorithms and Performance**Sharayu Moharir ; Subhashini Krishnasamy ; Sanjay Shakkottai
PDF (1016 KB)**How Much Cache is Needed to Achieve Linear Capacity Scaling in Backhaul-Limited Dense Wireless Networks?**An Liu ; Vincent K. N. Lau
PDF (1722 KB)**On the Problem of Optimal Path Encoding for Software-Defined Networks**Adishesu Hari ; Urs Niesen ; Gordon Wilfong
PDF (765 KB)**Optimizing Throughput in Optical Networks: The Joint Routing and Power Control Problem**Zizhong Cao ; Paul Claisse ; René-Jean Essiambre ; Murali Kodialam ; T. V. Lakshman
PDF (1876 KB)**Optimal Monitor Assignment for Preferential Link Tomography in Communication Networks**Wei Dong ; Yi Gao ; Wenbin Wu ; Jiajun Bu ; Chun Chen ; Xiang-Yang Li
PDF (2490 KB)**RFID Estimation With Blocker Tags**Xiulong Liu ; Bin Xiao ; Keqiu Li ; Alex X. Liu ; Jie Wu ; Xin Xie ; Heng Qi
PDF (2947 KB)**Online Allocation of Virtual Machines in a Distributed Cloud**Fang Hao ; Murali Kodialam ; T. V. Lakshman ; Sarit Mukherjee
PDF (2643 KB)**How CSMA/CA With Deferral Affects Performance and Dynamics in Power-Line Communications**Christina Vlachou ; Albert Banchs ; Julien Herzen ; Patrick Thiran
PDF (1973 KB)**Multi-Category RFID Estimation**Xiulong Liu ; Keqiu Li ; Alex X. Liu ; Song Guo ; Muhammad Shahzad ; Ann L. Wang ; Jie Wu
PDF (5312 KB)**Fast Tracking the Population of Key Tags in Large-Scale Anonymous RFID Systems**Xiulong Liu ; Xin Xie ; Keqiu Li ; Bin Xiao ; Jie Wu ; Heng Qi ; Dawei Lu
PDF (4300 KB)

Resource Allocation and Rate Gains in Practical Full-Duplex Systems

Jelena Marašević ; Jin Zhou ; Harish Krishnaswamy ; Yuan Zhong ; Gil Zussman
PDF (3994 KB)

Packet-Scale Congestion Control Paradigm

Rebecca Lovewell ; Qianwen Yin ; Tianrong Zhang ; Jasleen Kaur ; Frank Donelson Smith
PDF (1164 KB)

PASE: Synthesizing Existing Transport Strategies for Near-Optimal Data Center Transport

Ali Munir ; Ghufuran Baig ; Syed Mohammad Irteza ; Ihsan Ayyub Qazi ; Alex X. Liu ; Fahad Rafique Dogar
PDF (2685 KB)

DX: Latency-Based Congestion Control for Datacenters

Changhyun Lee ; Chunjong Park ; Keon Jang ; Sue Moon ; Dongsu Han
PDF (2007 KB)

Improved Utility-Based Congestion Control for Delay-Constrained Communication

Stefano D'Aronco ; Laura Toni ; Sergio Mena ; Xiaoqing Zhu ; Pascal Frossard
PDF (3144 KB)

Temporal Update Dynamics Under Blind Sampling

Xiaoyong Li ; Daren B. H. Cline ; Dmitri Loguinov
PDF (3145 KB)

Throughput-Optimal Multihop Broadcast on Directed Acyclic Wireless Networks

Abhishek Sinha ; Georgios Paschos ; Chih-Ping Li ; Eytan Modiano
PDF (2563 KB)

Collision-Aware Churn Estimation in Large-Scale Dynamic RFID Systems

Qingjun Xiao ; Bin Xiao ; Shigang Chen ; Jiming Chen
PDF (1577 KB)

HetNets Selection by Clients: Convergence, Efficiency, and Practicality

Alireza Keshavarz-Haddad ; Ehsan Aryafar ; Michael Wang ; Mung Chiang
PDF (2672 KB)

Optimal Spectrum Auction Design With 2-D Truthful Revelations Under Uncertain Spectrum Availability

V. Sriram Siddhardh Nadendla ; Swastik K. Brahma ; Pramod K. Varshney
PDF (2073 KB)

Network Capability in Localizing Node Failures via End-to-End Path Measurements

Liang Ma ; Ting He ; Ananthram Swami ; Don Towsley ; Kin K. Leung
PDF (2222 KB)

Self-Stabilized Distributed Network Distance Prediction

Yongquan Fu ; Xu Xiaoping
PDF (1912 KB)

Robust and Optimal Opportunistic Scheduling for Downlink Two-Flow Network Coding With Varying Channel Quality and Rate Adaptation

Wei-Cheng Kuo ; Chih-Chun Wang
PDF (1530 KB)

Accurate Per-Packet Delay Tomography in Wireless Ad Hoc Networks

Yi Gao ; Wei Dong ; Chun Chen ; Xiaoyu Zhang ; Jiajun Bu ; Xue Liu
PDF (2092 KB)

A High Efficiency MAC Protocol for WLANs: Providing Fairness in Dense Scenarios

Luis Sanabria-Russo ; Jaume Barcelo ; Boris Bellalta ; Francesco Gringoli
PDF (1583 KB)

eBA: Efficient Bandwidth Guarantee Under Traffic Variability in Datacenters

Fangming Liu ; Jian Guo ; Xiaomeng Huang ; John C. S. Lui
PDF (2379 KB)

eICIC Configuration Algorithm with Service Scalability in Heterogeneous Cellular Networks

Hao Zhou ; Yusheng Ji ; Xiaoyan Wang ; Shigeki Yamada
PDF (4426 KB)

Amazon in the White Space: Social Recommendation Aided Distributed Spectrum Access

Xu Chen ; Xiaowen Gong ; Lei Yang ; Junshan Zhang
PDF (1977 KB)

Performance Modeling, Analysis, and Optimization of Delayed Mobile Data Offloading for Mobile Users

Fidan Mehmeti ; Thrasyvoulos Spyropoulos
PDF (2194 KB)

Path-Based Epidemic Spreading in Networks

Wei Koong Chai ; George Pavlou
PDF (2545 KB)

Guaranteeing Deadlines for Inter-Data Center Transfers

Hong Zhang ; Kai Chen ; Wei Bai ; Dongsu Han ; Chen Tian ; Hao Wang ; Haibing Guan ; Ming Zhang
PDF (3126 KB)

STPP: Spatial-Temporal Phase Profiling-Based Method for Relative RFID Tag Localization

Longfei Shangguan ; Zheng Yang ; Alex X. Liu ; Zimu Zhou ; Yunhao Liu
PDF (3680 KB)

Design and Implementation of a Stateful Network Packet Processing Framework for GPUs

Giorgos Vasiliadis ; Lazaros Koromilas ; Michalis Polychronakis ; Sotiris Ioannidis
PDF (2248 KB)

Inter-Session Network Coding Schemes for 1-to-2 Downlink Access-Point Networks With Sequential Hard Deadline Constraints

Xiaohang Li ; Chih-Chun Wang ; Xiaojun Lin
PDF (1017 KB)

List of Reviewers

PDF (70 KB)

IEEE/ACM Transactions on Networking society information

PDF (79 KB)

IEEE/ACM Transactions on Networking information for authors

PDF (75 KB)

JOURNAL OF Optical Communications and Networking

[Front cover]
PDF (1935 KB)

[front inside cover]
PDF (32 KB)

Table of Contents
PDF (77 KB)

Introduction to the OFC 2016 special issue
Ori Gerstel ; Pat Iannone
PDF (24 KB)

Increasing flexibility and capacity in real PON deployments by using 2/4/8-PAM formats
R. Van Der Linden ; N. C. Tran ; E. Tangdionga ; A. M. J. Koonen
PDF (691 KB)

Design of low-margin optical networks
Yvan Pointurier
PDF (604 KB)

Tipping point for the future scalable OXC: what size MxM WSS is needed?
Masaki Niwa ; Yojiro Mori ; Hiroshi Hasegawa ; Ken-ichi Sato
PDF (2131 KB)

Synchronization in a random length ring network for SND-controlled optical TDM switching
Valerija Kamchevska ; Valentina Cristofori ; Francesco Da Ros ; Bingli Guo ; Chris Jackson ; Anna M. Fagertun ; Sarah Ruepp ; Reza Nejabati ; Dimitra Simeonidou ; Lars Dittmann ; Michael Berger ; Leif K. Oxenlowe ; Michael Galili
PDF (1460 KB)

Virtual network topology adaptability based on data analytics for traffic prediction
Fernando Morales ; Marc Ruiz ; Lluís Gifre ; Luis M. Contreras ; Victor Lopez ; Luis Velasco
PDF (1184 KB)

Performance evaluation of ethernet- based mobile fronthaul and wireless comp in split-PHY processing
Kenji Miyamoto ; Shigeru Kuwano ; Tatsuya Shimizu ; Jun Terada ; Akihiro Otaka
PDF (642 KB)

Need for a transport aPI in 5G for global orchestration of cloud and networks through a virtualized infrastructure manager and planner [invited]
Arturo Mayoral ; Raul Munoz ; Ricard Vilalta ; Ramon Casellas ; Ricardo Martinez ; Victor Lopez
PDF (918 KB)

Software-defined elastic optical network node supporting spectrum defragmentation

Paikun Zhu ; Juhao Li ; Dan Wu ; Yuanxiang Chen ; Yu Tian ; Zhongying Wu ; Dawei Ge ; Xin Chen ; Zhangyuan Chen ; Yongqi He
PDF (1060 KB)

PON roadmap [invited]

Derek Nessel
PDF (243 KB)

Spatial and spectral super-channel optical packet switching system for multigranular SDM-WDM optical networks

Hideaki Furukawa ; Jose Manuel Delgado Mendinueta ; Naoya Wada ; Hiroaki Harai
PDF (1156 KB)

Joint multi-layer survivability techniques for IP-over-elastic-optical- networks

P. Papanikolaou ; K. Christodoulopoulos ; E. Varvarigos
PDF (1359 KB)

Routing, Spectrum, and core and/or mode assignment on space-division multiplexing optical networks [invited]

Hideki Tode ; Yusuke Hirota
PDF (2250 KB)

Multiflow application for WDM networks with multicarrier transponders serving superchannels in contentionless OXCS [invited]

Thierry Zami
PDF (2343 KB)

Traffic grooming policies under switching constraints in next-generation transport networks

Antnio Eira ; Joao Pedro ; Joao Pires
PDF (1408 KB)

Survey of photonic switching architectures and technologies in support of spatially and spectrally flexible optical networking [invited]

Dan M. Marom ; Paul D. Colbourne ; Antonio D'errico ; Nicolas K. Fontaine ; Yuichiro Ikuma ; Roberto Proietti ; Liangjia Zong ; Jose M. Rivas-Moscoco ; Ioannis Tomkos
PDF (3247 KB)

Ring-based colorless WDM-PON with Rayleigh backscattering noise mitigation

Haitao Yao ; Wei Li ; Qiguang Feng ; Jilong Han ; Zhujun Ye ; Qianggao Hu ; Qi Yang ; Shaohua Yu
PDF (804 KB)

Non-hermitian symmetry orthogonal frequency division multiplexing for multiple-input multiple-output visible light communications

Chen Chen ; Wen-De Zhong ; Dehao Wu
PDF (1078 KB)

Experimental demonstration of upstream transmission in digital filter multiple access pons with real-time reconfigurable optical network units

Xiao Duan ; Roger P. Giddings ; Sa'ad Mansoor ; J. M. Tang
PDF (660 KB)

Content placement with maximum number of end-to-content paths in K-node (edge) content connected optical datacenter networks

Xin Li ; Shan Yin ; Xinbo Wang ; Yu Zhou ; Yongli Zhao ; Shanguo Huang ; Jie Zhang
PDF (1103 KB)

Exploiting SDN for integrating green TWDM-PONS and metro networks preserving end-to-end delay

K. Kondepu ; A. Sgambelluri ; L. Valcarengi ; F. Cugini ; P. Castoldi
PDF (1073 KB)

Fair bandwidth allocation algorithm for PONS based on network utility maximization

N. Merayo ; P. Pavon-Marino ; J. C. Aguado ; R. J. Durán ; F. Burrull ; V. Bueno-Delgado
PDF (837 KB)

Improved dynamic bandwidth allocation algorithm for XGPON

Rizwan Aslam Butt ; Sevia Mahdaliza Idrus ; Kashif Naseer Qureshi ; Nadiatulhuda Zulkifli ; Siti Hasunah Mohammad
PDF (1368 KB)

Performance analysis of a data-driven quality-of-transmission decision approach on a dynamic multicast-capable metro optical network

T. Panayiotou ; S. P. Chatzis ; G. Ellinas
PDF (419 KB)

Performance analysis of relay-assisted NLOS ultraviolet communications over turbulence channels

Maryam Haghighi Ardakani ; Ali Reza Heidarpour ; Murat Uysal
PDF (573 KB)

Sliding scheduled lightpath establishment with time-slotted wavelength-switching

Jeremy M. Plante ; Vinod M. Vokkarane
PDF (990 KB)

Journal of Lightwave Technology

A JOINT IEEE / OSA PUBLICATION

JANUARY 1, 2017

VOLUME 35

NUMBER 1

JLTEDG

(ISSN 0733-8724)

Table of Contents
PDF (50 KB)

Multiparameter POF Sensing Based on Multimode Interference and Fiber Bragg Grating

Ricardo Oliveira ; Thiago H. R. Marques ; Lúcia Bilro ; Rogério Nogueira ; Cristiano M. B. Cordeiro
PDF (3985 KB)

Theory of Optical Leaky-Wave Antenna Integrated in a Ring Resonator for Radiation Control

Caner Guclu ; Ozdal Boyraz ; Filippo Capolino
PDF (1122 KB)

Planar Waveguides in γ -LiAlO₂ With Ion Implantation: Light Being Facilely Propagated

Jing Zhang ; Hong-Lian Song ; Mei Qiao ; Xiao-Fei Yu ; Tie-Jun Wang ; Peng Liu ; Xue-Lin Wang
PDF (1115 KB)

Novel Electric Field Sensing Scheme Using Integrated Optics LiNbO₃ Unbalanced Mach-Zehnder Interferometers and Optical Delay-Modulation

Celso Gutiérrez-Martínez ; Joel Santos-Aguilar ; Jacobo Meza-Pérez ; Adolfo Morales-Díaz
PDF (516 KB)

Multiple Channel Interference Cancellation of Digital Filter Multiple Access PONs

Yixian Dong ; Ehab Al-Rawachy ; Roger Philip Giddings ; Wei Jin ; Derek Nasset ; J. M. Tang
PDF (1071 KB)

Experimental Investigation of All-Optical Relay-Assisted 10 Gb/s FSO Link Over the Atmospheric Turbulence Channel

Norhanis Aida Mohd Nor ; Zabih (Fary) Ghassemlooy ; Jan Bohata ; Prakriti Saxena ; Matej Komanec ; Stanislav Zvanovec ; Manav R. Bhatnagar ; Mohammad-Ali Khalighi
PDF (907 KB)

High-Q Transfer in Nonlinearly Coupled Mode-Locked Semiconductor Lasers

Abhijeet Ardey ; Edris Sarailou ; Peter J. Delfyett
PDF (808 KB)

Routing, Modulation Format, Baud Rate and Spectrum Allocation in Optical Metro Rings With Flexible Grid and Few-Mode Transmission

Cristina Rottondi ; Pierpaolo Boffi ; Paolo Martelli ; Massimo Tornatore
PDF (1357 KB)

Enhanced Magnetic Fields at Optical Frequency by Diffraction Coupling of Magnetic Resonances in Lifted Metamaterials

Jing Chen ; Tangqun Zha ; Tao Zhang ; Chaojun Tang ; Ying Yu ; Yuanjian Liu ; Labao Zhang
PDF (384 KB)

56-Gb/s Optical Transmission Performance of an InP HBT PAM4 Driver Compensating for Nonlinearity of Extinction Curve of EAM

Toshiki Kishi ; Munehiko Nagatani ; Shigeru Kanazawa ; Wataru Kobayashi ; Hiroshi Yamazaki ; Minoru Ida ; Kenji Kurishima ; Masafumi Nogawa ; Shunji Kimura ; Hideyuki Nosaka
PDF (1784 KB)

Sensitivity Improved SPR Biosensor Based on the MoS₂/Graphene-Aluminum Hybrid Structure

Leiming Wu ; Yue Jia ; Leyong Jiang ; Jun Guo ; Xiaoyu Dai ; Yuanjiang Xiang ; Dianyuan Fan
PDF (825 KB)

Time-Scale Independent Permutation Entropy of a Photonic Integrated Device

Joshua P. Toomey ; Apostolos Argyris ; Christopher McMahon ; Dimitris Syvridis ; Deborah M. Kane
PDF (903 KB)

Analysis of High-Order Slotted Surface Gratings by the 2-D Finite-Difference Time-Domain Method

Wei Sun ; Qiaoyin Lu ; Weihua Guo ; Michael Wallace ; Frank Bello ; John F. Donegan
PDF (931 KB)

Received-Power Fluctuation Analysis for LEO Satellite-to-Ground Laser Links

Dimitar Radkov Kolev ; Morio Toyoshima
PDF (1293 KB)

Information Rates of Next-Generation Long-Haul Optical Fiber Systems Using Coded Modulation

Gabriele Liga ; Alex Alvarado ; Erik Agrell ; Polina Bayvel
PDF (851 KB)

Corrections to "Sub-THz Wireless Over Fiber for Frequency Band 220.280 GHz"

Haymen Shams ; Martyn J. Fice ; Luis Gonzalez-Guerrero ; Cyril C. Renaud ; Frédéric van Dijk ; Alwyn J. Seeds
PDF (45 KB)

Corrections to "Silicon-Based On-chip Electrically-Tunable Spectral Shaper for Continuously Tunable Linearly Chirped Microwave Waveform Generation"

Weifeng Zhang ; Jianping Yao
PDF (45 KB)

Journal of Lightwave Technology

A JOINT IEEE / OSA PUBLICATION

JANUARY 15, 2017

VOLUME 35

NUMBER 2

JLTEDG

(ISSN 0733-8724)

Table of Contents
PDF (51 KB)

Integrated Optical Rectangular-Edge Filter Devices in SOI
Parimal Sah ; Bijoy Krishna Das
PDF (1667 KB)

A Scalable, Partially Configurable Optical Switch for Data Center Networks
William Maxwell Mellette ; Glenn M. Schuster ; George Porter ; George Papen ; Joseph E. Ford
PDF (1177 KB)

Impact of Multipath Interference on the Performance of RoF-Based Mobile Fronthaul Network Implemented by Using DML
Byung Gon Kim ; Hoon Kim ; Yun C. Chung
PDF (596 KB)

Four-Dimensional Trellis Coded Modulation for Flexible Optical Communications
Saleem Alreesh ; Carsten Schmidt-Langhorst ; Robert Emmerich ; Pablo Wilke Berenguer ; Colja Schubert ; Johannes Karl Fischer
PDF (1395 KB)

Monolithic High-Contrast Gratings: Why Do They Not Scatter Light?
Maciej Dems
PDF (1317 KB)

Simulative Implementations of Fast Single-Qubit Quantum Logic Operations With Waveguides Based on Invariant Engineering
Hongying Liu ; Lian-Fu Wei
PDF (687 KB)

Characterization and Optimization of an Eight-Channel Time-Multiplexed Pulse-Shaping System
Christophe Dorrer ; Wade A. Bittle ; Robert Cuffney ; Michael Spilatro ; Elizabeth M. Hill ; Tanya Z. Kosc ; John H. Kelly ; Jonathan D. Zuegel
PDF (1785 KB)

Interplay Between In-Plane and Out-of-Plane Resonances of Heptamer Oligomer Nanoapertures
Mohsen Janipour ; Kursat Sendur
PDF (805 KB)

Modeling Plasmonic Structures Using LOD-FDTD Methods With Accurate Dispersion Models of Metals at Optical Wavelengths
Konstantinos P. Prokopoulos ; Dimitrios C. Zografopoulos
PDF (695 KB)

Shared-Protection Survivable Multipath Scheme in Flexible-Grid Optical Networks Against Multiple Failures
Shan Yin ; Shanguo Huang ; Bingli Guo ; Yu Zhou ; Haibin Huang ; Min Zhang ; Yongli Zhao ; Jie Zhang ; Wanyi Gu
PDF (1198 KB)

Fabrication of Bragg Gratings on the End Facet of Standard Optical Fibers by Sputtering the Same Material
Joaquín Ascorbe ; Jesus M. Corres ; Ignacio del Villar ; Francisco J. Arregui ; Ignacio R. Matias
PDF (855 KB)

Acoustooptic-Mode-Coupling-Based Whispering Gallery Mode Excitation in Silica-Capillary Microresonator
Jixuan Wu ; Hao Zhang ; Bo Liu ; Binbin Song ; Yuetao Li ; Chengkun Yang
PDF (1304 KB)

Ridge Waveguides and Y-Branch Beam Splitters in KTiOAsO₄ Crystal by 15 MeV Oxygen Ion Implantation and Femtosecond Laser Ablation
Chen Chen ; Shavkat Akhmedaliev ; Carolina Romero ; Javier R. Vázquez de Aldana ; Shengqiang Zhou ; Feng Chen
PDF (398 KB)

Investigation of Pre-Equalization Technique for Pluggable CFP2-ACO Transceivers in Beyond 100 Gb/s Transmissions
Feng Lu ; Bo Zhang ; Yang Yue ; Jon Anderson ; Gee-Kung Chang
PDF (1502 KB)

Demonstration of 16QAM-OFDM UDWDM Transmission Using a Tunable Optical Flat Comb Source
Abir Hraghi ; Mohamed Essghair Chaibi ; Mourad Menif ; Didier Erasme
PDF (1631 KB)

Folded Shallow Grating Couplers With Minimal Back Reflection and Extended Coupling Bandwidth for Robust Coupling to Multimode Fibers
Masatoshi Tokushima ; Jun Ushida ; Kazuhiko Kurata
PDF (1028 KB)

High-Speed Visible Light Communication Using GaN-Based Light-emitting Diodes With Photonic Crystals
Yu-Feng Yin ; Wen-Yi Lan ; Tung-Chin Lin ; Curtis Wang ; Milton Feng ; Jian-Jang Huang
PDF (781 KB)

Dysprosium-Doped Chalcogenide Master Oscillator Power Amplifier (MOPA) for Mid-IR Emission

Mario Christian Falconi ; Giuseppe Palma ; Florent Starecki ; Virginie Nazabal ; Johann Troles ; Jean-Luc Adam ; Stefano Taccheo ; Maurizio Ferrari ; Francesco Prudenzano
PDF (1042 KB)

Optimization of Modulation-Canceling Reflective Semiconductor Optical Amplifier for Colorless WDM Transmitter Applications

Wenhui Zhan ; Peng Zhou ; Yuxiao Zeng ; Masaru Mukaikubo ; Takuo Tanemura ; Yoshiaki Nakano
PDF (1002 KB)

Semiconductor Optical Amplifier Space Switch With Symmetrical Thin-Film Resistive Current Injection

Rafael C. Figueiredo ; Tiago Sutili ; Napoleão S. Ribeiro ; Cristiano M. Gallep ; Evandro Conforti
PDF (963 KB)

Survivable Cloud Network Design Against Multiple Failures Through Protecting Spanning Trees

Zhili Zhou ; Tachun Lin ; Krishnaiyan Thulasiraman
PDF (814 KB)

Low-Cost Fabrication of All-Polymer Components for Integrated Photonics

Maher Rezem ; Axel Günther ; Bernhard Roth ; Eduard Reithmeier ; Maik Rahlves
PDF (838 KB)

Theoretical Lower Bound for Indoor Visible Light Positioning Using Received Signal Strength Measurements and an Aperture-Based Receiver

Heidi Steendam ; Thomas Qian Wang ; Jean Armstrong
PDF (1474 KB)

Numerical Study on Plasmonic Absorption Enhancement by a Rippled Graphene Sheet

He Huang ; Shaolin Ke ; Bing Wang ; Hua Long ; Kai Wang ; Peixiang Lu
PDF (473 KB)

Energy Efficient Dynamic Optical Routing for Mobile Metro-Core Networks Under Tidal Traffic Patterns

Rodolfo Alvizu ; Xingyu Zhao ; Guido Maier ; Yajing Xu ; Achille Pattavina
PDF (805 KB)

Quadrature Michelson Interferometer for Temperature Measurement in the Core of Active Fiber of a High-Power Fiber Laser

Vladimir Gainov ; Oleg A. Ryabushkin
PDF (665 KB)

IEEE TRANSACTIONS ON **MULTIMEDIA**

A PUBLICATION OF
THE IEEE CIRCUITS AND SYSTEMS SOCIETY
THE IEEE SIGNAL PROCESSING SOCIETY
THE IEEE COMMUNICATIONS SOCIETY
THE IEEE COMPUTER SOCIETY



<http://www.signalprocessingsociety.org/tmm/>

FEBRUARY 2017

VOLUME 19

NUMBER 2

ITREAE

(ISSN 1520-9210)

Table of Contents
PDF (201 KB)

IEEE Transactions on Multimedia
PDF (54 KB)

Fast, Compact, and Discriminative: Evaluation of Binary Descriptors for Mobile Applications
Simone Madeo ; Miroslaw Bober
PDF (1607 KB)

Wavelet-Based L₀ Semi-regular Mesh Coding
Ruxandra Florea ; Adrian Munteanu ; Shao-Ping Lu ; Peter Schelkens
PDF (969 KB)

Toward Encrypted Cloud Media Center With Secure Deduplication
Yifeng Zheng ; Xingliang Yuan ; Xinyu Wang ; Jinghua Jiang ; Cong Wang ; Xiaolin Gui
PDF (906 KB)

Fast and Adaptive 3D Reconstruction With Extensively High Completeness
Pengfei Wu ; Yiguang Liu ; Mao Ye ; Jie Li ; Shuangli Du
PDF (2372 KB)

A Novel Transient Wrinkle Detection Algorithm and Its Application for Expression Synthesis
Weicheng Xie ; Linlin Shen ; Jianmin Jiang
PDF (3069 KB)

Color-Guided Depth Recovery via Joint Local Structural and Nonlocal Low-Rank Regularization
Weisheng Dong ; Guangming Shi ; Xin Li ; Kefan Peng ; Jinjian Wu ; Zhenhua Guo
PDF (396 KB)

Retrieval Compensated Group Structured Sparsity for Image Super-Resolution
Jiaying Liu ; Wenhan Yang ; Xinfeng Zhang ; Zongming Guo
PDF (844 KB)

A Joint Deep Boltzmann Machine (jDBM) Model for Person Identification Using Mobile Phone Data
Mohammad Rafiqul Alam ; Mohammed Bennamoun ; Roberto Togneri ; Ferdous Sohel
PDF (676 KB)

Automatic Mesh Animation Preview With User Voting-Based Refinement
Zhong Zhou ; Na Jiang ; Ke Chen ; Jingchang Zhang
PDF (1009 KB)

Implicit Analysis of Perceptual Multimedia Experience Based on Physiological Response: A Review
Seong-Eun Moon ; Jong-Seok Lee
PDF (430 KB)

Multimodal Video-to-Near-Scene Annotation
Chien-Li Chou ; Hua-Tsung Chen ; Suh-Yin Lee
PDF (923 KB)

Joint Image-Text News Topic Detection and Tracking by Multimodal Topic And-Or Graph
Weixin Li ; Jungseock Joo ; Hang Qi ; Song-Chun Zhu
PDF (2777 KB)

Hashing With Pairwise Correlation Learning and Reconstruction
Xiao-Jiao Mao ; Yu-Bin Yang ; Ning Li
PDF (1128 KB)

Weakly Supervised Learning of Deformable Part-Based Models for Object Detection via Region Proposals
Yuxing Tang ; Xiaofang Wang ; Emmanuel Dellandréa ; Liming Chen
PDF (1810 KB)

Integration of Diverse Data Sources for Spatial PM_{2.5} Data Interpolation
Mengfan Tang ; Xiao Wu ; Pranav Agrawal ; Siripen Pongpaichet ; Ramesh Jain
PDF (772 KB)

Visualizing Video Sounds With Sound Word Animation to Enrich User Experience

Fangzhou Wang ; Hidehisa Nagano ; Kunio Kashino ; Takeo Igarashi
PDF (1334 KB)

Modeling Restaurant Context for Food Recognition

Luis Herranz ; Shuqiang Jiang ; Ruihan Xu
PDF (719 KB)

IEEE Transactions on Multimedia information for authors
PDF (61 KB)

Introducing IEEE Collabratec

PDF (1912 KB)

Expand your network, get rewarded

PDF (1042 KB)

IEEE Transactions on Multimedia

PDF (49 KB)

IEEE TRANSACTIONS ON MOLECULAR, BIOLOGICAL, AND MULTI-SCALE COMMUNICATIONS

A PUBLICATION OF
THE IEEE COMMUNICATIONS SOCIETY
THE IEEE COMPUTER SOCIETY
THE IEEE NANOTECHNOLOGY COUNCIL



DECEMBER 2016

VOLUME 2

NUMBER 2

ITMBDH

ISSN (2332-7804)

Table of contents

Publication Year: 2016,
PDF (521 KB)

IEEE Communications Society

Publication Year: 2016,
PDF (60 KB)

Guest Editorial Biological Applications of Information Theory in
Honor of Claude Shannon's Centennial—Part II
Alexander G. Dimitrov ; Faramarz Fekri ; Aurel A. Lazar ; Stefan M.
Moser ; Peter J. Thomas
Publication Year: 2016,
PDF (244 KB)

Information Theory of Molecular Communication: Directions and
Challenges

Amin Gohari ; Mahtab Mirmohseni ; Masoumeh Nasiri-Kenari
Publication Year: 2016,
PDF (743 KB)

On Palimpsests in Neural Memory: An Information Theory
Viewpoint

Lav R. Varshney ; Julius Kusuma ; Vivek K Goyal
Publication Year: 2016,
PDF (1058 KB)

Neural Computation From First Principles: Using the Maximum
Entropy Method to Obtain an Optimal Bits-Per-Joule Neuron

William B Levy ; Toby Berger ; Mustafa Sungkar
Publication Year: 2016,
PDF (760 KB)

Mutual Information and Parameter Estimation in the Generalized
Inverse Gaussian Diffusion Model of Cortical Neurons

Mustafa Sungkar ; Toby Berger ; William B Levy
Publication Year: 2016,
PDF (1278 KB)

Identifying Multisensory Dendritic Stimulus Processors

Aurel A. Lazar ; Yiyin Zhou
Publication Year: 2016,
PDF (1452 KB)

Fundamental Limits of Genome Assembly Under an Adversarial
Erasure Model

Ilan Shomorony ; Thomas A. Courtade ; David Tse
Publication Year: 2016,
PDF (1040 KB)

Inscribed Matter Communication: Part I

Christopher Rose ; I. S. Mian
Publication Year: 2016,
PDF (891 KB)

Inscribed Matter Communication: Part II

Christopher Rose ; I. S. Mian
Publication Year: 2016,
PDF (544 KB)

Process Information and Evolution

Erick Chastain ; Cameron Smith
Publication Year: 2016,
PDF (336 KB)

2016 IndexIEEE Transactions on Molecular, Biological and Multi-
Scale CommunicationsVol. 2

Publication Year: 2016,
PDF (66 KB)

IEEE Communications Society Information

Publication Year: 2016,
PDF (60 KB)

IEEE

INTERNET OF THINGS JOURNAL

A JOINT PUBLICATION OF THE IEEE SENSORS COUNCIL 

THE IEEE COMMUNICATIONS SOCIETY



THE IEEE COMPUTER SOCIETY 

THE IEEE SIGNAL PROCESSING SOCIETY



FEBRUARY 2017

VOLUME 4

NUMBER 1

IITJAU

(ISSN 2327-4662)

Front Cover
PDF (1356 KB)

IEEE Internet of Things Journal
PDF (63 KB)

Table of contents
PDF (2028 KB)

IoT Middleware: A Survey on Issues and Enabling Technologies

Anne H. Ngu ; Mario Gutierrez ; Vangelis Metsis ; Surya Nepal ;
Quan Z. Sheng
PDF (1762 KB)

Random Access Delay Distribution of Multichannel Slotted ALOHA With Its Applications for Machine Type Communications

Xin Jian ; Yuqin Liu ; Yixiao Wei ; Xiaoping Zeng ; Xiaoheng Tan
PDF (681 KB)

Achieve Secure Handover Session Key Management via Mobile Relay in LTE-Advanced Networks

Qinglei Kong ; Rongxing Lu ; Shuo Chen ; Hui Zhu
PDF (1279 KB)

Lysis: A Platform for IoT Distributed Applications Over Socially Connected Objects

Roberto Girau ; Salvatore Martis ; Luigi Atzori
PDF (1026 KB)

Predictive Scheduling Framework for Electric Vehicles With Uncertainties of User Behaviors

Bin Wang ; Yubo Wang ; Hamidreza Nazarpouya ; Charlie Qiu ;
Chi-Cheng Chu ; Rajit Gadh
PDF (1560 KB)

Adaptive Clustering for Dynamic IoT Data Streams

Daniel Puschmann ; Payam Barnaghi ; Rahim Tafazolli
PDF (906 KB)

IoT-Based Big Data Storage Systems in Cloud Computing: Perspectives and Challenges

Hongming Cai ; Boyi Xu ; Lihong Jiang ; Athanasios V. Vasilakos
PDF (1396 KB)

S2M: A Lightweight Acoustic Fingerprints-Based Wireless Device Authentication Protocol

Dajiang Chen ; Ning Zhang ; Zhen Qin ; Xufei Mao ; Zhiguang Qin ;
Xuemin Shen ; Xiang-yang Li
PDF (1878 KB)

Secrecy-Rate Analysis in Multitier Heterogeneous Networks Under Generalized Fading Model

Yohannes Jote Tolossa ; Satyanarayana Vuppala ; Giuseppe Abreu
PDF (816 KB)

Achieving Centimeter-Accuracy Indoor Localization on WiFi Platforms: A Frequency Hopping Approach

Chen Chen ; Yan Chen ; Yi Han ; Hung-Quoc Lai ; K. J. Ray Liu
PDF (2249 KB)

Achieving Centimeter-Accuracy Indoor Localization on WiFi Platforms: A Multi-Antenna Approach

Chen Chen ; Yan Chen ; Yi Han ; Hung-Quoc Lai ; Feng Zhang ; K.
J. Ray Liu
PDF (3086 KB)

Enabling IoT for In-Home Rehabilitation: Accelerometer Signals Classification Methods for Activity and Movement Recognition

Igor Bisio ; Alessandro Delfino ; Fabio Lavagetto ; Andrea Sciarone
PDF (1349 KB)

Toward a Gaussian-Mixture Model-Based Detection Scheme Against Data Integrity Attacks in the Smart Grid

Xinyu Yang ; Peng Zhao ; Xialei Zhang ; Jie Lin ; Wei Yu
PDF (1979 KB)

Two-Stage Multiple Access for Many Devices of Unique Identifications Over Frequency-Selective Fading Channels

Jinho Choi
PDF (732 KB)

SIMISS: A Model-Based Searching Strategy for Inventory Management Systems

Yan Tang Demey ; Mikael Wolff
PDF (2196 KB)

Distributed Localized Contextual Event Reasoning Under Uncertainty

Kostas Kolomvatsos ; Christos Anagnostopoulos ; Stathes Hadjiefthymiades
PDF (628 KB)

Toward Integrating Distributed Energy Resources and Storage Devices in Smart Grid

Guobin Xu ; Wei Yu ; David Griffith ; Nada Golmie ; Paul Moulema
PDF (2122 KB)

Geo-Spatial Location Estimation for Internet of Things (IoT) Networks With One-Way Time-of-Arrival via Stochastic Censoring

Sai Ganesh Nagarajan ; Pengfei Zhang ; Ido Nevat
PDF (673 KB)

Multicast Routing for Multimedia Communications in the Internet of Things

Jun Huang ; Qiang Duan ; Yanxiao Zhao ; Zhong Zheng ; Wei Wang
PDF (1064 KB)

FogRoute: DTN-Based Data Dissemination Model in Fog Computing

Longxiang Gao ; Tom H. Luan ; Shui Yu ; Wanlei Zhou ; Bo Liu
PDF (1918 KB)

A Data-Oriented M2M Messaging Mechanism for Industrial IoT Applications

Zhaozong Meng ; Zhipeng Wu ; Cahyo Muvianto ; John Gray
PDF (1712 KB)

Dynamic Load Balancing Applying Water-Filling Approach in Smart Grid Systems

Mushu Li ; Peter He ; Lian Zhao
PDF (1634 KB)

Multiobjective Optimization Model for Service Node Selection Based on a Tradeoff Between Quality of Service and Resource Consumption in Mobile Crowd Sensing

Shuang Ding ; Xin He ; Jicheng Wang
PDF (1494 KB)

IoT Considerations, Requirements, and Architectures for Smart Buildings—Energy Optimization and Next-Generation Building Management Systems

Daniel Minoli ; Kazem Sohraby ; Benedict Occhiogrosso
PDF (4524 KB)

A Generic Framework for Constraint-Driven Data Selection in Mobile Crowd Photographing

Huihui Chen ; Bin Guo ; Zhiwen Yu ; Liming Chen ; Xiaojuan Ma
PDF (3156 KB)

IEEE Internet of Things Journal

PDF (116 KB)

Information for Authors

PDF (128 KB)