Synchronization in NC-OFDM-Based Cognitive Radio Platforms
Research output: Scientific - peer-review › Chapter

The Evolution of Software-Defined Radio: An Introduction
Research output: Scientific - peer-review › Chapter

The Future of Software-Defined Radio: Recommendations
Research output: Scientific - peer-review › Chapter

The Impact of Galileo Open Service on Location Based Services Markets
Research output: Scientific - peer-review › Chapter

Understanding the GNSS Signal Model
Research output: Scientific - peer-review › Chapter

Rinne, J., Keskinen, J., Berger, P. R., Lupo, D. & Valkama, M. 2017 In : IEEE Access.
Research output: Scientific - peer-review › Article

In preparation towards future cellular networks: the detailed analysis of macro and micro site densification and sector densification
Research output: Scientific - peer-review › Article

Monitoring intrusion in an area using WIFI-enabled devices
Della Rosa, F. & Nurmi, J. 13 Dec 2016 9520041
Research output: Scientific › Patent

Active RF cancellation of nonlinear TX leakage in FDD transceivers
Research output: Scientific - peer-review › Conference contribution

Digital predistortion for mitigating transmitter-induced receiver desensitization in carrier aggregation FDD transceivers
Research output: Scientific - peer-review › Conference contribution

Efficient Time-Domain Phase Noise Mitigation in cm-Wave Wireless Communications
Research output: Scientific - peer-review › Conference contribution

Fast-convolution filtered OFDM waveforms with adjustable CP length
Methods for phase noise mitigation for DFT-S-OFDM waveforms
Research output: Scientific - peer-review › Conference contribution

Reference receiver enabled digital cancellation of nonlinear out-of-band blocker distortion in wideband receivers
Research output: Scientific - peer-review › Conference contribution

Wireless Optogenetic Neural Dust for Deep Brain Stimulation
Research output: Scientific - peer-review › Conference contribution

FPGA Implementation Issues of a Flexible Synchronizer Suitable for NC-OFDM-Based Cognitive Radios
Research output: Scientific - peer-review › Article

Compact inband full-duplex relays with beyond 100 dB self-interference suppression: Enabling techniques and field measurements
Research output: Scientific - peer-review › Article

Low-Complexity Subband Digital Predistortion for Spurious Emission Suppression in Noncontiguous Spectrum Access
Research output: Scientific - peer-review › Article

Terahertz band communications: Applications, research challenges, and standardization activities
Research output: Scientific - peer-review › Conference contribution

Feasibility and Fundamental Limits of Energy-Harvesting Based M2M Communications
Research output: Scientific - peer-review › Conference contribution

Integrating Printed and Silicon Electronics
Mäntysalo, M. & Kraft, T. Sep 2016 International Conference on Flexible and Printed Electronics. Yonezawa, Japan
Research output: Professional › Conference contribution

Location Based Beamforming in 5G Ultra-Dense Networks
Research output: Scientific - peer-review › Conference contribution
Implementation and performance evaluation of graphene-based passive UHF RFID textile tags

Research output: Scientific - peer-review › Conference contribution

Random Triangle: A Baseline Model for Interference Analysis in Heterogeneous Networks

Research output: Scientific - peer-review › Article

Optimization of Flexible Filter Banks Based on Fast Convolution

Research output: Scientific - peer-review › Article

Performance Considerations for Positioning with Signals of Opportunity

Research output: Scientific - peer-review › Conference contribution

Multilevel outphasing power amplifier system with a transmission-line power combiner

Research output: Scientific - peer-review › Conference contribution

Analysis and Augmented Spatial Processing for Uplink OFDMA MU-MIMO Receiver With Transceiver I/Q Imbalance and External Interference

Research output: Scientific - peer-review › Article

Performance and Cramer-Rao Bounds for DoA/RSS Estimation and Transmitter Localization Using Sectorized Antennas

Research output: Scientific - peer-review › Article

MULTI-POS: Marie Curie Network in Multi-technology Positioning

Research output: Scientific - peer-review › Conference contribution

Data-Parallel Implementation of Reconfigurable Digital Predistortion on a Mobile GPU

Research output: Scientific - peer-review › Conference contribution

Sub-band Digital Predistortion for Noncontiguous Transmissions: Algorithm Development and Real-Time Prototype Implementation

Research output: Scientific - peer-review › Conference contribution

Analysis of a receiver-based reliable broadcast approach for vehicular networks

Research output: Scientific - peer-review › Article
Power amplifier effects on frequency localized 5G candidate waveforms
Research output: Scientific - peer-review › Conference contribution

Printed epidermal electronic system
Research output: Scientific › Paper, poster or abstract

Private cloud deployment model in open-source mobile robots ecosystem
Research output: Scientific - peer-review › Conference contribution

Remotely Powered Piezoresistive Pressure Sensor: Toward Wireless Monitoring of Intracranial Pressure
Research output: Scientific - peer-review › Article

Short range HF radio channel measurements: Search for one path channels
Research output: Scientific - peer-review › Conference contribution

Statistical Trilateration with Skew-t Distributed Errors in LTE Networks
Research output: Scientific - peer-review › Article

The Possibilities of Graphene-Based Passive RFID Tags in High humidity Conditions
Research output: Scientific - peer-review › Conference contribution

Unified Analysis of Cooperative Spectrum Sensing over Composite and Generalized Fading Channels
Research output: Scientific - peer-review › Article

Using Competing Bacterial Communication to Disassemble Biofilms
Research output: Scientific - peer-review › Conference contribution

Energy cooperation for throughput optimization based on save-then-transmit protocol in wireless communication system
Dai, C-Q., Li, F-J. & Renfors, M. 26 Dec 2015 In : Eurasip Journal on Wireless Communications and Networking. 2015, 1, 119
Research output: Scientific - peer-review › Article

Context Awareness for Navigation Applications
Research output: Collection of articles › Doctoral Thesis
Combined architecture for multi-dimensional signal quality enhancements in GNSS receivers
Research output: Professional › Conference contribution

Biotelemetric wireless intracranial pressure monitoring: an in vitro study
Research output: Scientific - peer-review › Article

Investigations on mobility models and their impact on indoor positioning
Research output: Scientific - peer-review › Conference contribution

On the impact of Intra-System Interference for Ranging and Positioning with Bluetooth Low Energy
Research output: Scientific - peer-review › Conference contribution

Room-level indoor positioning with Wi-Fi and RFID fingerprints
Research output: Scientific - peer-review › Conference contribution

Entropy and Channel Capacity under Optimum Power and Rate Adaptation over Generalized Fading Conditions
Research output: Scientific - peer-review › Article

Sectorized antenna-based DoA estimation and localization: Advanced algorithms and measurements
Research output: Scientific - peer-review › Article

SPMA: An innovative solution for future smart networks in macrocellular suburban environment
Research output: Scientific - peer-review › Conference contribution

Modeling and Digital Mitigation of Transmitter Imperfections in Radio Communication Systems
Kiayani, A. 27 Oct 2015 Tampere University of Technology. 97 p. (Tampere University of Technology. Publication; vol. 1332)
Research output: Collection of articles › Doctoral Thesis

Novel Methods for Personal Indoor Positioning
Leppäkoski, H. 27 Oct 2015 Tampere University of Technology. 129 p. (Tampere University of Technology. Publication; vol. 1330)
Research output: Monograph › Doctoral Thesis

Nonlinear Distortion in Wideband Radio Receivers and Analog-to-Digital Converters: Modeling and Digital Suppression
Allen, M. 23 Oct 2015 Tampere University of Technology. 95 p. (Tampere University of Technology. Publication; vol. 1329)
Research output: Collection of articles › Doctoral Thesis
Signal strength readout and miniaturised antenna for metal-mountable UHF RFID threshold temperature sensor tag
Research output: Scientific - peer-review › Article

Capacity, Energy-Efficiency and Cost-Efficiency Aspects of Future Mobile Network Deployment Solutions
Yunas, S. F. 9 Oct 2015 Tampere University of Technology. 122 p. (Tampere University of Technology. Publication; vol. 1323)
Research output: Monograph › Doctoral Thesis

3GPP LTE-assisted Wi-Fi-direct: Trial implementation of live D2D technology
Research output: Scientific - peer-review › Article

A non-repudiable negotiation protocol for security service level agreements
Research output: Scientific - peer-review › Article

Solutions to integrals involving the marcum Q-function and applications
Research output: Scientific - peer-review › Article

Analytic Hierarchy Process for assessing e-health technologies for elderly indoor mobility analysis
Research output: Scientific - peer-review › Conference contribution

Model-based design and implementation of an adaptive digital predistortion filter
Research output: Scientific - peer-review › Conference contribution

Achievable transmission rates and self-interference channel estimation in hybrid full-duplex/half-duplex MIMO relaying
Research output: Scientific - peer-review › Conference contribution

Abstractiong Application Development for Resource Constrained Wireless Sensor Networks
Laukkarinen, T. 4 Sep 2015 Tampere: Tampere University of Technology. 104 p. (Tampere University of Technology. Publication; vol. 1306)
Research output: Collection of articles › Doctoral Thesis

Frequency Response Mismatches in 4-channel Time-Interleaved ADCs: Analysis, Blind Identification, and Correction
Research output: Scientific - peer-review › Article

High-Efficiency Device Localization in 5G Ultra-Dense Networks: Prospects and Enabling Technologies
Research output: Scientific - peer-review › Conference contribution
Securing Network-Assisted Direct Communication: The Case of Unreliable Cellular Connectivity

Research output: Scientific - peer-review › Conference contribution

You are AllRing too Much: Assessing the Privacy of Users in Crowdsourcing Environmental Data

Research output: Scientific - peer-review › Conference contribution

Transceiver I/Q Imbalance and Widely-Linear Spatial Processing in Large Antenna Systems

Research output: Scientific - peer-review › Conference contribution

Evaluation of SPMA and higher order sectorization for homogeneous SIR through macro sites

Research output: Scientific - peer-review › Article

Performance analysis of IoT-enabling IEEE 802.11ah technology and its RAW mechanism with non-cross slot boundary holding schemes

Research output: Scientific - peer-review › Conference contribution

Molecular Communication Modeling of Antibody-Mediated Drug Delivery Systems

Research output: Scientific - peer-review › Article

Prioritized centrally-controlled resource allocation in integrated multi-RAT HetNets

Research output: Scientific - peer-review › Conference contribution

Wideband self-adaptive RF cancellation circuit for full-duplex radio: Operating principle and measurements

Research output: Scientific - peer-review › Conference contribution

Electro-textiles – The enabling technology for wearable antennas in wireless body-centric sensing systems

Research output: Scientific - peer-review › Conference contribution

Incorporating Bacterial Properties for Plasmid Delivery in Nano Sensor Networks

Research output: Scientific - peer-review › Article

Performance Evaluation of Wearable Passive RFID Tag for Human Indoor Positioning
Digital Self-Interference Cancellation under Nonideal RF Components: Advanced Algorithms and Measured Performance
Research output: Scientific - peer-review › Conference contribution

Indoor Positioning Technology Assessment using Analytic Hierarchy Process for Pedestrian Navigation Services
Research output: Scientific - peer-review › Conference contribution

Received Signal Strength models for WLAN and BLE-based indoor positioning in multi-floor buildings
Research output: Scientific - peer-review › Conference contribution

Receiver Architecture for Cognitive Positioning with CDMA and OFDM signals
Research output: Scientific - peer-review › Conference contribution

Systematic search for design contradictions in systems' architecture: Toward a computer aided analysis
Research output: Scientific - peer-review › Article

Feasibility study of the THz band for communications between wearable electronics
Research output: Scientific - peer-review › Conference contribution

Performance comparison of selected wired and wireless networks on chip architectures
Research output: Scientific - peer-review › Conference contribution

A molecular noise model for THz channels
Research output: Scientific - peer-review › Conference contribution

Distributed power allocation over indoor multi-pico stations
Research output: Scientific - peer-review › Article

Efficient Wireless Microphone sensing: Subband energy detector principle and measured performance
Research output: Scientific - peer-review › Conference contribution

Frequency response mismatch analysis in time-interleaved analog I/Q processing and ADCs
Research output: Scientific - peer-review › Article
Bit error rate of underlay decode-and-forward cognitive networks with best relay selection
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Context-awareness and the smart grid: Requirements and challenges
Research output: Scientific - peer-review › Article

The internet of Bio-Nano things
Research output: Scientific - peer-review › Article

LTE Indoor MIMO performances field measurements
Research output: Scientific - peer-review › Conference contribution

Enhanced Spectrum Sensing Techniques for Cognitive Radio Systems
Dikmese, S. 13 Feb 2015 Tampere University of Technology. 86 p. (Tampere University of Technology. Publication; vol. 1280)
Research output: Collection of articles › Doctoral Thesis

Communication challenges in high-density deployments of wearable wireless devices
Research output: Scientific - peer-review › Article

Coarse-grained model of protein interaction for bio-inspired nano-communication
Research output: Scientific - peer-review › Conference contribution

Enhanced OFDM for fragmented spectrum use in 5G systems
Research output: Scientific - peer-review › Article

Social behavior in bacterial nanonetworks: Challenges and opportunities
Research output: Scientific - peer-review › Article

Spectral and energy efficiency of ultra-dense networks under different deployment strategies
Research output: Scientific - peer-review › Article
A Capacity Bound for mmWave-based Channel Access in Ultra-Dense Wearable Deployments
Research output: Scientific - peer-review › Conference contribution

Acquisition of E5 Galileo signals in Matlab
Research output: Scientific - peer-review › Article

Adaptive equalization and Successive self-Interference Cancellation (SIC) methods: The European Commission 7th Framework Programme (FP7) project ICT-318362-EMPhAtiC deliverable D3.2
Research output: Professional › Commissioned report

Research output: Scientific - peer-review › Conference contribution

Advances In statistical channel modeling for wireless communications
Research output: Scientific › Article

Analysis and Design Specifications for Full-Duplex Radio Transceivers under RF Oscillator Phase-Noise with Arbitrary Spectral Shape
Research output: Scientific - peer-review › Article

Analysis of Cognitive Cooperative Networks with Best Relay Selection and Diversity Reception
Research output: Scientific - peer-review › Conference contribution

Analysis of Galileo E1 Receiver Performance with a Power-controlled Front-end
Research output: Scientific - peer-review › Article

Analysis of Noise Uncertainty and Frequency Selectivity Effects in Wideband Multimode Spectrum Sensing
Research output: Scientific - peer-review › Conference contribution

Analytical Performance Evaluation of Cooperative and Multi-Radio Concepts in Emerging Wireless Networks
Galinina, O. 2015 Tampere: Tampere University of Technology. 124 p. (Tampere University of Technology. Publication; vol. 1320)
Research output: Collection of articles › Doctoral Thesis

Analytic Symbol Error Rate Evaluation of M–PSK Based Regenerative Cooperative Networks Over Generalized Fading Channels
Research output: Scientific - peer-review › Conference contribution
Analyzing Assisted Offloading of Cellular User Sessions onto D2D Links in Unlicensed Bands
Research output: Scientific - peer-review › Article

An Analytical Approach to SINR Estimation in Adjacent Rectangular Cells
Research output: Scientific - peer-review › Conference contribution

A Novel Transform for Secret Key Generation in Time-varying TDD Channel under Hardware Fingerprint Deviation
Research output: Scientific - peer-review › Conference contribution

Antennas in Body-Centric Sensor Network Devices
Research output: Scientific - peer-review › Chapter

Application of the nonuniform filterbank for spectrum sensing in a cognitive radio: The European Commission 7th Framework Programme (FP7) project ICT-318362-EMPHAIC deliverable D8.1
Research output: Professional › Commissioned report

Area under ROC Curve of Energy Detection over Generalized Fading Channels
Research output: Scientific - peer-review › Conference contribution

A Spectrum Sensing Algorithm for Constant Modulus Primary Users Signals
Research output: Scientific - peer-review › Article

Assisted Handover Based on Device-to-Device Communications in 3GPP LTE Systems
Research output: Scientific - peer-review › Conference contribution

AUC study of energy detection based spectrum sensing over η-μ and α-μ fading channels
Research output: Scientific - peer-review › Conference contribution

Cache storage attacks
Brumley, B. B. 2015 Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics). Springer Verlag, p. 22-34 13 p. (Lecture Notes in Computer Science; vol. 9048)
Research output: Scientific - peer-review › Conference contribution

Channel Estimation and Equalization in Multi-User Uplink OFDMA and SC-FDMA Systems Under Transmitter RF Impairments
Research output: Scientific - peer-review › Article
Exact Error Analysis and Energy-Efficiency Optimization of Regenerative Relay Systems under Spatial Correlation
Fikadu, M., Sofotasios, P., Valkama, M., Cui, Q. & Karagiannidis, G. 2015 In : IEEE Transactions on Vehicular Technology. 65, 7, p. 4973-4992

Fast-convolution implementation of filter bank multicarrier waveform processing

Faster Binary Curve Software: A Case Study

Feasibility analysis of ITU-T P.1201 Amd.2 standard for video on demand services

Flexible Digital Predistortion for Future Spectrally-Agile Waveforms and 5G Radio Systems

Flexible fast-convolution implementation of single-carrier waveform processing for 5G

Hybrid WLAN-RFID Indoor Localization Solution Utilizing Textile Tag

Implementation of IEEE-802.11a/g receiver blocks on a coarse-grained reconfigurable array

Interference Analysis and Performance Evaluation of 5G Flexible-TDD based Dense Small-Cell System

Interference and SINR in Dense Terahertz Networks
Petrov, V., Moltchanov, D. & Koucheryavy, Y. 2015 2015 IEEE 82nd Vehicular Technology Conference (VTC2015-Fall). IEEE

Internet of Things, Smart Spaces, and Next Generation Networks and Systems: 15th International Conference, NEW2AN 2015, and 8th Conference, ruSMART 2015, St. Petersburg, Russia, August 26-28, 2015, Proceedings
IoT Use Cases in Healthcare and Tourism
Research output: Scientific - peer-review › Conference contribution

Joint Cooling and Information Transmission for Board-to-Board Communications
Research output: Scientific - peer-review › Conference contribution

K-Means Fingerprint Clustering for Low-Complexity Floor Estimation in Indoor Mobile Localization
Research output: Scientific - peer-review › Conference contribution

Low-Complexity Digital Correction of 4-Channel Time-Interleaved ADC Frequency Response Mismatch using Adaptive I/Q Signal Processing
Research output: Scientific - peer-review › Conference contribution

Low-profile head-worn antenna with a monopole-like radiation pattern
Research output: Scientific - peer-review › Article

LTE Performance Analysis Using Queuing Systems with Finite Resources and Random Requirements
Research output: Scientific - peer-review › Conference contribution

MIMO channel estimation and data detection: The European Commission 7th Framework Programme (FP7) project ICT-318362-EMPhAtiC deliverable D4.2
Research output: Professional › Commissioned report

Mobile GPU Accelerated Digital Predistortion on a Software-defined Mobile Transmitter
Research output: Scientific - peer-review › Conference contribution

Multi-Antenna Interference Cancellation for Black Space Cognitive Radio Communications
Research output: Scientific - peer-review › Conference contribution

Multimode, non-uniform filterbank: The European Commission 7th Framework Programme (FP7) project ICT-318362-EMPhAtiC deliverable D2.2
Research output: Professional › Commissioned report

Network-Assisted Device-to-Device Connectivity: Contemporary Vision and Open Challenges
Novel Indoor Positioning Mechanism via Spectral Compression

On capacity of active relaying in magnetic induction based wireless underground sensor networks

On Capturing Spatial Diversity of Joint M2M/H2H Dynamic Uplink Transmissions in 3GPP LTE Cellular System

On Predicting Video Quality Expectations of Mobile Users

On the Effects of UE Transceiver Non-Reciprocity in Coordinated TDD Multi-Cell MIMO Network

On the RSS biases in WLAN-based Indoor Positioning

On the Solution of the Steiner Tree NP-Hard Problem via Physarum BioNetwork

Optimized burst truncation in fast-convolution filter bank based waveform generation

Outage Probability Analysis of Dual-hop Full-Duplex Decode-and-Forward Relaying over Generalized Multipath Fading Conditions

Outage Probability Analysis of Full-Duplex Regenerative Relaying over Generalized Asymmetric Fading Channels
Parameterized Sets of Dataflow Modes And Their Application to Implementation of Cognitive Radio Systems
Research output: Scientific - peer-review › Article

Performance analysis of energy detection over mixture gamma based fading channels with diversity reception
Research output: Scientific - peer-review › Conference contribution

Relaxed direct position estimation as strategy for open-loop GNSS receivers
Research output: Scientific - peer-review › Conference contribution

Resource Management Schemes for Network Assisted Device-to-Device Communication for an Integrated OFDMA Cellular System
Research output: Scientific - peer-review › Conference contribution

Service Failure and Interruption Probability Analysis for Licensed Shared Access Regulatory Framework
Research output: Scientific - peer-review › Conference contribution

Simplified Probabilistic Modelling and Analysis of Enhanced Distributed Coordination Access in IEEE 802.11
Research output: Scientific - peer-review › Article

Simultaneous Transmission and Spectrum Sensing in OFDM Systems Using Full-Duplex Radios
Research output: Scientific - peer-review › Conference contribution

Smart home gateway system over Bluetooth low energy with wireless energy transfer capability
Galinina, O., Mikhaylov, K., Andreev, S., Turlikov, A. & Koucheryavy, Y. 2015 In : Eurasip Journal on Wireless Communications and Networking. 2015, 1, 178
Research output: Scientific - peer-review › Article

Software simulations and experiments: The European Commission 7th Framework Programme (FP7) project ICT-318362-EMPhAIC deliverable D9.2
Research output: Professional › Commissioned report

Spectrum sensing in generalized multipath fading conditions using square-law combining
Start-up and Frequency Stability Analysis using Time-Varying Root Locus
Jain, S. & Tchamov, N. 2015 In : IEICE Electronics Express. 12, 22, 12.20150661
Research output: Scientific - peer-review › Article

Statistical Sensor Fusion of Ultra Wide Band Ranging and Real Time Kinematic Satellite Navigation
Research output: Scientific - peer-review › Conference contribution

Study of the Duty Cycle Challenges for Short Range Devices Deployment Based on the IEEE 802.11ah in M2M and IoT Network
Research output: Scientific › Article

Subband Energy Based Reduced Complexity Spectrum Sensing under Noise Uncertainty and Frequency-Selective Spectral Characteristics
Research output: Scientific - peer-review › Article

Techno-Economical Comparison of Dynamic DAS and Legacy Macrocellular Densification: Capacity and Cost-Efficiency Analysis of Alternative Deployment Solutions for Outdoor Service Provisioning
Research output: Scientific - peer-review › Article

The effects of RF impairments in Vehicle-to-Vehicle Communications
Research output: Scientific - peer-review › Conference contribution

The η − µ / Inverse Gamma Composite Fading Model
Research output: Scientific - peer-review › Conference contribution

The κ − µ / Inverse Gamma Fading Model
Research output: Scientific - peer-review › Conference contribution

Training design and algorithms for channel estimation: The European Commission 7th Framework Programme (FP7) project ICT-318362-EMPhAtiC deliverable D3.1
Research output: Professional › Commissioned report

Understanding Practical Limitations of Network Coding for Assisted Proximate Communication
Research output: Scientific - peer-review › Article
Co-modeling of embedded networks using systemc and SDL: From theory to practice
Research output: Scientific - peer-review > Conference contribution

A blind frequency response mismatch correction algorithm for 4-channel Time-Interleaved ADC
Research output: Scientific - peer-review > Conference contribution

Adaptive mobile tracking in unknown non-line-of-sight conditions with application to digital TV networks
Research output: Scientific - peer-review > Article

Analysis and Rate Optimization of OFDM-Based Cognitive Radio Networks Under Power Amplifier Nonlinearity
Research output: Scientific - peer-review > Article

Analysis of Channel Non-Reciprocity Due to Transceiver and Antenna Coupling Mismatches in TDD Precoded Multi-User MIMO-OFDM Downlink
Research output: Scientific - peer-review > Conference contribution

Analysis of Oscillator Phase-Noise Effects on Self-Interference Cancellation in Full-Duplex OFDM Radio Transceivers
Research output: Scientific - peer-review > Article

Analytic Expressions and Bounds for Special Functions and Applications in Communication Theory
Research output: Scientific - peer-review > Article

Analytic performance evaluation of M-QAM based decode-and-forward relay networks over enriched multipath fading channels
Research output: Scientific - peer-review > Conference contribution

Analytic solutions to a Marcum Q-function-based integral and application in energy detection of unknown signals over multipath fading channels
Research output: Scientific - peer-review > Conference contribution

Analyzing Impacts of Coexistence between M2M and H2H Communication on 3GPP LTE System
Analyzing the overload of 3GPP LTE system by diverse classes of connected-mode MTC devices

Antibody-based molecular communication for targeted drug delivery systems

A PET project from Finland :Automating GNSS receiver testing

A road map for traffic engineering in software defined networks

A routing framework for energy harvesting wireless nanosensor networks in the Terahertz Band

A statistical-physical model of interference in diffusion-based molecular nanonetworks

Capturing Spatial Randomness of Heterogeneous Cellular/WLAN Deployments With Dynamic Traffic

Cell planning for outdoor distributed antenna systems in dense urban areas

Cellular traffic offloading onto network-assisted device-to-device connections

Closed-form Analysis of Channel Non-Reciprocity Due to Transceiver and Antenna Coupling Mismatches in Multi-user Massive MIMO Network

Delay-based Congestion Control Mechanism for Video Services: Mechanism including Backward Loading and Real-time Modes
Delivering uniform connectivity and service experience to converged 5G wireless networks

Dense Small-Cell Networks: Rethinking the Radio Interface Beyond LTE-Advanced

Deployment strategies and performance analysis of Macrocell and Femtocell networks in suburban environment with modern buildings

Digital post-processing based wideband receiver linearization for enhanced spectrum sensing and access

Digital Suppression of Power Amplifier Spurious Emissions at Receiver Band in FDD Transceivers

Distance-aware multi-carrier (DAMC) modulation in Terahertz Band communication

DSP-Based Suppression of Spurious Emissions At RX Band in Carrier Aggregation FDD Transceivers

Editorial

Editorial

Editorial

Editorial

Effects of Radio Front-end PLL Phase Noise on GNSS Baseband Correlation

Efficient Estimation and Compensation of Transceiver Non-Reciprocity in Precoded TDD Multi-User MIMO-OFDM Systems
Efficient Estimation and Pilot-Free Online Re-Calibration of I/Q Imbalance in Broadband Direct-Conversion Transmitters
Research output: Scientific - peer-review › Article

End-to-end propagation noise and memory analysis for molecular communication over microfluidic channels
Research output: Scientific - peer-review › Article

Energy Detection under IQ Imbalance with Single- and Multi-Channel Direct-Conversion Receiver: Analysis and Mitigation
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Frequency-Selective Digital Predistortion for Unwanted Emission Reduction
Research output: Scientific - peer-review › Article

Full-Duplex Transceiver System Calculations: Analysis of ADC and Linearity Challenges
Research output: Scientific - peer-review › Article

Graphene-based plasmonic nano-transceiver for terahertz band communication
Research output: Scientific - peer-review › Conference contribution

IEEE 802.11ac MIMO Receiver Baseband Processing on Customized VLIW Processor
Research output: Scientific - peer-review › Conference contribution

Impact of modern construction materials on radio signal propagation: Practical measurements and network planning aspects
Research output: Scientific - peer-review › Conference contribution

**Impact of received signal on self-interference channel estimation and achievable rates in in-band full-duplex transceivers**

Research output: Scientific - peer-review › Conference contribution

**Impact of VANET-Based V2X Communication Using IEEE 802.11p on Reducing Vehicles Traveling Time in Realistic Large Scale Urban Area**

Research output: Scientific - peer-review › Conference contribution

**Improving network connectivity in the presence of heavy-tailed interference**

Research output: Scientific - peer-review › Article

**Intelligent access network selection in converged multi-radio heterogeneous networks**

Research output: Scientific - peer-review › Article

**Internet of Things, Smart Spaces, and Next Generation Networks and Systems. 14th International Conference, NEW2AN 2014 and 7th Conference, nuSMART 2014, St. Petersburg, Russia, August 27-29, 2014. Proceedings**

Research output: Scientific - peer-review › Anthology

**Joint Mitigation of Nonlinear RF and Baseband Distortions in Wideband Direct-Conversion Receivers**

Research output: Scientific - peer-review › Article

**Lifetime analysis of wireless sensor nodes in different smart grid environments**

Research output: Scientific - peer-review › Article

**LOS and NLOS channel modeling for terahertz wireless communication with scattered rays**

Research output: Scientific - peer-review › Conference contribution

**Low-complexity digital predistortion for reducing power amplifier spurious emissions in spectrally-agile flexible radio**

Research output: Scientific - peer-review › Conference contribution

**Low latency radio interface for 5G flexible TDD local area communications**

Research output: Scientific - peer-review › Conference contribution
Multiuser frequency allocation with wideband power amplifier models

Nanonetworks editorial for 2013

Network-Assisted D2D Communications: Implementing a Technology Prototype for Cellular Traffic Offloading

Network-Assisted 802.11n Over WiFi Direct

New Spectrally and Energy Efficient Flexible TDD Based Air Interface for 5G Small Cells

On modulation for magnetic induction based transmission in wireless underground sensor networks

On receiver design for diffusion-based molecular communication


On the Optimal Assisted Rate Allocation in N-Tier Multi-RAT Heterogeneous Networks

Optimal energy-throughput efficiency for magneto-inductive underground sensor networks

Optimized Power Allocation and Spectrum Sharing in Device to Device underlaying Cellular Systems
Optimizing energy efficiency of a multi-radio mobile device in heterogeneous beyond-4G networks

Performance Analysis of Primary User RSS/DoA Estimation and Localization in Cognitive Radio Networks Using Sectorized Antennas

Performance Enhancement and Evaluation of IEEE 802.11ah Multi-Access Point Network Using Restricted Access Window Mechanism

Performance evaluation of IEEE 802.11ah and its restricted access window mechanism

Performance evaluation of MDT assisted LTE RF fingerprint framework

Phase noise mitigation in OFDMA uplink

Predicting user QoE satisfaction in current mobile networks

Radio Interface Design for Ultra-Low Latency Millimeter-Wave Communications in 5G Era

Radio Interface Evolution towards 5G and Enhanced Local Area Communications

Reduced-complexity power amplifier linearization for carrier aggregation mobile transceivers
Reference Receiver Based Digital Self-Interference Cancellation in MIMO Full-Duplex Transceivers
Research output: Scientific - peer-review › Conference contribution

Signature-assisted rendezvous in OFDM-based cognitive networks using sub-Nyquist samples
Research output: Scientific - peer-review › Conference contribution

Spectral Efficiency of Dynamic DAS with Extreme Down-tilt Antenna Configuration
Research output: Scientific - peer-review › Conference contribution

Techno-economical analysis and comparison of legacy and ultra-dense small cell networks
Research output: Scientific - peer-review › Conference contribution

Terahertz band: Next frontier for wireless communications
Research output: Scientific - peer-review › Article

TeraNets: Ultra-broadband communication networks in the terahertz band
Research output: Scientific - peer-review › Article

The Area Under a Receiver Operating Characteristic Curve Over Enriched Multipath Fading Conditions
Research output: Scientific - peer-review › Conference contribution

Throughput of the magnetic induction based wireless underground sensor networks: Key optimization techniques
Research output: Scientific - peer-review › Article

Transmitter-side channel estimation in magnetic induction based communication systems
Research output: Scientific - peer-review › Conference contribution

Two Approaches to Analyzing Dynamic Cellular Networks with Limited Resources
Research output: Scientific - peer-review › Conference contribution

User Guided Energy and Capacity Optimization in UMTS Mobile Networks
Research output: Scientific - peer-review › Conference contribution
User’s Happiness in Numbers: Understanding Mobile YouTube Quality Expectations
Research output: Scientific › peer-review › Conference contribution

Video-based safety manual for personal guidance
Research output: Scientific › Conference contribution

Widely Linear Digital Self-Interference Cancellation in Direct-Conversion Full-Duplex Transceiver
Research output: Scientific › peer-review › Article

Wireless Sensor Network Based Smart Home System over BLE with Energy Harvesting Capability
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A cross-layer communication module for the internet of Things
Research output: Scientific › peer-review › Article

Active self-interference cancellation of passband signals using gradient descent
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Ad Hoc Networks editorial for 2012
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A differential coding-based scheduling framework for wireless multimedia sensor networks
Research output: Scientific › peer-review › Article

Advanced self-interference cancellation and multiantenna techniques for full-duplex radios
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A molecular communication system model for particulate drug delivery systems
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Asymptotic queuing analysis for dynamic spectrum access networks in the presence of heavy tails
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Mobile transmitter digital predistortion: Feasibility analysis, algorithms and design exploration
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Molecular transport in microfluidic channels for flow-induced molecular communication
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Multiuser resource allocation optimization using bandwidth-power product in cognitive radio networks
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On the throughput of Wireless Underground Sensor Networks using magneto-inductive waveguides
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Optimal deployment for magnetic induction-based wireless networks in challenged environments
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Optimal primary-user mobility aware spectrum sensing design for cognitive radio networks
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Radio access network energy minimization in multi-layer heterogeneous wireless systems
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Reinforcement learning for cooperative sensing gain in cognitive radio ad hoc networks
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System-theoretic analysis and least-squares design of microfluidic channels for flow-induced molecular communication
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TCP CRAHN: A transport control protocol for cognitive radio ad hoc networks
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Traffic-aware utility based QoS provisioning in OFDMA hybrid smallcells
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A complete femtocell network modeling and development platform
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A diffusion-based binary digital communication system
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A receiver architecture for pulse-based electromagnetic nanonetworks in the Terahertz Band
Research output: Scientific - peer-review » Conference contribution

Correlation-aware QoS routing with differential coding for wireless video sensor networks
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Correlation-aware user selection for cooperative spectrum sensing in cognitive radio ad hoc networks
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Dynamic cooperator selection in cognitive radio networks
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Interference effects on modulation techniques in diffusion based nanonetworks
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Intersymbol and co-channel interference in diffusion-based molecular communication
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Joint energy harvesting and communication analysis for perpetual wireless nanosensor networks in the terahertz band
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MIMO communications based on molecular diffusion
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Monaco: Fundamentals of molecular nano-communication networks
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Multiagent jamming-resilient control channel game for cognitive radio ad hoc networks
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Network stability of cognitive radio networks in the presence of heavy tailed traffic
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On capacity of magnetic induction-based wireless underground sensor networks
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On the origins of heavy-tailed delay in dynamic spectrum access networks
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OPERATION: Optimal routing metric for cognitive radio ad hoc networks
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Optimal detection for diffusion-based communications in the presence of ISI
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QoS-aware user Cohabitation Coordinator in Cognitive Radio Networks
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Spatio-temporal estimation for interference management in femtocell networks
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Spectrum-aware mobility management in cognitive radio cellular networks
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Terahertz channel modeling of underground sensor networks in oil reservoirs
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The internet of multimedia Nano-Things
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The internet of multimedia nano-things in the terahertz band
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A mode-based approach for channel modeling in underground tunnels under the impact of vehicular traffic flow
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A spatial correlation-based image compression framework for wireless multimedia sensor networks
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A spectrum decision framework for cognitive radio networks
Research output: Scientific - peer-review › Article

Automata modeling of Quorum Sensing for nanocommunication networks
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Bio-inspired synchronization for nanocommunication networks
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BorderSense: Border patrol through advanced wireless sensor networks
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Can dynamic spectrum access induce heavy tailed delay?
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Capacity and outage analysis of MIMO and cooperative communication systems in underground tunnels
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Channel modeling and capacity analysis for electromagnetic wireless nanonetworks in the terahertz band
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Cognitive radio resource management exploiting heterogeneous primary users
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Computer Networks: Editorial
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Cooperative spectrum sensing in cognitive radio networks: A survey
Research output: Scientific - peer-review › Article

CRP: A routing protocol for cognitive radio ad hoc networks
Research output: Scientific - peer-review › Article

Diffusion-based noise analysis for molecular communication in nanonetworks
Research output: Scientific - peer-review › Article

Dynamic connectivity in wireless underground sensor networks
Research output: Scientific - peer-review › Article
Editorial
Research output: Scientific - peer-review › Article

Information capacity of diffusion-based molecular communication in nanonetworks
Research output: Scientific - peer-review › Conference contribution

Information capacity of pulse-based Wireless Nanosensor Networks
Research output: Scientific - peer-review › Conference contribution

Low-weight channel coding for interference mitigation in electromagnetic nanonetworks in the terahertz band
Research output: Scientific - peer-review › Conference contribution

MISE-PIPE: Magnetic induction-based wireless sensor networks for underground pipeline monitoring
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Mobile relay and group mobility for 4G WiMAX networks
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Modulation techniques for communication via diffusion in nanonetworks
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Nanonetworks: A new frontier in communications
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Noise analysis in ligand-binding reception for molecular communication in nanonetworks
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OFDM-based common control channel design for cognitive radio ad hoc networks
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On network connectivity of wireless sensor networks for sandstorm monitoring
Research output: Scientific - peer-review › Article

Percolation theory based connectivity and latency analysis of cognitive radio ad hoc networks
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Primary user activity modeling using first-difference filter clustering and correlation in cognitive radio networks
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Primary-user mobility impact on spectrum sensing in cognitive radio networks
Research output: Scientific - peer-review › Conference contribution

Spatial correlation and mobility-aware traffic modeling for wireless sensor networks
Research output: Scientific - peer-review › Article

Spatio-temporal correlation-based density optimization in wireless underground sensor networks
Research output: Scientific - peer-review › Conference contribution

Topology analysis of wireless sensor networks for sandstorm monitoring
Research output: Scientific - peer-review › Conference contribution

Visual correlation-based image gathering for wireless multimedia sensor networks
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