Research outputs
Listing of Research outputs

Opportunistic Fountain Coding with Coordinative Routing
Research output: Contribution to journal › Article › peer-review

Resource Allocation in Full-Duplex UAV Enabled Multiscale Cell Networks
Research output: Contribution to journal › Article › peer-review

Joint Transceiver Beamforming Design for Hybrid Full-Duplex and Half-Duplex Ad-Hoc Networks
Research output: Contribution to journal › Article › peer-review

Full-Duplex Multiple Access Mechanism for Connected Vehicles Operating at Different Autonomous Levels in NR eV2X VANETs
Research output: Contribution to journal › Article › peer-review

Ad-Hoc Communication System for Intelligent Transportation with Simultaneous Transmission and Sensing
Research output: Patent

AoA-Based Pilot Assignment in Massive MIMO Systems Using Deep Reinforcement Learning
Research output: Contribution to journal › Article › peer-review

Optimization of Rate Allocation and Power Control for Rate Splitting Multiple Access (RSMA)
Research output: Contribution to journal › Article › peer-review

Reduce delay of multipath TCP in IoT networks
Research output: Contribution to journal › Article › peer-review

Energy Efficient Intelligent Reflecting Surface Assisted Terahertz Communications
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Joint Beamforming, User Association, and Height Control for Cellular-Enabled UAV Communications
Research output: Contribution to journal › Article › peer-review

Optimal Control for Full-Duplex Communications with Reconfigurable Intelligent Surface
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review
Secure Intelligent Reflecting Surface Assisted UAV Communication Networks
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Full Duplex-Based Scheduling Protocol for Latency Enhancement in 5G eV2X VANETs
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Cross-layer multipath congestion control, routing and scheduling design in ad hoc wireless networks
Research output: Contribution to journal › Article › peer-review

Beamforming Design for Multiuser Transmission through Reconfigurable Intelligent Surface
Research output: Contribution to journal › Article › peer-review

An adaptive full-duplex deep reinforcement learning-based design for 5G-V2X mode 4 VANETs
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Energy minimization for federated learning with IRS-assisted over-the-air computation
Research output: Contribution to journal › Conference paper › peer-review

Energy-Efficient Wireless Communications with Distributed Reconfigurable Intelligent Surfaces
Yang, Z., Chen, M., Saad, W., Xu, W., Shikh-Bahaei, M., Poor, H. V. & Cui, S., 2021, (Accepted/In press) In: IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS.
Research output: Contribution to journal › Article › peer-review

Hybrid Beamforming for Distributed Intelligent Reflecting Surfaces-Aided Systems
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Optimized asymmetric feedback detection for rate-adaptive harq with unreliable feedback
Research output: Contribution to journal › Conference paper › peer-review

Joint Trajectory and Passive Beamforming Design for Secure UAV Networks with RIS
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Machine Learning for Predictive Deployment of UAVs with Rate Splitting Multiple Access
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review
Resource Allocation for Wireless Communications with Distributed Reconfigurable Intelligent Surfaces

Vertical Federated Learning Based Privacy-Preserving Cooperative Sensing in Cognitive Radio Networks

Energy Efficient Federated Learning Over Wireless Communication Networks
Shikh-Bahaei, M., Yang, Z., Chen, M., Saad, W. & Hong, C. S., 19 Nov 2020, In: IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS.

Cooperative rate-splitting for secrecy sum-rate enhancement in multi-antenna broadcast channels

Fair non-orthogonal multiple access communication systems with reconfigurable intelligent surface

Joint user clustering and passive beamforming for downlink NOMA system with reconfigurable intelligent surface

Ensemble Learning Based Robust Cooperative Sensing in Full-Duplex Cognitive Radio Networks

A Pointer Network Based Deep Learning Algorithm for User Pairing in Full-Duplex Wi-Fi Networks

Throughput improvement by mode selection in hybrid duplex wireless networks
On Ensemble Learning Based Secure Fusion Strategy for Robust Cooperative Sensing in Full-Duplex Cognitive Radio Networks
Zhang, Y., Wu, Q. & Shikh-Bahaei, M., 29 Jun 2020, (Accepted/In press) In: IEEE TRANSACTIONS ON COMMUNICATIONS.
Research output: Contribution to journal › Article › peer-review

Downlink Sum-Rate Maximization for Rate Splitting Multiple Access (RSMA)
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Energy efficient rate splitting multiple access (RSMA) with reconfigurable intelligent surface
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Hardware impairment-aware data collection and wireless power transfer using a MIMO full-duplex UAV
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

A Priority-Based Cross-Layer Design for Future VANETs through Full-Duplex Technology
Research output: Contribution to journal › Article › peer-review

Function-Aware Network Coding for Dynamic Vision Sensor Networks
Research output: Contribution to journal › Article › peer-review

Resource Allocation for UAV Assisted Wireless Networks with QoS Constraints
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Channel Assignment in Uplink Wireless Communication Using Machine Learning Approach
Research output: Contribution to journal › Article › peer-review

Joint Optimization of Power and Location in Full-Duplex UAV Enabled Systems
Research output: Contribution to journal › Article › peer-review

Energy Efficient UAV Communication with Energy Harvesting
Research output: Contribution to journal › Article › peer-review

Collision Avoidance in V2X Communication Networks
Zang, J., Towhidlou, V. & Shikh-Bahaei, M., 18 Nov 2019, 2019 IEEE Wireless Communications and Networking Conference. Institute of Electrical and Electronics Engineers Inc.
Delay Analysis in Full-Duplex Heterogeneous Cellular Networks
Research output: Contribution to journal › Article › peer-review

Energy Efficient Resource Allocation in UAV-Enabled Mobile Edge Computing Networks
Research output: Contribution to journal › Article › peer-review

Efficient Resource Allocation for Mobile-Edge Computing Networks with NOMA: Completion Time and Energy Minimization
Research output: Contribution to journal › Article › peer-review

Sum-Rate Maximization of Uplink Rate Splitting Multiple Access (RSMA) Communication
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

A Survey on Implementation and Applications of Full Duplex Wireless Communications
Research output: Contribution to journal › Article › peer-review

On Fair Secure Rate Maximization for NOMA Downlinks using Quantum Key Distribution
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Resource Allocation in Full-Duplex Mobile-Edge Computation Systems with NOMA and Energy Harvesting
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

A Neural Network Prediction Based Adaptive Mode Selection Scheme in Full-Duplex Cognitive Networks
Research output: Contribution to journal › Article › peer-review

Full-Duplex D2D Communications in Vehicular Networks
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Joint Power, Altitude, Location and Bandwidth Optimization for UAV with Underlaid D2D Communications
Research output: Contribution to journal › Article › peer-review

On the SINR Distribution of SWIPT MU-MIMO with Antenna Selection
Energy Efficient Resource Allocation for Mobile-Edge Computation Networks with NOMA
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Transmission Capacity of Full-Duplex MIMO Ad-Hoc Network with Limited Self-Interference Cancellation
Hou, J. & Shikh-Bahaei, M., 20 Feb 2019, 2018 IEEE Global Communications Conference, GLOBECOM 2018 - Proceedings. Institute of Electrical and Electronics Engineers Inc., 8647531
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Device-to-Device (D2D) Communication as a Bootstrapping System in a Wireless Cellular Network
Research output: Contribution to journal › Article › peer-review

Cross-Layer combining of truncated ARQ with adaptive modulation and coding in full duplex systems
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Physical Layer Network Coding in Network MIMO: A New Design for 5G and Beyond
Research output: Contribution to journal › Article › peer-review

Edge computing for low delay to cache and transfer electronic medical records
Research output: Contribution to journal › Article › peer-review

Wireless-Powered Distributed Spatial Modulation with Energy Recycling and Finite Energy Storage
Research output: Contribution to journal › Article › peer-review

Joint Altitude, Beamwidth, Location and Bandwidth Optimization for UAV-Enabled Communications
Research output: Contribution to journal › Article › peer-review

Multi-antenna assisted virtual full-duplex relaying with reliability-aware iterative decoding
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Cache Placement in Two-Tier HetNets with Limited Storage Capacity: Cache or Buffer?
Research output: Contribution to journal › Article › peer-review

Symbol-Level Selective Full-Duplex Relaying with Power and Location Optimization
Research output: Contribution to journal › Article › peer-review
Improved Cognitive Networking through Full Duplex Cooperative ARQ and HARQ
Research output: Contribution to journal › Article › peer-review

Performance analysis of Inband FD-D2D communications with imperfect SI cancellation for wireless video distribution
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Square deviation based symbol-level selection for virtual full-duplex relaying networks
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

An Adaptive Optimal Mapping Selection Algorithm for PNC using Variable QAM Modulation
Research output: Contribution to journal › Article › peer-review

Energy Efficient NOMA-Based Mobile Edge Computing Offloading
Pan, Y., Chen, M., Yang, Z., Huang, N. & Shikh-Bahaei, M., 1 Jan 2018, (Accepted/In press) In: IEEE COMMUNICATIONS LETTERS.
Research output: Contribution to journal › Article › peer-review

Full-duplex and cognitive radio networking for the emerging 5g systems
Research output: Contribution to journal › Editorial › peer-review

Adaptive Full Duplex Communications in Cognitive Radio Networks
Research output: Contribution to journal › Article › peer-review

Evaluation of availability of initial-segments of video files in Device-to-Device (D2D) network
Research output: Contribution to conference types › Paper › peer-review

Cooperative Full-Duplex Physical and MAC Layer Design in Asynchronous Cognitive Networks
Research output: Contribution to journal › Article › peer-review

Edge caching and Dynamic Vision Sensing for low delay access to visual medical information
Research output: Chapter in Book/Report/Conference proceeding › Other chapter contribution › peer-review

Full-duplex Device-to-Device collaboration for low-latency wireless video distribution
Research output: Chapter in Book/Report/Conference proceeding › Other chapter contribution › peer-review
Survey on peer-assisted content delivery networks
13 p.
Research output: Contribution to journal › Article › peer-review

Asynchronous full-duplex cognitive radio
Towhidlou, V. & Bahaei, M. S., 17 Mar 2017, IEEE Vehicular Technology Conference. Institute of Electrical and Electronics Engineers Inc., 7880911
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Full-Duplex Device-to-Device Communication for Wireless Video Distribution
Research output: Contribution to journal › Article › peer-review

Optimal full-duplex cooperative spectrum sensing in asynchronous cognitive networks
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

A new femtocaching file placement algorithm for Telemedicine
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Multi-user scalable video transmission over cognitive radio networks
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Rayleigh flat fading channel modeled as a G/H_2/1 queue
Research output: Chapter in Book/Report/Conference proceeding › Conference paper › peer-review

Probabilistic Radio Resource Allocation over CDMA-Based Cognitive Radio Networks
Research output: Contribution to journal › Article › peer-review

Cross-layer resource allocation for video streaming over OFDMA cognitive radio networks
Research output: Contribution to journal › Article › peer-review

Packet error rate-based adaptive rate optimisation with selective-repeat automatic repeat request for convolutionally-coded M-ary quadrature amplitude modulation systems
Research output: Contribution to journal › Article › peer-review

Cross-layer resource allocation for video streaming over OFDMA cognitive radio networks with imperfect cross-link CSI
Research output: Chapter in Book/Report/Conference proceeding › Other chapter contribution › peer-review
Cross-Layer Design in Dynamic Spectrum Sharing Systems
Research output: Contribution to journal › Article › peer-review

Cross-layer Design for Interference-limited Spectrum Sharing Systems
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Low-complexity analytical model for cross-layer expired time video packet drop protection in WLANs,
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Multi-user Time-Frequency Downlink Scheduling and Resource Allocation for LTE Cellular Systems
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Jointly Optimized Rate and Outer Loop Power Control with Single- and Multi-User Detection
Research output: Contribution to journal › Article › peer-review

M/M/1 Queuing Model for Adaptive Cross-Layer Error Protection in WLANs
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

TCP Dynamics and Adaptive MAC Retry-Limit Aware Link-Layer Adaptation over IEEE 802.11 WLAN
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Optimum power and rate adaptation for MQAM in Rayleigh flat fading with imperfect channel estimation
Research output: Contribution to journal › Article › peer-review

Variable rate and variable power MQAM system based on Bayesian bit error rate, and channel estimation techniques
Research output: Contribution to journal › Article › peer-review

BER-based adaptation in composite fading channel
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Design of Near Allpass Strictly Stable Minimal Phase Real Valued Rational IIR Filters
Research output: Contribution to journal › Article › peer-review
Iterative cancellation of clipping noise in multilevel quadrature amplitude modulation multi-carrier CDMA system
Research output: Contribution to journal › Article › peer-review

LDPC Coded Adaptive Transmission over Fading Channels
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Optimising expected spectral efficiency of adaptive multilevel quadrature amplitude modulation with service outage constraints over fading channels
Research output: Contribution to journal › Article › peer-review

Power and rate adaptation based on imperfect channel estimation over MIMO fading channels
Research output: Contribution to journal › Article › peer-review

Interference suppression in the Wigner distribution using fractional Fourier transformation and signal synthesis
Research output: Contribution to journal › Article › peer-review

Joint optimisation of 'transmission rate' and 'outer-loop' SNR target adaptation over fading channel
Research output: Contribution to journal › Article › peer-review

Adaptive power and rate transmission with single-and multi-user detection
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Cross-layer adaptive ARQ and modulation tradeoffs
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

ENHANCING THE READABILITY OF THE WIGNER DISTRIBUTION USING AN ITERATIVE DETECT-AND-ELIMINATE APPROACH FOR THE INTERFERENCE
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Multi-user Interference Cancellation Technology in the Presence of Multiple Frequency Offsets
Research output: Contribution to journal › Article › peer-review

Apparatus and Method for Secondary Synchronization Channel Detection in a 3GPP WCDMA Receiver
Research output: Patent

Performance of Bayesian Estimation Based Variable Rate Variable Power MQAM System
Performance of Variable Rate and Variable Power MQAM System Based on Bit Error Rate and Channel Estimate

Analysis of the channel bit-rate detection process in WCDMA

Joint Optimisation of Spreading Factors and Outer-Loop Power Control for DS-CDMA
Zarringhalam, F., Olfat, A., Shikh-Bahaei, M. & Charbit, G., 2005, Unknown. Unknown Publisher

Joint SNR Target & Rate adaptation Based on Bit Error Rate Estimation Wireless Communications Systems

New SIC Scheme with Frequency Offset Estimation and Correction
Kobravi, A., Shikh-Bahaei, M. R. & Lambotharan, S., 2005, Unknown. Unknown Publisher

Optimum Power Rate Adaptation with Imperfect Channel Estimation for MQAM in Rayleigh Flat Fading
Olfat, A. & Shikh-Bahaei, M., 2005, Unknown. Unknown Publisher

QoS enhancement for VoIP using a new FEC scheme with backup channel

Joint Optimisation of outer-loop power control and rate adaptation over fading channels

Voice Over Adaptive IP Network (VoAIP)
Asosheh, A. & Shikh-Bahaei, M., 2004, Unknown. Unknown Publisher

Adaptive Voice over IP network with selective dropping mechanism

On the performance of channel data rate detection algorithms in WCDMA receivers

3GPP WCDMA receiver using pipelined apparatus and method for performing cell searches
Toussi, K., Shikh-Bahaei, M. & Pirooz, A., 2002

Apparatus and method for secondary synchronization channel detection in a 3GPP WCDMA receiver
Optimization of an adaptive multi-dwell implementation of the cell-search in WCDMA
Shikh-Bahaei, M., Nassiri-Toussi, K., Pirooz, A. D. & Bahai, A. S., 2002, Unknown. Unknown Publisher
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Joint planning of soft-capacity and soft-coverage for 3G WCDMA systems
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

A statistical processing approach to interference cancellation in W-CDMA systems
Research output: Contribution to journal › Article › peer-review

The capacity of power-controlled W-CDMA systems in the presence of interference cancellation
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Interference Cancellation in Single-Layer and Hierarchical W-CDMA Cellular Structures
Shikh-Bahaei, M. & Aghvami, A. H., 1999, Unknown. Unknown Publisher
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Interference cancellation in W-CDMA cellular structures using statistical processing
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

An Approach to Signal Detection in CDMA Systems using Optimal Linear-Quadratic Statistical Processing
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Efficient Optical Filtering in Dense WDM Networks by Grating Inside Holographic Resonator
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

On the Performance of the Single and Multi-Cell DS-CDMA Systems using 'Non-Overlap Constellation Assignment' to the Different Groups of Spreading Codes
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Optimal Linear-Quadratic Statistical Processing for Interference Cancellation in CDMA Systems
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Tuneable Optical Filters by Grating Inside a Resonator
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

An interference estimation method for interference cancellation in CDMA systems
Shikh-Bahaei, M. & Aghvami, A. H., 1997, Unknown. Unknown Publisher, p. 4/1 - 4/6
Research output: Chapter in Book/Report/Conference proceeding › Conference paper
The above report is produced using the following setup
Ordered by: null