Abdelaziz, Mahmoud; Tarver, Chance; Li, Kaipeng; Anttila, Lauri; Martinez, Raul; Valkama, Mikko; Cavallaro, Joseph R / Sub-band Digital Predistortion for Noncontiguous Transmissions: Algorithm Development and Real-Time Prototype Implementation.  
Research output: Scientific - peer-review › Conference contribution

Gholibeigi, Mozhdeh; Heijenk, Geert; Moltchanov, Dmitri; Koucheryavy, Yevgeni / Analysis of a receiver-based reliable broadcast approach for vehicular networks.  
Research output: Scientific - peer-review › Article

Nurminen, Henri; Raitoharju, Matti; Piche, Robert / An efficient indoor positioning particle filter using a floor-plan based proposal distribution.  
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Mineraud, Julien; Wang, Liang; Balasubramaniam, Sasitharan; Kangasharju, Jussi / Hybrid Renewable Energy Routing for ISP Networks.  
Research output: Scientific - peer-review › Conference contribution

Aghababaeetafreshi, Mona; Lehtonen, Lasse K.; Levanen, Toni; Valkama, Mikko; Takala, Jarmo / IEEE 802.11ac MIMO Transceiver Baseband Processing on a VLIW Processor.  
Research output: Scientific - peer-review › Article

Krohns-Välimäki, Heidi; Sää, Joonas; Haapanen, Jussi; Verho, Pekka; Lempiäinen, Jukka / Improving Disturbance Management with Combined Electricity and Mobile Network Situation Awareness System.  
Research output: Scientific - peer-review › Article

Galina, Olga (Editor); Balandin, Sergey (Editor); Koucheryavy, Yevgeni (Editor) / Internet of Things, Smart Spaces, and Next Generation Networks and Systems: 16th International Conference, NEW2AN 2016, and 9th Conference, ruSMART 2016, St. Petersburg, Russia, September 26-28, 2016, Proceedings.  
Research output: Scientific - peer-review › Anthology

Koivisto, Mike; Costa, Mario Jorge; Hakkarainen, Aki; Leppänen, Kari; Valkama, Mikko / Joint 3D Positioning and Network Synchronization in 5G Ultra-Dense Networks Using UKF and EKF.  
Research output: Scientific - peer-review › Conference contribution

Yli-Kaakinen, Juha; Renfors, Markku; Tuomivaara, Hannu / Multicarrier modulation for HF communications.  
Research output: Scientific - peer-review › Conference contribution

Yli-Kaakinen, Juha; Levanen, Toni; Aghababaeetafreshi, Mona; Renfors, Markku; Valkama, Mikko / Optimization of parallel processing intensive digital front-end for IEEE 802.11ac receiver.  
Research output: Scientific - peer-review › Conference contribution
Aghababaeetafreshi, Mona; Yli-Kaakinen, Juha; Levanen, Toni; Korhonen, Ville; Jääskeläinen, Pekka; Renfors, Markku; Valkama, Mikko; Takala, Jarmo / Parallel processing intensive digital front-end for IEEE 802.11ac receiver. 2015 49th Asilomar Conference on Signals, Systems and Computers. IEEE, 2016. p. 1619-1626.
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Conference contribution

Research output: Scientific › Paper, poster or abstract

Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Conference contribution

Al Hammadi, Ahmed; Al Hussein, Omar; Sofotasios, Paschalis; Muhaidat, Sami; Al Qutayri, Mahmoud; Al Araji, Saleh; Karagiannidis, George; Liang, Jie / Unified Analysis of Cooperative Spectrum Sensing over Composite and Generalized Fading Channels. In: IEEE Transactions on Vehicular Technology, Vol. 65, No. 9, 2016, p. 6949-6961.
Research output: Scientific - peer-review › Article


Talvitie, Jukka; Renfors, Markku; Lohan, Elena-Simona / A Comparison of Received Signal Strength Statistics between 2.4 GHz and 5 GHz bands for WLAN-based Indoor Positioning. IEEE GLOBECOM 2015 Workshop on Localization for Indoors, Outdoors, and Emerging Networks (LION). IEEE, 2015.

Daniel, Ondrej; Wymeersch, Henk; Numri, Jari / Hybrid Cooperative Positioning in Harsh Environments. 2015 IEEE Globecom Workshops. IEEE, 2015.


Zou, Yaning; Raeesi, Orod; Anttila, Lauri; Hakkarainen, Aki; Vieira, Joao; Tufvesson, Fredrik; Cui, Qimei; Valkama, Mikko / Impact of Power Amplifier Nonlinearities in Multi-user Massive MIMO Downlink. Proceedings of IEEE Global Communications Conference (IEEE GLOBECOM 2015). 2015.

Werner, Janis; Costa, Mario Jorge; Hakkarainen, Aki; Leppänen, Kari; Valkama, Mikko / Joint User Node Positioning and Clock Offset Estimation in 5G Ultra-Dense Networks. IEEE Global Communications Conference (GLOBECOM) 2015. IEEE, 2015.


Ferrara, Nunzia Giorgia; Paśnikowski, Maciej Jerzy; Sánchez-Naranjo, Susana; González, Fabio Augusto; Ramos-Pollán, Raúl; Seco-Granados, Gonzalo; Lopez-Salcedo, Jose A.; Egea-Roca, Daniel; Solé, Marc; Toledo, Manuel; Lohan, Elena-Simona / Combined architecture for multi-dimensional signal quality enhancements in GNSS receivers. 5th International Colloquium Scientific and Fundamental Aspects of the Galileo Programme, 27-29 October 2015, Braunschweig, Germany. European Space Agency, 2015. Research output: Professional › Conference contribution


Figueiredo e Silva, Pedro; Basiri, Anahid; Lohan, Elena-Simona; Pinchin, James; Hill, Chris; Moore, Terry / On the Impact of Intra-System Interference for Ranging and Positioning with Bluetooth Low Energy. 23rd International Conference on Advances in Geographic Information Systems: ACM SIGSPATIAL. ACM, 2015. Research output: Scientific - peer-review › Conference contribution

Figueiredo e Silva, Pedro; Lohan, Elena-Simona / Room-level indoor positioning with Wi-Fi and RFID fingerprints. 23rd International Conference on Advances in Geographic Information Systems: ACM SIGSPATIAL. ACM, 2015. Research output: Scientific - peer-review › Conference contribution


Werner, Janis; Wang, Jun; Hakkarainen, Aki; Gulati, Nikhil; Patron, Damiano; Pfeil, Doug; Dandekar, Kapi; Cabric, Danijela; Valkama, Mikko / Sectorized antenna-based DoA estimation and localization: Advanced algorithms and measurements. In: IEEE Journal on Selected Areas in Communications, Vol. 33, No. 11, 01.11.2015, p. 2272-2286. Research output: Scientific - peer-review › Article


Leppäkoski, Helena / **Novel Methods for Personal Indoor Positioning.**
Research output: Monograph › Doctoral Thesis

Allen, Markus / **Nonlinear Distortion in Wideband Radio Receivers and Analog-to-Digital Converters: Modeling and Digital Suppression.**
Tampere University of Technology, 2015. 95 p. (Tampere University of Technology. Publication; Vol. 1329).
Research output: Collection of articles › Doctoral Thesis

Björninen, Toni; Yang, Fan / **Signal strength readout and miniaturised antenna for metal-mountable UHF RFID threshold temperature sensor tag.**
Research output: Scientific - peer-review › Article

Yunas, Syed Fahad / **Capacity, Energy-Efficiency and Cost-Efficiency Aspects of Future Mobile Network Deployment Solutions.**
Tampere University of Technology, 2015. 122 p. (Tampere University of Technology. Publication; Vol. 1323).
Research output: Monograph › Doctoral Thesis

Pyattaev, Alexander; Hosek, Jiri; Johnsson, Kerstin; Krkos, Radko; Gerasimenko, Mikhail; Masek, Pavel; Ometov, Aleksandr; Andreev, Sergey; Sedy, Jakub; Novotny, Vít; Koucheryavy, Yevgeni / **3GPP LTE-assisted Wi-Fi-direct: Trial implementation of live D2D technology.**
In: ETRI Journal, Vol. 37, No. 5, 01.10.2015, p. 877-887.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Sofotasios, Paschalis C.; Muhaidat, Sami; Karagiannidis, George K.; Sharif, Bayan S. / **Solutions to integrals involving the marcum Q-function and applications.**
Research output: Scientific - peer-review › Article

Lohan, Elena-Simona; Cramariuc, Oana; Malicki, Lukasz; Samar Brencic, Neja; Cramariuc, Bogdan / **Analytic Hierarchy Process for assessing e-health technologies for elderly indoor mobility analysis.**
Research output: Scientific - peer-review › Conference contribution

Korpi, Dani; Riihonen, Taneli; Haneda, Katsuyuki; Yamamoto, Koji; Valkama, Mikko / **Achievable transmission rates and self-interference channel estimation in hybrid full-duplex/half-duplex MIMO relaying.**
Research output: Scientific - peer-review › Conference contribution

Laukkarinen, Teemu / **Abstracting Application Development for Resource Constrained Wireless Sensor Networks.**
Research output: Collection of articles › Doctoral Thesis
Petrov, Vitaly; Moltchanov, Dmitri; Balasubramaniam, Sasitharan; Koucheryavy, Yevgeni / Incorporating Bacterial Properties for Plasmid Delivery in Nano Sensor Networks.
Research output: Scientific - peer-review › Article

Hasani, Masoumeh; Sydänheimo, Lauri; Lohan, Elena-Simona; Ukkonen, Leena / Performance Evaluation of Wearable Passive RFID Tag for Human Indoor Positioning.
Research output: Scientific - peer-review › Conference contribution

Korpi, Dani; Huusari, Timo; Choi, Yang Seok; Anttila, Lauri; Talwar, Shilpa; Valkama, Mikko / Digital Self-Interference Cancellation under Nonideal RF Components: Advanced Algorithms and Measured Performance.
Research output: Scientific - peer-review › Conference contribution

Basiri, Anahid; Peltola, Pekka; Figueiredo e Silva, Pedro; Lohan, Elena Simona; Moore, Terry; Hill, Chris / Indoor Positioning Technology Assessment using Analytic Hierarchy Process for Pedestrian Navigation Services.
Research output: Scientific - peer-review › Conference contribution

Lohan, Elena-Simona; Talvitie, Jukka; Figueiredo e Silva, Pedro; Numinen, Henri; Ali-Löytty, Simo; Piche, Robert / Received Signal Strength models for WLAN and BLE-based indoor positioning in multi-floor buildings.
Research output: Scientific - peer-review › Conference contribution

Figueiredo e Silva, Pedro Manuel; Granados, Gonzalo Seco; Lohan, Elena-Simona / Receiver Architecture for Cognitive Positioning with CDMA and OFDM signals.
Research output: Scientific - peer-review › Conference contribution

Coatanéa, Eric; Nonsiri, Sarayut; Roca, Ricardo; Mokammel, Faisal; Kruck, Juliane; Christophe, François / Systematic search for design contradictions in systems' architecture : Toward a computer aided analysis.
Research output: Scientific - peer-review › Article

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

Komar, Maria / Performance comparison of selected wired and wireless networks on chip architectures.
2015 17TH Conference of Open Innovations Association (FRUCT). 2015. p. 68-74 (Conference of Open Innovations Association (FRUCT)).
Research output: Scientific - peer-review › Conference contribution

Boronin, P.; Moltchanov, D.; Koucheryavy, Y. / A molecular noise model for THz channels.
Research output: Scientific - peer-review › Conference contribution

Fei, Ze Song; Gao, Qiang; Fu, You; Isotalo, Tero; Niemelä, Jarno / Distributed power allocation over indoor multi-pico stations.
Research output: Scientific - peer-review › Article

Dikmese, Sener; Zheng, Zhenyu; Sofotasios, Paschalis C.; Renfors, Markku; Valkama, Mikko / Efficient Wireless Microphone sensing: Subband energy detector principle and measured performance.

Research output: Scientific - peer-review › Conference contribution

Singh, Simran; Valkama, Mikko; Epp, Michael; Schlecker, Wolfgang / Frequency response mismatch analysis in time-interleaved analog I/Q processing and ADCs.

Research output: Scientific - peer-review › Article

Voropaeva, Anastasiia; Pyattaev, Alexander; Gerasimenko, Mikhail; Andreev, Sergey; Koucheryavy, Yevgeni / On feasibility of coding-based 3GPP LTE coverage enhancements for MTC.

Research output: Scientific - peer-review › Conference contribution

Galina, Olga; Pyattaev, Alexander; Andreev, Sergey; Dohler, Mischa; Koucheryavy, Yevgeni / 5G Multi-RAT LTE-WiFi Ultra-Dense Small Cells: Performance Dynamics, Architecture, and Trends.
In: IEEE Journal on Selected Areas in Communications, Vol. 33, No. 6, 06.2015, p. 1224-1240.

Research output: Scientific - peer-review › Article

Laitinen, Elina; Lohan, Elena-Simona / Are all the Access Points necessary in WLAN-based indoor positioning?

Research output: Scientific - peer-review › Conference contribution

Asp, Ari; Baniya, Anil; Yunas, Syed; Niemelä, Jarno; Valkama, Mikko / Applicability of Frequency Selective Surfaces to Enhance Mobile Network Coverage in Future Energy-Efficient Built Environments.

Research output: Scientific - peer-review › Conference contribution

Kivimäki, Tero / Technologies for Ambient Assisted Living: Ambient Communication and Indoor Positioning.
Tampere University of Technology, 2015. 54 p. (Tampere University of Technology. Publication; Vol. 1295).

Research output: Collection of articles › Doctoral Thesis

Alhava, J.; Renfors, M. / Integer-to-integer complex extended lapped transform.

Research output: Scientific - peer-review › Conference contribution

Heino, Mikko; Korpi, Dani; Huusari, Timo; Antonio-Rodriguez, Emilio; Venkatashramanian, Sathya; Riihonen, Taneli; Anttila, Lauri; Icheln, Clemens; Haneda, Katsuyuki; Wichman, Risto; Valkama, Mikko / Recent advances in antenna design and interference cancellation algorithms for in-band full duplex relays.

Research output: Scientific - peer-review › Article

Singh, Simran; Anttila, Lauri; Epp, Michael; Schlecker, Wolfgang; Valkama, Mikko / Analysis, Blind Identification, and Correction of Frequency Response Mismatch in Two-Channel Time-Interleaved ADCs.

Research output: Scientific - peer-review › Article

Korpi, Dani; Riihonen, Taneli; Valkama, Mikko / Achievable rate regions and self-interference channel estimation in hybrid full-duplex/half-duplex radio links.

Research output: Scientific - peer-review › Conference contribution
Research output: Scientific - peer-review › Article

Collin, Jussi (Inventor) / Measuring angular information by inertial unit arranged to wheel.
IPC No.: G01B 7/30. Patent No.: FI125167.
Research output: Scientific › Patent

Ho-Van, Khuong; Sofotasios, Paschalis C.; Alexandopoulos, George C.; Freear, Steven / Bit error rate of underlay decode-and-forward cognitive networks with best relay selection.
Research output: Scientific - peer-review › Article

Tabus, Vlad; Moltchanov, Dmitri; Koucheryavy, Yevgeni; Tabus, Ioan; Astola, Jaakko / Energy Efficient Wireless Sensor Networks Using Linear-Programming Optimization of the Communication Schedule.
Research output: Scientific - peer-review › Article

Donohoe, Michael; Jennings, Brendan; Balasubramaniam, Sasitharan / Context-awareness and the smart grid: Requirements and challenges.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Nguyen-Thanh, Duc; Le-Tien, Thuong; Bui-Thu, Cao; Le-Thanh, Toi / LTE indoor MIMO performance field measurements.
Research output: Scientific - peer-review › Conference contribution

Tampere University of Technology, 2015. 86 p. (Tampere University of Technology. Publication; Vol. 1280).
Research output: Collection of articles › Doctoral Thesis

Pyattaev, Alexander; Johnsson, Kerstin; Andreev, Sergey; Koucheryavy, Yevgeni / Communication challenges in high-density deployments of wearable wireless devices.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Conference contribution

Loulou, Alaaeddin; Renfors, Markku / Enhanced OFDM for fragmented spectrum use in 5G systems.
In: Transactions on Emerging Telecommunications Technologies, Vol. 26, No. 1, 01.01.2015, p. 31-45.
Research output: Scientific - peer-review › Article

Hasan, Monowar; Hossain, Ekram; Balasubramaniam, Sasitharan; Koucheryavy, Yevgeni / Social behavior in bacterial nanonetworks: Challenges and opportunities.
In: IEEE Network, Vol. 29, No. 1, 7018200, 01.01.2015, p. 26-34.

Galinina, Olga; Turlikov, Andrey; Pyattaev, Alexander; Johnsson, Kerstin; Andreev, Sergey; Koucheryavy, Yevgeni / A Capacity Bound for mmWave-based Channel Access in Ultra-Dense Wearable Deployments. 2015 7th International Congress on Ultra Modern Telecommunications and Control Systems and Workshops (ICUMT). IEEE, 2015. p. 298-304.


Nedic, Slobodan; Josilo, Sladjana; Stanivuk, Vladimir; Narandžić, Milan; Renfors, Markku; Yli-Kaakinen, Juha; Kofidis, Eleftherios; Beikos, Antonis; Zakaria, Rostom / Adaptive equalization and Successive self-Interference Cancellation (SIC) methods : The European Commission 7th Framework Programme (FP7) project ICT-318362-EMPhAtiC deliverable D3.2. ICT-EMPhAtiC, 2015. 91 p.


Ho-Van, Khuong; Sofotasios, Paschalis C.; Que Son, Vo; Thanh Tra, Luu; Hong Lien, Pham / Analysis of Cognitive Cooperative Networks with Best Relay Selection and Diversity Reception. 2015 International Conference on Advanced Technologies for Communications (ATC). IEEE, 2015. p. 651-656.


Fikadu, Mulugeta K.; Sofotasios, Paschalis C.; Valkama, Mikko; Cui, Qimei; Muhaidat, Sami; Karagiannidis, George K. / Analytic Symbol Error Rate Evaluation of M−PSK Based Regenerative Cooperative Networks Over Generalized Fading Channels. 

Andreev, Sergey; Galinina, Olga; Pyattaev, Alexander; Johnsson, Kerstin; Koucheryavy, Yevgeni / Analyzing Assisted Offloading of Cellular User Sessions onto D2D Links in Unlicensed Bands. 

Begishev, Vyacheslav; Kovalchukov, Roman; Samuylov, Andrey; Ometov, Aleksandr; Molotchanov, Dmitri; Gaidamaka, Yuliya; Andreev, Sergey / An Analytical Approach to SINR Estimation in Adjacent Rectangular Cells. 

Li, Guyue; Hu, Aiqun; Zou, Yaning; Peng, Linning; Valkama, Mikko / A Novel Transform for Secret Key Generation in Time-varying TDD Channel under Hardware Fingerprint Deviation. 

Ukkonen, Leena; Rahmat-Samii, Yahya / Antennas in Body-Centric Sensor Network Devices. 

Gregoratti, David; Mestre, Xavier; Renfors, Markku; Yli-Kaakinen, Juha; Passas, Nikos; Tsolias, Dimitris; Ringset, Vidar; Nedic, Slobodan; Tomic, Stefan; Marijanovic, Ljiljana / Application of the nonuniform filterbank for spectrum sensing in a cognitive radio: The European Commission 7th Framework Programme (FP7) project ICT-318362-EMPhAsC deliverable D8.1. 

Bagheri, Alireza; Sofotasios, Paschalis C.; Tsiftsis, Theodoros A.; Shahzadi, Ali; Freear, Steven; Valkama, Mikko / Area under ROC Curve of Energy Detection over Generalized Fading Channels. 

Benedetto, F.; Giunta, G.; Renfors, M. / A Spectrum Sensing Algorithm for Constant Modulus Primary Users Signals. 


Bagheri, Alireza; Sofotasios, Paschalis C.; Tsiftsis, Theodoros A.; Shahzadi, Ali; Valkama, Mikko / AUC study of energy detection based spectrum sensing over η-μ and α-μ fading channels. 
Brumley, Billy Bob / **Cache storage attacks.**
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics). Springer Verlag, 2015. p. 22-34 (Lecture Notes in Computer Science; Vol. 9048).
Research output: Scientific - peer-review › Conference contribution

Kiayani, Adnan Qamar; Anttila, Lauri; Zou, Yaning; Valkama, Mikko / **Channel Estimation and Equalization in Multi-User Uplink OFDMA and SC-FDMA Systems Under Transmitter RF Impairments.**
Research output: Scientific - peer-review › Article

L. Cotton, Simon; Ki Yoo, Seong; Sofotasios, Paschalis / **Characterizing Fading in Wearable Communications Channels using Composite Models.**
Research output: Scientific - peer-review › Conference contribution

Syrjälä, Ville; Valkama, Mikko / **Coexistence of LTE and WLAN in Unlicensed Bands: Full-Duplex Spectrum Sensing.**
Research output: Scientific - peer-review › Conference contribution

Krohns-Välimäki, Heidi; Haapanen, Jussi; Verho, Pekka; Sää, Joonas; Lempääläinen, Jukka / **Combined Electricity and Mobile Network Situation Awareness System for Disturbance Management.**
2015 IEEE Innovative Smart Grid Technologies - Asia (ISGT Asia). Institute of Electrical and Electronics Engineers IEEE, 2015.
Research output: Scientific - peer-review › Conference contribution

Alexandru, Rusu-Casandra; Lohan, Elena-Simona / **Comparison of Detection Techniques for Multipath Propagation of Pseudolite Signals Used in Dense Industrial Environments.**
Research output: Scientific - peer-review › Article

Razavi, Alireza; Valkama, Mikko; Cabric, Danijela / **Compressive Identification of Active OFDM Subcarriers in Presence of Timing Offset.**
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Razavi, Alireza S.; Valkama, Mikko; Cabric, Danijela / **Covariance-based OFDM spectrum sensing with sub-Nyquist samples.**
Research output: Scientific - peer-review › Article

Wirdatmadja, Stefanus; Moltchanov, Dmitri; Bolcos, Paul; Väliaho, Jari; Kreutzer, Joose; Kallio, Pasi; Koucheryavy, Yevgeni / **Data Rate Performance of Droplet Microfluidic Communication System.**
Research output: Scientific - peer-review › Conference contribution

Kannisto, Joona; Heikkinen, Seppo; Slavov, Kristian; Harju, Jarmo / **Delayed key exchange for constrained smart devices.**
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics). Springer Verlag, 2015. p. 12-26 (Lecture Notes in Computer Science; Vol. 8629).
Airoldi, Roberto; Campi, Fabio; Cucchi, Manuele; Revanna, Deepak; Anjum, Omer; Nurmi, Jari / Design and Implementation of a Power-aware FFT Core for OFDM-based DSA-enabled Cognitive Radios.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Conference contribution

Singh, Simran; Valkama, Mikko; Epp, Michael; Anttila, Lauri; Schlecker, Wolfgang; Ingber, Elmar / Digital correction of frequency response mismatches in 2-channel time-interleaved ADCs using adaptive I/Q signal processing.
Research output: Scientific - peer-review › Article

Kiayani, A.; Abdelaziz, M.; Anttila, L.; Lehtinen, V.; Valkama, M. / Digital Mitigation of Transmitter-Induced Receiver Desensitization in Carrier Aggregation FDD Transceivers.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Talvitie, Jukka; Renfors, Markku; Lohan, Elena-Simona / Distance-based Interpolation and Extrapolation Methods for RSS-based Localization with Indoor Wireless Signals.
Research output: Scientific - peer-review › Article

Dikmese, Sener; Abdelaziz, Mahmoud; Anttila, Lauri; Renfors, Markku; Valkama, Mikko / Dynamic and Flexible Spectrum Use with Frequency Localized Waveforms under Transmitter Nonidealities.
Research output: Scientific - peer-review › Conference contribution

Dikmese, Sener; Sofotasios, Paschalis C.; Ihalainen, Tero; Renfors, Markku; Valkama, Mikko / Efficient Energy Detection Methods for Spectrum Sensing under Non-Flat Spectral Characteristics.
Research output: Scientific - peer-review › Article

Renfors, Markku; Yli-Kaakinen, Juha; Levanen, Toni; Valkama, Mikko; Ihalainen, Tero; Vihriälä, Jaakko / Efficient Fast-Convolution Implementation of Filtered CP-OFDM Waveform Processing for 5G.
Research output: Scientific - peer-review › Conference contribution

Ukkonen, Leena; Sydänheimo, Lauri; Rahmat-Samii, Yahya / Embroidered Textile Antennas for Wireless Body-Centric Communication and Sensing.
Research output: Scientific - peer-review › Conference contribution


Research output: Scientific - peer-review › Conference contribution

Petrov, Vitaly; Moltchanov, Dmitri; Koucheryavy, Yevgeni / *Interference and SINR in Dense Terahertz Networks.*
Research output: Scientific - peer-review › Conference contribution

Balandin, Sergey (Editor); Andreev, Sergey (Editor); Koucheryavy, Yevgeni (Editor) / *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.*
Research output: Scientific - peer-review › Anthology

Balandina, Ekaterina; Balandin, Sergey; Koucheryavy, Yevgeni; Mouromtsev, Dmitry / *IoT Use Cases in Healthcare and Tourism.*
Research output: Scientific - peer-review › Conference contribution

Volkova, Anna; Moltchanov, Dmitri; Petrov, Vitaly; Koucheryavy, Yevgeni / *Joint Cooling and Information Transmission for Board-to-Board Communications.*
Research output: Scientific - peer-review › Conference contribution

Razavi, Alireza; Valkama, Mikko; Lohan, Elena-Simona / *K-Means Fingerprint Clustering for Low-Complexity Floor Estimation in Indoor Mobile Localization.*
Research output: Scientific - peer-review › Conference contribution

Björninen, Toni; Yang, Fan / *Low-profile head-worn antenna with a monopole-like radiation pattern.*
Research output: Scientific - peer-review › Article

Naumov, Valeriy; Samouylov, Konstantin; Yarkina, Natalia; Sopin, Eduard; Andreev, Sergey; Samuylov, Andrey / *LTE Performance Analysis Using Queuing Systems with Finite Resources and Random Requirements.*
Research output: Scientific - peer-review › Conference contribution

Mavrokefalidis, Christos; Kofidis, Eleftherios; Rontogiannis, Athanasios; Beikos, Antonios; Renfors, Markku; Yli-Kaakinen, Juha; Louveaux, Jerome / *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

Li, Kaipeng; Ghazi, Amanullah; Boutellier, Jani; Abdelaziz, Mahmoud; Anttila, Lauri; Junntti, Markku; Valkama, Mikko; Cavallaro, Joseph R. / *Mobile GPU Accelerated Digital Predistortion on a Software-defined Mobile Transmitter.*
Research output: Scientific - peer-review › Conference contribution
Yli-Kaakinen, Juha; Renfors, Markku / Optimized burst truncation in fast-convolution filter bank based waveform
generation.
p. 71-75.
Research output: Scientific - peer-review › Conference contribution

Fikadu, Mulugeta K.; Sofotasios, Paschalis C.; Valkama, Mikko; Muhaidat, Sami; Cui, Qimei; Karagiannidis, George K. / Outage Probability Analysis of Dual-hop Full-Duplex Decode-and-Forward Relaying over Generalized Multipath Fading Conditions.
Research output: Scientific - peer-review › Conference contribution

Lin, Shuoxin; Wang, Lai-Huei; Vosoughi, Aida; Cavallaro, Joseph R.; Juntti, Markku; Boutellier, Jani; Silven, Olli; Valkama, Mikko; Bhattacharyya, Shuva S. / Parameterized Sets of Dataflow Modes And Their Application to Implementation of Cognitive Radio Systems.
Research output: Scientific - peer-review › Article

Gudkova, Irina; Samouylov, Konstantin; Ostrikova, Darya; Mokrov, Evgeniy; Ponomarenko-Timofeev, Aleksei; Andreev, Sergey; Koucheryavy, Yevgeni / Service Failure and Interruption Probability Analysis for Licensed Shared Access Regulatory Framework.
Research output: Scientific - peer-review › Conference contribution

Research output: Monograph › Doctoral Thesis

Rajmic, Pavel; Hosek, Jiri; Fusek, Michal; Andreev, Sergey; Stecik, Julius / Simplified Probabilistic Modelling and Analysis of Enhanced Distributed Coordination Access in IEEE 802.11.
Research output: Scientific - peer-review › Article

Pierobon, M.; Akyildiz, I.F. / A statistical-physical model of interference in diffusion-based molecular nanonetworks.
Research output: Scientific - peer-review › Article

Galinina, Olga; Andreev, Sergey; Gerasimenko, Mikhail; Koucheryavy, Yevgeni; Himayat, Nageen; Yeh, Shu-Ping; Talwar, Shilpa / Capturing Spatial Randomness of Heterogeneous Cellular/WLAN Deployments With Dynamic Traffic.
Research output: Scientific - peer-review › Article

Yunas, Syed Fahad; Valkama, Mikko; Niemelä, Jarno / Cell planning for outdoor distributed antenna systems in dense urban areas.
Research output: Scientific - peer-review › Conference contribution

Andreev, Sergey; Pyattaev, Alexander; Johnsson, Kerstin; Galinina, Olga; Koucheryavy, Yevgeni / Cellular traffic offloading onto network-assisted device-to-device connections.
Research output: Scientific - peer-review › Article

Raeesi, Orod; Zou, Yaning; Tölli, Antti; Valkama, Mikko / Closed-form Analysis of Channel Non-Reciprocity Due to Transceiver and Antenna Coupling Mismatches in Multi-User Massive MIMO Network.
GLOBECOM 2014, IEEE Global Communications Conference, 8-12 December 2014, Austin, TX, USA. Institute of Electrical and Electronics Engineers IEEE, 2014. p. 418-424.
Research output: Scientific - peer-review › Conference contribution

Vihervaara, Juha; Loula, Pekka / Delay-based Congestion Control Mechanism for Video Services: Mechanism including Backward Loading and Real-time Modes.
Research output: Scientific - peer-review › Conference contribution

Andreev, Sergey / Delivering uniform connectivity and service experience to converged 5G wireless networks.
Research output: Scientific - peer-review › Conference contribution

Levanen, Toni; Pirskanen, Juho; Valkama, Mikko / Dense Small-Cell Networks: Rethinking the Radio Interface Beyond LTE-Advanced.
Research output: Scientific - peer-review › Conference contribution

Yunas, Syed Fahad; Asp, Ari; Niemelä, Jarno; Valkama, Mikko / Deployment strategies and performance analysis of Macrocell and Femtocell networks in suburban environment with modern buildings.
Research output: Scientific - peer-review › Conference contribution

Allen, Markus; Marttila, Jaakko; Valkama, Mikko; Grimm, Michael; Thomä, Reiner / Digital post-processing based wideband receiver linearization for enhanced spectrum sensing and access.
Kiayani, Adnan; Anttila, Lauri; Valkama, Mikko / Digital Suppression of Power Amplifier Spurious Emissions at Receiver Band in FDD Transceivers. 
Research output: Scientific - peer-review › Article

Han, C.; Akyildiz, I.F. / Distance-aware multi-carrier (DAMC) modulation in Terahertz Band communication. 
Research output: Scientific - peer-review › Conference contribution

Kiayani, Adnan; Abdelaziz, Mahmoud; Anttila, Lauri; Lehtinen, Vesa; Valkama, Mikko / DSP-Based Suppression of Spurious Emissions At RX Band in Carrier Aggregation FDD Transceivers. 
Research output: Scientific - peer-review › Conference contribution

Akyildiz, I.F. / Editorial. 
Research output: Scientific - peer-review › Article

Akyildiz, I.F. / Editorial. 
Research output: Scientific - peer-review › Article

Akyildiz, I.F.; Rudin, H. / Editorial. 
Research output: Scientific - peer-review › Article

Thombre, Sarang; Tchamov, Nikolay N.; Lohan, Simona; Valkama, Mikko; Nurmi, Jari / Effects of Radio Front-end PLL Phase Noise on GNSS Baseband Correlation. 
Research output: Scientific - peer-review › Article

Zou, Yaning; Raeesi, Orod; Valkama, Mikko / Efficient Estimation and Compensation of Transceiver Non-Reciprocity in Precoded TDD Multi-User MIMO-OFDM Systems. 
Research output: Scientific - peer-review › Conference contribution

Luo, Jian; Kortke, Andreas; Keusgen, Wilhelm; Valkama, Mikko / Efficient Estimation and Pilot-Free Online Re-Calibration of I/Q Imbalance in Broadband Direct-Conversion Transmitters. 
Research output: Scientific - peer-review › Article

Bicen, A.O.; Akyildiz, I.F. / End-to-end propagation noise and memory analysis for molecular communication over microfluidic channels. 
Research output: Scientific - peer-review › Article

Gökceoğlu, Ahmet; Dikmese, Sener; Valkama, Mikko; Renfors, Markku / Energy Detection under IQ Imbalance with Single- and Multi-Channel Direct-Conversion Receiver: Analysis and Mitigation. 
Wang, P.; Akyildiz, I.F. / Improving network connectivity in the presence of heavy-tailed interference.
Research output: Scientific - peer-review › Article

Andreev, Sergey; Gerasimenko, Mikhail; Galinina, Olga; Koucheryavy, Yevgeni; Himayat, Nageen; Yeh, Shu-Ping; Talwar, Shilpa / Intelligent access network selection in converged multi-radio heterogeneous networks.
Research output: Scientific - peer-review › Article

Balandin, Sergey (Editor); Andreev, Sergey (Editor); Koucheryavy, Yevgeni (Editor) / Internet of Things, Smart Spaces, and Next Generation Networks and Systems. 14th International Conference, NEW2AN 2014 and 7th Conference, ruSMART 2014, St. Petersburg, Russia, August 27-29, 2014. Proceedings.
Research output: Scientific - peer-review › Anthology

Grimm, Michael; Allen, Markus; Marttila, Jaakko; Valkama, Mikko; Thomä, Reiner / Joint Mitigation of Nonlinear RF and Baseband Distortions in Wideband Direct-Conversion Receivers.
Research output: Scientific - peer-review › Article

Eris, C.; Saimler, M.; Gungor, V.C.; Fadel, E.; Akyildiz, I.F. / Lifetime analysis of wireless sensor nodes in different smart grid environments.
Research output: Scientific - peer-review › Article

Moldovan, A.; Ruder, M.A.; Akyildiz, I.F.; Gerstacker, W.H. / LOS and NLOS channel modeling for terahertz wireless communication with scattered rays.
Research output: Scientific - peer-review › Conference contribution

Abdelaziz, Mahmoud; Anttila, Lauri; Cavallaro, Joseph R.; Bhattacharyya, Shuvra S.; Mohammadi, Abbas; Ghannouchi, Fadhel; Juntti, Markku; Valkama, Mikko / Low-complexity digital predistortion for reducing power amplifier spurious emissions in spectrally-agile flexible radio.
Research output: Scientific - peer-review › Conference contribution

Levanen, Toni; Pirskanen, Juho; Koskela, Timo; Talvitie, Jukka; Valkama, Mikko / Low latency radio interface for 5G flexible TDD local area communications.
Research output: Scientific - peer-review › Conference contribution

Ghazi, Amanullah; Boutellier, Jani; Abdelaziz, Mahmoud; Lu, Xiaojia; Anttila, Lauri; Cavallaro, Joseph R.; Bhatacharyya, Shuvra S.; Valkama, Mikko; Juntti, Markku / Low power implementation of digital predistortion filter on a heterogeneous application specific multiprocessor.
Research output: Scientific - peer-review › Conference contribution

Akyildiz, I.F.; Gutierrez-Estevez, D.M.; Balakrishnan, R.; Chavarria-Reyes, E. / LTE-Advanced and the evolution to Beyond 4G (B4G) systems.
Research output: Scientific - peer-review › Article
Dikmese, Sener; Sofotasios, Paschalis C.; Renfors, Markku; Valkama, Mikko / Maximum-minimum energy based spectrum sensing under frequency selectivity for Cognitive Radios.
Research output: Scientific - peer-review › Conference contribution

Saffer, Zsolt; Andreev, Sergey; Koucheryavy, Yevgeni / Periodically gated vacation model and its application to IEEE 802.16 network.
Research output: Scientific - peer-review › Article

Chaudhari, Sachin; Kosunen, Marko; Mäkinen, Semu; Cardenas-Gonzales, Ana; Koivunen, Visa; Rynänen, Jussi; Laatta, Markus; Valkama, Mikko / Measurement campaign for collaborative sensing using cyclostationary based mobile sensors.
Research output: Scientific - peer-review › Conference contribution

Anttila, Lauri; Korpi, Dani; Antonio-Rodriguez, Emilio; Wichman, Risto; Valkama, Mikko / Modeling and Efficient Cancellation of Nonlinear Self-Interference in MIMO Full-Duplex Transceivers.
GLOBECOM 2014, IEEE Global Communications Conference, 8-12 December 2014, Austin, TX, USA. Institute of Electrical and Electronics Engineers IEEE, 2014. p. 862-868.
Research output: Scientific - peer-review › Conference contribution

Ahmadian, Amir A.; Galinina, Olga; Andreev, Sergey; Koucheryavy, Yevgeni / Modeling contention-based M2M transmissions over 3GPP LTE cellular networks.
2014 IEEE International Conference on Communications Workshops (ICC), 10-14 June 2014, Sydney, NSW. Institute of Electrical and Electronics Engineers IEEE, 2014. p. 441-447.
Research output: Scientific - peer-review › Conference contribution

Borodakiy, Vladimir Y.; Samouylov, Konstantin E.; Gudkova, Irina A.; Ostrikova, Darya Y.; Ponomarenko-Timofeev, Aleksei A.; Turtlikov, Andrey M.; Andreev, Sergey D. / Modeling Unreliable LSA Operation in 3GPP LTE Cellular Networks.
Research output: Scientific - peer-review › Conference contribution

Chahibi, Y.; Akyildiz, I.F. / Molecular communication noise and capacity analysis for particulate drug delivery systems.
Research output: Scientific - peer-review › Article

Gokceoglu, Ahmet; Zou, Yaning; Valkama, Mikko; Sofotasios, Paschalis C. / Multi-channel energy detection under phase noise: analysis and mitigation.
Research output: Scientific - peer-review › Article

Himayat, Nageen; Yeh, Shu-ping; Panah, Ali Y.; Talwar, Shilpa; Gerasimenko, Mikhail; Andreev, Sergey; Koucheryavy, Yevgeni / Multi-radio heterogeneous networks: Architectures and performance.
2014 International Conference on Computing, Networking and Communications (ICNC), 3-6 February 2014, Honolulu, HI, USA. Institute of Electrical and Electronics Engineers IEEE, 2014. p. 252-258.
Research output: Scientific - peer-review › Conference contribution

Lu, Xiaojia; Tölli, Antti; Anttila, Lauri; Juntti, Markku; Valkama, Mikko / Multiuser frequency allocation with wideband power amplifier models.
Research output: Scientific - peer-review › Conference contribution
Research output: Scientific - peer-review › Article

Pyattaev, Alexander; Johnsson, Kerstin; Surak, Adam; Florea, Roman; Andreev, Sergey; Koucheryavy, Yevgeni / Network-Assisted D2D Communications: Implementing a Technology Prototype for Cellular Traffic Offloading.
Research output: Scientific - peer-review › Conference contribution

Pyattaev, Alexander; Galinina, Olga; Johnsson, Kerstin; Surak, Adam; Florea, Roman; Andreev, Sergey; Koucheryavy, Yevgeni / Network-Assisted D2D Over WiFi Direct.
Research output: Scientific - peer-review › Chapter

Levanen, Toni; Talvitie, Jukka; Pirskanen, Juho; Valkama, Mikko / New Spectrally and Energy Efficient Flexible TDD Based Air Interface for 5G Small Cells.
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Conference contribution

Meng, L.-S.; Yeh, P.-C.; Akyildiz, I.F. / On receiver design for diffusion-based molecular communication.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Conference contribution

Moltchanov, Dmitri; Gerasimenko, Mikhail; Wang, Qiao; Andreev, Sergey; Koucheryavy, Yevgeni / On the Optimal Assisted Rate Allocation in N-Tier Multi-RAT Heterogeneous Networks.
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Conference contribution

Han, Jiang; Cui, Qimei; Yang, Chengcheng; Valkama, Mikko; Tao, Xiaofeng / Optimized Power Allocation and Spectrum Sharing in Device to Device underlaying Cellular Systems.
Research output: Scientific - peer-review › Conference contribution


Raeesi, Orod; Pirskanen, Juho; Hazmi, Ali; Levanen, Toni; Valkama, Mikko / Performance evaluation of IEEE 802.11ah and its restricted access window mechanism. 2014 IEEE International Conference on Communications Workshops (ICC), 10-14 June 2014, Sydney, NSW. Institute of Electrical and Electronics Engineers IEEE, 2014. p. 460-466. Research output: Scientific - peer-review › Conference contribution


Samara, Lutfi; Syrjälä, Ville; Hamila, Ridha; Valkama, Mikko / Phase noise mitigation in OFDMA uplink. 2014 6th International symposium on communications, control and signal processing (ISCCSP), 21-23 May 2014, Athens. Institute of Electrical and Electronics Engineers IEEE, 2014. p. 344-347. Research output: Scientific - peer-review › Conference contribution

Hosek, Jiri; Vajsar, Pavel; Nagy, Lubos; Ries, Michal; Galinina, Olga; Andreev, Sergey; Koucheryavy, Yevgeni; Sulc, Zdenek; Hais, Petr; Penizek, Radek / Predicting user QoE satisfaction in current mobile networks. 2014 IEEE International Conference on Communications (ICC), 10-14 June 2014, Sydney, NSW. Institute of Electrical and Electronics Engineers IEEE, 2014. p. 1088-1093. Research output: Scientific - peer-review › Conference contribution


Abdelaziz, Mahmoud; Anttila, Lauri; Mohammadi, Abbas; Ghannouchi, Fadhel; Valkama, Mikko / Reduced-complexity power amplifier linearization for carrier aggregation mobile transceivers. 2014 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 4-9 May 2014, Florence, Italy. Institute of Electrical and Electronics Engineers IEEE, 2014. p. 3908-3912. Research output: Scientific - peer-review › Conference contribution
Korpi, Dani; Anttila, Lauri; Valkama, Mikko / Reference Receiver Based Digital Self-Interference Cancellation in MIMO Full-Duplex Transceivers.
GLOBECOM 2014, IEEE Global Communications Conference, 8-12 December 2014, Austin, TX, USA. Institute of Electrical and Electronics Engineers IEEE, 2014. p. 1099-1105.
Research output: Scientific - peer-review › Conference contribution

Razavi, Alireza; Valkama, Mikko; Cabric, Danijela / Signature-assisted rendezvous in OFDM-based cognitive networks using sub-Nyquist samples.
Research output: Scientific - peer-review › Conference contribution

Yunas, Syed Fahad; Valkama, Mikko; Niemelä, Jarno / Spectral Efficiency of Dynamic DAS with Extreme Down-tilt Antenna Configuration.
Research output: Scientific - peer-review › Conference contribution

Yunas, Syed Fahad; Niemelä, Jarno; Valkama, Mikko; Isotalo, Tero / Techno-economical analysis and comparison of legacy and ultra-dense small cell networks.
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Akyildiz, I.; Jornet, J.; Han, C. / TeraNets: Ultra-broadband communication networks in the terahertz band.
Research output: Scientific - peer-review › Article

Sofotasios, Paschalis; Fikadu, Mulugeta; Ho-Van, Khuong; Valkama, Mikko; Karagiannidis, George K. / The Area Under a Receiver Operating Characteristic Curve Over Enriched Multipath Fading Conditions.
GLOBECOM 2014, IEEE Global Communications Conference, 8-12 December 2014, Austin, TX, USA. Institute of Electrical and Electronics Engineers IEEE, 2014. p. 4327-4332.
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Kisseleff, S.; Akyildiz, I.F.; Gerstacker, W. / Transmitter-side channel estimation in magnetic induction based communication systems.
Research output: Scientific - peer-review › Conference contribution

Naumov, V.; Samoylov, K.; Sopin, E.; Andreev, S. / Two Approaches to Analyzing Dynamic Cellular Networks with Limited Resources.
Research output: Scientific - peer-review › Conference contribution

Wang, P.; Akyildiz, I.F. / Asymptotic queuing analysis for dynamic spectrum access networks in the presence of heavy tails. 
Research output: Scientific - peer-review › Article

Akyildiz, I.; Ulema, M. / Blackseacom 2013, communications and networking in the land of "Golden Fleece". 
Research output: Scientific - peer-review › Article

Anttila, Lauri; Korpi, Dani; Syrjälä, Ville; Valkama, Mikko / Cancellation of power amplifier induced nonlinear self-interference in full-duplex transceivers. 
Research output: Scientific - peer-review › Conference contribution

Pierobon, M.; Akyildiz, I.F. / Capacity of a diffusion-based molecular communication system with channel memory and molecular noise. 
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Vizziello, A.; Akyildiz, I.F.; Agusti, R.; Favalli, L.; Savazzi, P. / Cognitive radio resource management exploiting heterogeneous primary users and a radio environment map database. 
Research output: Scientific - peer-review › Article

Akyildiz, I.F. / Editorial. 
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Conference contribution

Sun, Z.; Akyildiz, I.F. / Optimal deployment for magnetic induction-based wireless networks in challenged environments.
Research output: Scientific - peer-review › Article

Bicen, A.O.; Akyildiz, I.F. / Molecular transport in microfluidic channels for flow-induced molecular communication.
Research output: Scientific - peer-review › Conference contribution

Chavarria-Reyes, E.; Akyildiz, I.F. / Radio access network energy minimization in multi-layer heterogeneous wireless systems.
Research output: Scientific - peer-review › Conference contribution

Lo, B.F.; Akyildiz, I.F. / Reinforcement learning for cooperative sensing gain in cognitive radio ad hoc networks.
Research output: Scientific - peer-review › Article

Bicen, A.O.; Akyildiz, I.F. / System-theoretic analysis and least-squares design of microfluidic channels for flow-induced molecular communication.
Research output: Scientific - peer-review › Article
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Conference contribution

Meng, L.-S.; Yeh, P.-C.; Chen, K.-C.; Akyildiz, I.F. / A diffusion-based binary digital communication system.
Research output: Scientific - peer-review › Conference contribution

Cid-Fuentes, R.G.; Jornet, J.M.; Akyildiz, I.F.; Alarcon, E. / A receiver architecture for pulse-based electromagnetic nanonetworks in the Terahertz Band.
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Cacciapuoti, A.S.; Akyildiz, I.F.; Paura, L. / Correlation-aware user selection for cooperative spectrum sensing in cognitive radio ad hoc networks.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Akyildiz, I.F. / Editorial.
Research output: Scientific - peer-review › Article

Akyildiz, I.F. / Editorial.
Research output: Scientific - peer-review › Article

Akyildiz, I.F.; Rudin, H. / Editorial.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Pierobon, M.; Akyildiz, I.F. / Intersymbol and co-channel interference in diffusion-based molecular communication.
Research output: Scientific - peer-review › Conference contribution
Jornet, J.M.; Akyildiz, I.F. / Joint energy harvesting and communication analysis for perpetual wireless nanosensor networks in the terahertz band.
Research output: Scientific - peer-review › Article

Meng, L.-S.; Yeh, P.-C.; Chen, K.-C.; Akyildiz, I.F. / MIMO communications based on molecular diffusion.
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Lo, B.F.; Akyildiz, I.F. / Multagent jamming-resilient control channel game for cognitive radio ad hoc networks.
Research output: Scientific - peer-review › Conference contribution

Wang, P.; Akyildiz, I.F. / Network stability of cognitive radio networks in the presence of heavy tailed traffic.
Research output: Scientific - peer-review › Conference contribution

Sun, Z.; Akyildiz, I.F. / On capacity of magnetic induction-based wireless underground sensor networks.
Research output: Scientific - peer-review › Conference contribution

Wang, P.; Akyildiz, I.F. / On the origins of heavy-tailed delay in dynamic spectrum access networks.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Article

Meng, L.-S.; Yeh, P.-C.; Chen, K.-C.; Akyildiz, I.F. / Optimal detection for diffusion-based communications in the presence of ISI.
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Article

Akkaş, M.A.; Akyildiz, I.F.; Sokullu, R. / Terahertz channel modeling of underground sensor networks in oil reservoirs.
Research output: Scientific - peer-review » Article

Jornet, J.M.; Akyildiz, I.F. / The internet of multimedia nano-things in the terahertz band.
Research output: Scientific - peer-review » Conference contribution

Sun, Z.; Akyildiz, I.F. / A mode-based approach for channel modeling in underground tunnels under the impact of vehicular traffic flow.
Research output: Scientific - peer-review » Article

Research output: Scientific - peer-review » Article

Research output: Scientific - peer-review » Article

Research output: Scientific - peer-review » Article

Research output: Scientific - peer-review » Conference contribution

Research output: Scientific - peer-review » Article

Wang, P.; Akyildiz, I.F. / Can dynamic spectrum access induce heavy tailed delay?
Research output: Scientific - peer-review » Conference contribution

Sun, Z.; Akyildiz, I.F.; Hancke, G.P. / Capacity and outage analysis of MIMO and cooperative communication systems in underground tunnels.
Research output: Scientific - peer-review » Article

Jornet, J.M.; Akyildiz, I.F. / Channel modeling and capacity analysis for electromagnetic wireless nanonetworks in the terahertz band.
Research output: Scientific - peer-review » Article

Research output: Scientific - peer-review » Conference contribution


