

Risto Wichman

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10133151/publications.pdf>

Version: 2024-02-01

122
papers

5,675
citations

430874

18
h-index

149698

56
g-index

123
all docs

123
docs citations

123
times ranked

3743
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Bandit-Based Power Control in Full-Duplex Cooperative Relay Networks With Strict-Sense Stationary and Non-Stationary Wireless Communication Channels. IEEE Open Journal of the Communications Society, 2022, 3, 366-378. | 6.9 | 5 |
| 2 | Adaptive Irregular Constellations for Full-Duplex Relaying With Residual Self-Interference. IEEE Transactions on Wireless Communications, 2021, 20, 7682-7693. | 9.2 | 0 |
| 3 | LoLa4SOR: Leveraging Successive Transmissions for Low-Latency Buffer-Aided Opportunistic Relay Networks. IEEE Open Journal of the Communications Society, 2021, 2, 1041-1054. | 6.9 | 5 |
| 4 | A Distributed Resource Allocation Scheme for Self-Backhauled Full-Duplex Small Cell Networks. IEEE Transactions on Vehicular Technology, 2021, 70, 1461-1473. | 6.3 | 10 |
| 5 | Cellular Network Planning via Local Regularity Optimization. , 2021, , . | | 1 |
| 6 | Bandit-Based Power Control in Full-Duplex Cooperative Relay Networks. , 2021, , . | | 3 |
| 7 | Data-Oriented View for Convolutional Coding With Adaptive Irregular Constellations. IEEE Communications Letters, 2021, 25, 1771-1775. | 4.1 | 1 |
| 8 | Empirical evaluation of OFDM waveforms for VLC in the presence of LED nonlinearities. , 2021, , . | | 2 |
| 9 | Visible Light Communications: A Novel Indoor Network Planning Approach. , 2021, , . | | 1 |
| 10 | Downlink Coverage and Rate Analysis of Low Earth Orbit Satellite Constellations Using Stochastic Geometry. IEEE Transactions on Communications, 2020, 68, 5120-5134. | 7.8 | 76 |
| 11 | Bandit-Based Relay Selection in Cooperative Networks Over Unknown Stationary Channels. , 2020, , . | | 6 |
| 12 | Power Allocation for ARQ Two-Hop Cooperative Networks for Ultra-Reliable Communication. , 2020, , . | | 1 |
| 13 | Coded Transmission under Non-Cooperative Radar Interference. , 2020, , . | | 0 |
| 14 | Integrating Broadcasting and NOMA in Full-Duplex Buffer-Aided Opportunistic Relay Networks. IEEE Transactions on Vehicular Technology, 2020, 69, 9157-9162. | 6.3 | 21 |
| 15 | Cellular Network Planning under Variable QoS Requirements Using Voronoi Algorithm. , 2020, , . | | 2 |
| 16 | Theoretical and Simulation-based Analysis of Terrestrial Interference to LEO Satellite Uplinks. , 2020, , . | | 11 |
| 17 | Throughput-Maximum Energy-Aware Rate Adaptation in W-NCSs over Quasi-Static Fading Channels. , 2020, , . | | 1 |
| 18 | A Distributed Mode Selection Scheme for Full-Duplex Device-to-Device Communication. IEEE Transactions on Vehicular Technology, 2019, 68, 10267-10271. | 6.3 | 4 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Time-Frequency Localization Measures for Packets of Orthogonally Multiplexed Signals. IEEE Transactions on Communications, 2019, 67, 6374-6385. | 7.8 | 1 |
| 20 | Military Full-Duplex Radio Shield for Protection Against Adversary Receivers. , 2019, , . | | 13 |
| 21 | The Joint Impact of Fading Severity, Irregular Constellation, and Non-Gaussian Noise on Signal Space Diversity-Based Relaying Networks. IEEE Access, 2019, 7, 116162-116171. | 4.2 | 2 |
| 22 | LI Cancellation and Power Allocation for Multipair FD Relay Systems With Massive Antenna Arrays. IEEE Wireless Communications Letters, 2019, 8, 1077-1081. | 5.0 | 2 |
| 23 | MMSE Filter Design for Full-duplex Filter-and-forward MIMO Relays under Limited Dynamic Range. Signal Processing, 2019, 156, 208-219. | 3.7 | 5 |
| 24 | Hybrid NOMA/OMA With Buffer-Aided Relay Selection in Cooperative Networks. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 524-537. | 10.8 | 54 |
| 25 | Generalized Self-Interference Model for Full-Duplex Multicarrier Transceivers. IEEE Transactions on Communications, 2019, 67, 4995-5007. | 7.8 | 10 |
| 26 | Low-Overhead Multi-Antenna-Enabled Random Access for Machine-Type Communications with Low Mobility. , 2019, , . | | 2 |
| 27 | Power Allocation for Multipair Massive MIMO FD Relay Systems with Low Resolution ADCs. , 2019, , . | | 0 |
| 28 | Adaptive Coded Modulation for Stabilization of Wireless Networked Control Systems over Binary Erasure Channels. , 2019, , . | | 2 |
| 29 | Planning and optimization of Cellular Networks Using Load-based Voronoi Algorithm. , 2018, , . | | 2 |
| 30 | Transferring the Full-Duplex Radio Technology from Wireless Networking to Defense and Security. , 2018, , . | | 11 |
| 31 | Tactical Communication Link Under Joint Jamming and Interception by Same-Frequency Simultaneous Transmit and Receive Radio. , 2018, , . | | 16 |
| 32 | A Convolutionally Encoded OSTBC System with SNR-Adaptive Constellations for Low-Latency and Low-Complexity Communications. , 2018, , . | | 0 |
| 33 | Power Adaptation in Buffer-Aided Full-Duplex Relay Networks With Statistical CSI. IEEE Transactions on Vehicular Technology, 2018, 67, 7846-7850. | 6.3 | 18 |
| 34 | Wideband full-duplex MIMO relays with blind adaptive self-interference cancellation. Signal Processing, 2017, 130, 74-85. | 3.7 | 15 |
| 35 | Constrained Phase Noise Estimation in OFDM Using Scattered Pilots Without Decision Feedback. IEEE Transactions on Signal Processing, 2017, 65, 2348-2362. | 5.3 | 17 |
| 36 | Location-aware 5G communications and Doppler compensation for high-speed train networks. , 2017, , . | | 13 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Predistortion for power amplifier linearization in full-duplex transceivers without extra RF chain. , 2017, , . | | 7 |
| 38 | Compensation of ADC-induced distortion in broadband full-duplex transceivers. , 2017, , . | | 5 |
| 39 | Robust filter design for full-duplex relay links under limited dynamic range. , 2017, , . | | 1 |
| 40 | SINR Analysis of Non-Regenerative Multihop Links with Asymptotically Large Hop Count. , 2017, , . | | 0 |
| 41 | Relay Selection for Buffer-Aided Non-Orthogonal Multiple Access Networks. , 2017, , . | | 14 |
| 42 | Selective multi-hop relaying for ultra-reliable communication in a factory environment. , 2016, , . | | 14 |
| 43 | Interference cancellation architecture for full-duplex system with GFDM signaling. , 2016, , . | | 8 |
| 44 | Enabling low-resolution ADC with high-order modulations for millimeter-wave systems. , 2016, , . | | 5 |
| 45 | Power allocation for balancing the effects of channel estimation error and pilot overhead in full-duplex decode-and-forward relaying. , 2016, , . | | 4 |
| 46 | Performance of Quantized Random Beamforming in Delay-Tolerant Machine-Type Communication. IEEE Transactions on Wireless Communications, 2016, 15, 5664-5680. | 9.2 | 15 |
| 47 | Geodesical Refinement of MIMO Limited Feedback. IEEE Transactions on Communications, 2016, 64, 1031-1041. | 7.8 | 1 |
| 48 | Optimization of Secondary System Antenna Deployment in Shared Spectrum Access. IEEE Transactions on Vehicular Technology, 2016, 65, 3536-3546. | 6.3 | 2 |
| 49 | Phase Noise Estimation in OFDM: Utilizing Its Associated Spectral Geometry. IEEE Transactions on Signal Processing, 2016, 64, 1999-2012. | 5.3 | 85 |
| 50 | A Multipath Extraction-Based CSI Acquisition Method for FDD Cellular Networks With Massive Antenna Arrays. IEEE Transactions on Wireless Communications, 2016, 15, 2940-2953. | 9.2 | 43 |
| 51 | Optimized In-Band Full-Duplex MIMO Relay Under Single-Stream Transmission. IEEE Transactions on Vehicular Technology, 2016, 65, 155-168. | 6.3 | 34 |
| 52 | Improved User-Specific Channel Estimation Using Geodesical Interpolation at the Transmitter. IEEE Wireless Communications Letters, 2015, 4, 165-168. | 5.0 | 3 |
| 53 | Coordinated optimization of EVD-based channel estimators in multi-cell massive MIMO networks. , 2015, , . | | 0 |
| 54 | Subspace-constrained SINR optimization in MIMO full-duplex relays under limited dynamic range. , 2015, , . | | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Subspace-based phase noise estimation in OFDM receivers. , 2015, , . | | 1 |
| 56 | Recent advances in antenna design and interference cancellation algorithms for in-band full duplex relays. , 2015, 53, 91-101. | | 232 |
| 57 | Full-duplex self-backhauling for small-cell 5G networks. IEEE Wireless Communications, 2015, 22, 83-89. | 9.0 | 70 |
| 58 | On Performance Loss of Some CoMP Techniques Under Channel Power Imbalance and Limited Feedback. IEEE Transactions on Wireless Communications, 2015, 14, 4469-4481. | 9.2 | 7 |
| 59 | Higher Rank Interference Effect on Weak Beamforming or OSTBC Terminals. IEEE Transactions on Wireless Communications, 2015, 14, 4948-4957. | 9.2 | 1 |
| 60 | Adaptive Channel Quantization on TDD Reciprocity Performance of Relative Antenna Calibration. , 2014, , . | | 2 |
| 61 | Iterative Genetic and Greedy-Based Algorithms for Multi-Carrier Multi-User Scheduling in MIMO Systems with Successive Zero Forcing. , 2014, , . | | 0 |
| 62 | A Novel Joint Precoder and Receiver Design with Imperfect CSI for Multi-User MIMO Downlink. , 2014, , . | | 0 |
| 63 | Modeling and efficient cancellation of nonlinear self-interference in MIMO full-duplex transceivers. , 2014, , . | | 51 |
| 64 | SINR optimization in wideband full-duplex MIMO relays under limited dynamic range. , 2014, , . | | 25 |
| 65 | Guest Editorial: In-Band Full-Duplex Wireless Communications and Networks. IEEE Journal on Selected Areas in Communications, 2014, 32, 1633-1636. | 14.0 | 4 |
| 66 | Full-Duplex Transceiver System Calculations: Analysis of ADC and Linearity Challenges. IEEE Transactions on Wireless Communications, 2014, 13, 3821-3836. | 9.2 | 281 |
| 67 | Communication technology and system design (Foreword). Telecommunication Systems, 2014, 56, 323-325. | 2.5 | 0 |
| 68 | In-Band Full-Duplex Wireless: Challenges and Opportunities. IEEE Journal on Selected Areas in Communications, 2014, 32, 1637-1652. | 14.0 | 1,720 |
| 69 | Uplink CFO compensation for FBMC multiple access and OFDMA in a high mobility scenario. Physical Communication, 2014, 11, 56-66. | 2.1 | 5 |
| 70 | Analysis of Channel Non-Reciprocity Due to Transceiver and Antenna Coupling Mismatches in TDD Precoded Multi-User MIMO-OFDM Downlink. , 2014, , . | | 15 |
| 71 | Advanced self-interference cancellation and multiantenna techniques for full-duplex radios. , 2013, , . | | 32 |
| 72 | Adaptive self-interference cancellation in wideband full-duplex decode-and-forward MIMO relays. , 2013, , . | | 19 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Large-system analysis of rate regions in bidirectional full-duplex MIMO link: Suppression versus cancellation. , 2013, , . | | 22 |
| 74 | Impact of Base Station Time Synchronization Mismatch on Almost Blank Subframes. IEEE Communications Letters, 2013, 17, 2092-2095. | 4.1 | 3 |
| 75 | One-Bit CSI Feedback Selection Schemes for Energy-Efficient Multiuser and Multirelay Systems. IEEE Transactions on Wireless Communications, 2013, 12, 1149-1161. | 9.2 | 6 |
| 76 | Optimal field measurement design for radio environment mapping. , 2013, , . | | 17 |
| 77 | Data-aided CFO estimators based on the averaged cyclic autocorrelation. Signal Processing, 2013, 93, 217-229. | 3.7 | 5 |
| 78 | On Number of Almost Blank Subframes in Heterogeneous Cellular Networks. IEEE Transactions on Wireless Communications, 2013, 12, 5061-5073. | 9.2 | 85 |
| 79 | Time domain bi-level downlink power control for cross-tier interference mitigation in HetNet. , 2013, , . | | 3 |
| 80 | Asymptotic analysis of full-duplex bidirectional MIMO link with transmitter noise. , 2013, , . | | 30 |
| 81 | Autocorrelation-based adaptation rule for feedback equalization in wideband full-duplex amplify-and-forward MIMO relays. , 2013, , . | | 10 |
| 82 | MIMO adaptive codebook for cross-polarized antenna arrays. , 2013, , . | | 3 |
| 83 | A practical method for combining multivariate data in radio environment mapping. , 2013, , . | | 9 |
| 84 | On achievable rate regions at large-system limit in full-duplex wireless local access. , 2013, , . | | 10 |
| 85 | Effect of oscillator phase noise and processing delay in full-duplex OFDM repeaters. , 2012, , . | | 19 |
| 86 | Average capacity of Rayleigh-fading OFDM link with wiener phase noise and frequency offset. , 2012, , . | | 2 |
| 87 | Adaptive Piecewise Linear Predistorters for Nonlinear Power Amplifiers With Memory. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 1519-1532. | 5.4 | 25 |
| 88 | Constrained least-squares estimation and compensation of phase noise in OFDM radio link. , 2012, , . | | 0 |
| 89 | Layer arrangement for single-user coordinated multi-point transmission. , 2012, , . | | 1 |
| 90 | Analog and digital self-interference cancellation in full-duplex MIMO-OFDM transceivers with limited resolution in A/D conversion. , 2012, , . | | 84 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | Characterization of OFDM Radio Link Under PLL-Based Oscillator Phase Noise and Multipath Fading Channel. IEEE Transactions on Communications, 2012, 60, 1479-1485. | 7.8 | 23 |
| 92 | Optimal eigenbeamforming for suppressing self-interference in full-duplex MIMO relays. , 2011, , . | | 53 |
| 93 | Accurate characterization and compensation of phase noise in OFDM receiver. , 2011, , . | | 3 |
| 94 | Hybrid Full-Duplex/Half-Duplex Relaying with Transmit Power Adaptation. IEEE Transactions on Wireless Communications, 2011, 10, 3074-3085. | 9.2 | 552 |
| 95 | Mitigation of Loopback Self-Interference in Full-Duplex MIMO Relays. IEEE Transactions on Signal Processing, 2011, 59, 5983-5993. | 5.3 | 1,143 |
| 96 | Low-Complexity Channel Prediction Using Approximated Recursive DCT. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 2520-2530. | 5.4 | 14 |
| 97 | Bit Loading Using Imperfect CSIT for Prediction-Based Resource Allocation in Mobile OFDMA. IEEE Transactions on Vehicular Technology, 2011, 60, 4082-4088. | 6.3 | 7 |
| 98 | Performance Analysis of OFDM with Wiener Phase Noise and Frequency Selective Fading Channel. IEEE Transactions on Communications, 2011, 59, 1321-1331. | 7.8 | 47 |
| 99 | Beamforming Codebooks for Two Transmit Antenna Systems Based on Optimum Grassmannian Packings. IEEE Transactions on Information Theory, 2011, 57, 6591-6602. | 2.4 | 78 |
| 100 | Performance Analysis of Maximum SNR Scheduling with an Infrastructure Relay Link. Wireless Personal Communications, 2011, 56, 277-299. | 2.7 | 1 |
| 101 | Receiver-side nonlinearities mitigation using an extended iterative decision-based technique. Signal Processing, 2011, 91, 2042-2056. | 3.7 | 17 |
| 102 | Inter-cell interference management in OFDMA TDD downlink using sounding/silencing protocol. , 2011, , . | | 0 |
| 103 | Transmit power optimization for multiantenna decode-and-forward relays with loopback self-interference from full-duplex operation. , 2011, , . | | 37 |
| 104 | Exclusion regions via handshaking protocol for inter-cell interference management. , 2011, , . | | 0 |
| 105 | Prediction based resource allocation in OFDMA. , 2011, , . | | 2 |
| 106 | Vision for Beyond 4G broadband radio systems. , 2011, , . | | 46 |
| 107 | Capacity of Generalized UTRA FDD Closed-Loop Transmit Diversity Modes. Wireless Personal Communications, 2010, 54, 467-484. | 2.7 | 14 |
| 108 | Decentralized Limited-Feedback Multiuser MIMO for Temporally Correlated Channels. Journal of Electrical and Computer Engineering, 2010, 2010, 1-9. | 0.9 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Hypoexponential Power Delay Profile and Performance of Multihop OFDM Relay Links. IEEE Transactions on Wireless Communications, 2010, 9, 3878-3888. | 9.2 | 7 |
| 110 | Green cooperative communication using threshold-based relay selection protocols. , 2010, , . | | 19 |
| 111 | Spectral characteristics of a piecewise linear function in modeling power amplifier type nonlinearities. , 2010, , . | | 3 |
| 112 | Optimized gain control for single-frequency relaying with loop interference. IEEE Transactions on Wireless Communications, 2009, 8, 2801-2806. | 9.2 | 173 |
| 113 | Precoder partitioning in closed-loop MIMO systems. IEEE Transactions on Wireless Communications, 2009, 8, 3910-3914. | 9.2 | 10 |
| 114 | Rate Optimization for 2D OFDM Relaying. IEEE Communications Letters, 2007, 11, 586-588. | 4.1 | 2 |
| 115 | BEP analysis of OSTBC-OFDM systems with broadband pa and imperfect memory compensation. IEEE Communications Letters, 2007, 11, 940-942. | 4.1 | 8 |
| 116 | On the Solution of Scatter Density in Geometry-Based Channel Models. IEEE Transactions on Wireless Communications, 2007, 6, 1054-1062. | 9.2 | 7 |
| 117 | Distributed Jacobi eigen-beamforming for closed-loop MIMO systems. IEEE Communications Letters, 2006, 10, 825-827. | 4.1 | 6 |
| 118 | Capacities of Physical Layer Scheduling Strategies on a Shared Link. Wireless Personal Communications, 2006, 39, 115-134. | 2.7 | 7 |
| 119 | The Effect of On-Off Scheduling to the Required Transmit Power in Systems with Fast Power Control. Wireless Personal Communications, 2005, 35, 337-352. | 2.7 | 0 |
| 120 | Transmit Diversity in the WCDMA System. International Journal of Wireless Information Networks, 1999, 6, 171-180. | 2.7 | 7 |
| 121 | Matched median detectors for multiple-access channels. Signal Processing, 1994, 38, 345-357. | 3.7 | 4 |
| 122 | Physical Layer Techniques for 5G Wireless Security. , 0, , 237-274. | | 1 |