Sooyong Choi

List of Publications by Year
in descending order

97 papers	1,212 citations	516561 16 h-index	501076 28 g-index
97 all docs	97 docs citations	97 times ranked	1189 citing authors

#	Article	IF	Citations
1	Joint Mode Selection and Power Allocation Scheme for Power-Efficient Device-to-Device (D2D) Communication. , 2012, , .		137
2	Performance Analysis of Large Intelligent Surfaces (LISs): Asymptotic Data Rate and Channel Hardening Effects. IEEE Transactions on Wireless Communications, 2020, 19, 2052-2065.	6.1	135
3	A New Filter-Bank Multicarrier System With Two Prototype Filters for QAM Symbols Transmission and Reception. IEEE Transactions on Wireless Communications, 2016, 15, 5998-6009.	6.1	82
4	Reliability Analysis of Large Intelligent Surfaces (LISs): Rate Distribution and Outage Probability. IEEE Wireless Communications Letters, 2019, 8, 1662-1666.	3.2	61
5	Deep Autoencoder Based CSI Feedback With Feedback Errors and Feedback Delay in FDD Massive MIMO Systems. IEEE Wireless Communications Letters, 2019, 8, 833-836.	3.2	47
6	A Beamforming Codebook Restriction for Cross-Tier Interference Coordination in Two-Tier Femtocell Networks. IEEE Transactions on Vehicular Technology, 2011, 60, 1651-1663.	3.9	40
7	A new filter-bank multicarrier system for QAM signal transmission and reception. , 2014, , .		38
8	A decision feedback recurrent neural equalizer as an infinite impulse response filter. IEEE Transactions on Signal Processing, 1997, 45, 2851-2858.	3.2	35
9	A New Filter-Bank Multicarrier System: The Linearly Processed FBMC System. IEEE Transactions on Wireless Communications, 2018, 17, 4888-4898.	6.1	32
10	Network massive MIMO for cell-boundary users: From a precoding normalization perspective. , 2012, , .		30
11	Optimal number of users in zero-forcing based multiuser MIMO systems with large number of antennas. Journal of Communications and Networks, 2013, 15, 362-369.	1.8	29
12	Throughput Analysis and Optimization of Sensing-Based Cognitive Radio Systems With Markovian Traffic. IEEE Transactions on Vehicular Technology, 2010, 59, 4163-4169.	3.9	24
13	Simplified Power Allocation Scheme for Cognitive Multi-Node Relay Networks. IEEE Transactions on Wireless Communications, 2012, 11, 2008-2012.	6.1	22
14	Spatial resource utilization to maximize uplink spectral efficiency in full-duplex massive MIMO. , 2015, , .		22
15	Performance of neural equalizers on partial erasure model. IEEE Transactions on Magnetics, 1997, 33, 2788-2790.	1.2	21
16	Performance of MC-CDMA systems in non-independent Rayleigh fading. , 0, , .		21
17	RBF multiuser detector with channel estimation capability in a synchronous MC-CDMA system. IEEE Transactions on Neural Networks, 2001, 12, 1536-1539.	4.8	21
18	Interference Minimization Approach to Precoding Scheme in MIMO-Based Cognitive Radio Networks. IEEE Communications Letters, 2011, 15, 789-791.	2.5	21

#	Article	IF	Citations
19	A Detection Scheme With TMR Estimation Based on Multi-Layer Perceptrons for Bit Patterned Media Recording. IEEE Transactions on Magnetics, 2019, 55, 1-4.	1.2	21
20	Synchronization Sequence Design for FBMC/OQAM Systems. IEEE Transactions on Wireless Communications, 2016, 15, 7199-7211.	6.1	19
21	Eigendecomposition-Based GFDM for Interference-Free Data Transmission and Pilot Insertion for Channel Estimation. IEEE Transactions on Wireless Communications, 2018, 17, 6931-6943.	6.1	19
22	Performance Evaluation of the Reed Solomon and Low Density Parity Check Codes for Blu-ray Disk Channels. Japanese Journal of Applied Physics, 2010, 49, 08KB02.	0.8	14
23	Extended Detection for MIMO Systems with Partial Incremental Redundancy Based Hybrid ARQ. IEEE Transactions on Wireless Communications, 2012, 11, 3714-3722.	6.1	14
24	Cell-to-Cell Interference Compensation Schemes Using Reduced Symbol Pattern of Interfering Cells for MLC NAND Flash Memory. IEEE Transactions on Magnetics, 2013, 49, 2569-2573.	1.2	14
25	Scaling Laws of Optimal Training Lengths for TDD Massive MIMO Systems. IEEE Transactions on Vehicular Technology, 2018, 67, 7128-7142.	3.9	14
26	Time Spread-Windowed OFDM for Spectral Efficiency Improvement. IEEE Wireless Communications Letters, 2018, 7, 696-699.	3.2	14
27	RSRP-Based Doppler Shift Estimator Using Machine Learning in High-Speed Train Systems. IEEE Transactions on Vehicular Technology, 2021, 70, 371-380.	3.9	14
28	Blind Equalization Method Based on Sparse Bayesian Learning. IEEE Signal Processing Letters, 2009, 16, 315-318.	2.1	13
29	Antenna Ratio for Sum-Rate Maximization in Full-Duplex Large-Array Base Station With Half-Duplex Multiantenna Users. IEEE Transactions on Vehicular Technology, 2016, 65, 10168-10173.	3.9	13
30	BER computation of an MC-CDMA system with carrier frequency offset. , 1999, , .		12
31	QR decomposition aided belief propagation detector for MIMO systems. Electronics Letters, 2015, 51, 873-874.	0.5	12
32	A decision feedback recurrent neural equalizer for digital communication. IEEE Transactions on Magnetics, 1997, 33, 2767-2769.	1.2	11
33	Asymptotic Distribution of System Capacity in Multiuser MIMO Systems with Large Number of Antennas. , 2013, , .		11
34	Antenna ratio for sum-rate maximization in MU-MIMO with full-duplex large array BS. , 2015, , .		11
35	Performance of Symbol-Level Combining and Bit-Level Combining in MIMO Multiple ARQ Systems. IEEE Transactions on Communications, 2016, 64, 1517-1528.	4.9	11
36	Nonlinear multilayer combining techniques for Bayesian equalizers using the radial basis function network as a digital magnetic storage equalizer. IEEE Transactions on Magnetics, 1999, 35, 2319-2321.	1.2	10

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37	Low Complexity Multiple Relay Selection Scheme for Cognitive Relay Networks. , 2011, , .		9
38	Channel Estimation and Interference Cancellation of Feedback Interference for DOCR in DVB-T System. IEEE Transactions on Broadcasting, 2012, 58, 87-97.	2.5	9
39	Effect of carrier frequency offset on the performance of an MC-CDMA system and its countermeasure using pulse shaping. , 0, , .		8
40	Line Encoding for Multiuser MIMO Downlink. IEEE Transactions on Vehicular Technology, 2011, 60, 734-739.	3.9	7
41	Performance analysis on the self-mixed interference cancellation in direct conversion receivers. IEEE Transactions on Consumer Electronics, 2013, 59, 310-315.	3.0	7
42	Performance evaluation of various small-cell deployment scenarios in small-cell networks. , 2014, , .		7
43	Effective Two-Dimensional Partial Response Maximum Likelihood Detection Scheme for Holographic Data Storage Systems. Japanese Journal of Applied Physics, 2012, 51, 08JB06.	0.8	7
44	A quadratic sigmoid neural equalizer for nonlinear digital magnetic recording channels. IEEE Communications Letters, 1998, 2, 263-265.	2.5	6
45	Pilot Power Ratio for Uplink Sum-Rate Maximization in Zero-Forcing Based MU-MIMO Systems with Large Number of Antennas. , 2013, , .		6
46	A New Link Adaptation Method to Mitigate SINR Mismatch in Ultra-Dense Small Cell LTE Networks. IEEE Transactions on Wireless Communications, 2018, 17, 1109-1122.	6.1	6
47	A complex version of a decision feedback recurrent neural equalizer as an infinite impulse response filter. , 0, , .		5
48	A hybrid structured neural network receiver in digital communication systems. , 2000, , .		5
49	Effect of Unpredictable Interference on MU-MIMO Systems in HetNet. IEEE Access, 2018, 6, 28870-28876.	2.6	5
50	SCLNR-Based Precoding Scheme for Multi-User MIMO SWIPT Systems. IEEE Transactions on Vehicular Technology, 2019, 68, 12392-12395.	3.9	5
51	A Decision Feedback Recurrent Neural Equalizer For Digital magnetic Recording Systems. , 0, , .		4
52	Sparse Bayesian Learning Approach to Adaptive Beamforming Assisted Receivers. IEEE Communications Letters, 2007, 11, 182-184.	2.5	4
53	Low-complexity interference-aware single relay selection in multi-source multi-destination cooperative networks. , 2012, , .		4
54	Statistical Beamforming Based on Effective Channel Gain for Spatially Correlated Massive MIMO Systems. IEEE Communications Letters, 2018, 22, 197-200.	2.5	4

#	ARTICLE	IF	CITATIONS
55	Cooperative Inference of DNNs Over Noisy Wireless Channels. IEEE Transactions on Vehicular Technology, 2021, 70, 8298-8303.	3.9	4
56	Equalization techniques using a simplified bilinear recursive polynomial perceptron with decision feedback. , 0, , .		3
57	Spectrally Efficient QAM-FBMC System Using FTN Scheme with Block-Wise Interleaved Filters. , 2018, , .		3
58	A suboptimal Bayesian equalizer using an nonlinear multilayer combiner. , 0, , .		2
59	Performance of RBF equalizer in data storage channels. , 0, , .		2
60	Adaptive error constrained LMS algorithms and its blind equalization method. , 0, , .		2
61	A simplified multiuser receiver of DS-CDMA system. , 0, , .		2
62	Blind Equalization Method Based on Sparse Bayesian Learning. IEEE Vehicular Technology Conference, 2008, , .	0.2	2
63	Dispersed Signal Transmission and Reception Scheme for Full-Duplex Systems. IEEE Access, 2019, 7, 138771-138778.	2.6	2
64	An Enhanced Tabu Search Based Receiver for Full-Spreading NOMA Systems. IEEE Access, 2019, 7, 159899-159917.	2.6	2
65	A Group Shuffled BP decoding for punctured Low-Density Parity-Check codes. IEICE Electronics Express, 2010, 7, 1429-1434.	0.3	1
66	Continuous BP Decoding Algorithm for a Low-Density Parity-Check Coded Hybrid ARQ System. IEICE Transactions on Communications, 2010, E93-B, 993-996.	0.4	1
67	Adaptive reduced multivariate polynomial equalizers for blu-ray disc channels. IEEE Transactions on Consumer Electronics, 2010, 56, 682-686.	3.0	1
68	Blind beamformer for constant modulus signals based on relevance vector machine. , 2011, , .		1
69	Multi-mode precoding scheme based on interference channel in MIMO-based cognitive radio networks. , 2012, , .		1
70	Self-mixed interference cancellation method in direct conversion receivers. , 2013, , .		1
71	Multiuser CQI prediction based on quantization error feedback for massive MIMO systems. , 2015, , .		1
72	Performance evaluation of heterogeneous networks with cell ID operation of small cell. , 2016, , .		1

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73	Optimal power control for wireless power transfer system: A deterministic approach. , 2017, , .		1
74	System Level Simulation of mmWave Based Mobile Xhaul Networks. , 2017, , .		1
75	Evaluation of Precoding Scheme for Multi-User MIMO SWIPT Systems. , 2018, , .		1
76	Achievable Rate Evaluation by System Level Simulation for mm Wave Based Backhaul Network Adopting in-Band Full-Duplex. , 2018, , .		1
77	An ant colony optimization aided two-dimensional soft output viterbi algorithm detection scheme for holographic data storage systems. Japanese Journal of Applied Physics, 2019, 58, SKKD03.	0.8	1
78	Equalization scheme with misalignment estimation based on multi-layer perceptrons for holographic data storage systems. Japanese Journal of Applied Physics, 2019, 58, SKKD02.	0.8	1
79	Partial Response Signaling for Circular Convolution Based Filter Bank Multi-Carrier System Adopting Quadrature Amplitude Modulation. IEEE Access, 2020, 8, 122791-122797.	2.6	1
80	A multilayer feedforward neural network having N/4 nodes in two hidden layers. , 0, , .		0
81	Performance Of Neural Equalizers On Partial Erasure Model. , 0, , .		0
82	High recording density hard disk channel equalization using a bilinear recursive polynomial model. IEICE Electronics Express, 2009, 6, 1071-1076.	0.3	0
83	2*2 OSIC Receiver for Hierarchical Constellation. IEICE Transactions on Communications, 2010, E93-B, 2458-2461.	0.4	0
84	Correction to "Adaptive reduced multivariate polynomial equalizers for blu-ray disc channels". IEEE Transactions on Consumer Electronics, 2010, 56, 2380-2381.	3.0	0
85	Iterative receiver based on Kalman filter. , 2011, , .		0
86	Kalman-Based MIMO Receivers Using Gaussian Sum Approximations. , 2012, , .		0
87	Load balancing based on dynamic overlay clustering. , 2014, , .		0
88	Link adaptation strategy for healthcare application on IEEE 802.15.4 WPANs. , 2015, , .		0
89	Impacts of sub hub on connectivity of IEEE 802.15.4 in healthcare environments. , 2015, , .		0
90	OSIC Scheme Based on Combined Post-Processing SINR for MIMO Systems with Retransmission. IEICE Transactions on Communications, 2016, E99.B, 732-738.	0.4	0

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91	Subframe shift for full-duplex base station in TD-LTE systems. , 2016, , .		0
92	Partial pilot transmission for self-interference channel estimation in full-duplex MIMO systems. , 2017, , .		0
93	A Low Overhead Feedback Scheme of Channel Covariance Matrix for Massive MIMO Systems. , 2018, , .		0
94	Initial Beam Selection Scheme Using Channel Correlation Matrix in mmWave Massive MIMO Systems. , 2018, , .		0
95	Low Complexity Beam Searching Algorithm Using Asymptotic Property of Massive MIMO Systems. , 2018, , .		0
96	CNN-based user selection in MIMO broadcasting channel. , 2019, , .		0
97	Deep Learning based Beam Selection for Wide Beam Sweeping System. , 2022, , .		0