Jian Song

List of Publications by Citations

158 papers	1,921 citations	22 h-index	38 g-index
223 ext. papers	2,624 ext. citations	4.1 avg, IF	5.38 L-index

#	Paper	IF	Citations
158	Generalised Spatial Modulation System with Multiple Active Transmit Antennas and Low Complexity Detection Scheme. *IEEE Transactions on Wireless Communications*, **2012**, 11, 1605-1615	9.6	299
157	Technical Review on Chinese Digital Terrestrial Television Broadcasting Standard and Measurements on Some Working Modes. *IEEE Transactions on Broadcasting*, **2007**, 53, 1-7	4.7	156
156	Compressive Sensing Based Channel Estimation for OFDM Systems Under Long Delay Channels. *IEEE Transactions on Broadcasting*, **2014**, 60, 313-321	4.7	86
155	A Simplified Equalization Method for Dual PN-Sequence Padding TDS-OFDM Systems. *IEEE Transactions on Broadcasting*, **2008**, 54, 825-830	4.7	59
154	Signal Vector Based Detection Scheme for Spatial Modulation. *IEEE Communications Letters*, **2012**, 16, 19-21	3.8	58
153	Double Kill: Compressive-Sensing-Based Narrow-Band Interference and Impulsive Noise Mitigation for Vehicular Communications. *IEEE Transactions on Vehicular Technology*, **2016**, 65, 5099-5109	6.8	47
152	Outage Analysis for Downlink NOMA With Statistical Channel State Information. *IEEE Wireless Communications Letters*, **2018**, 7, 142-145	5.9	45
151	Spectral Efficiency Analysis for Downlink NOMA Aided Spatial Modulation With Finite Alphabet Inputs. *IEEE Transactions on Vehicular Technology*, **2017**, 66, 10562-10566	6.8	38
150	Spatial Modulation for More Spatial Multiplexing: RF-Chain-Limited Generalized Spatial Modulation Aided MM-Wave MIMO With Hybrid Precoding. *IEEE Transactions on Communications*, **2018**, 66, 986-998	6.9	37
149	Multi-resolution CSI Feedback with Deep Learning in Massive MIMO System **2020**,		37
148	On the Multi-User Multi-Cell Massive Spatial Modulation Uplink: How Many Antennas for Each User?. *IEEE Transactions on Wireless Communications*, **2017**, 16, 1437-1451	9.6	33
147	Novel Transmit Diversity Scheme for TDS-OFDM System With Frequency-Shift m-Sequence Padding. *IEEE Transactions on Broadcasting*, **2012**, 58, 317-324	4.7	30
146	Perineuronal nets protect long-term memory by limiting activity-dependent inhibition from parvalbumin interneurons. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**,	11.5	30
145	Joint Transceiver Optimization for Wireless Communication PHY Using Neural Network. *IEEE Journal on Selected Areas in Communications*, **2019**, 37, 1364-1373	14.2	28
144	On the Achievable Spectral Efficiency of Spatial Modulation Aided Downlink Non-Orthogonal Multiple Access. *IEEE Communications Letters*, **2017**, 21, 1937-1940	3.8	27
143	Coded Modulation with Signal Space Diversity. *IEEE Transactions on Wireless Communications*, **2011**, 10, 660-669	9.6	27
142	Integrated power line and visible light communication system compatible with multi-service transmission. *IET Communications*, **2017**, 11, 104-111	1.3	26

141	Novel channel estimation method based on PN sequence reconstruction for Chinese DTTB system. *IEEE Transactions on Consumer Electronics*, **2008**, 54, 1583-1589	4.8	26
140	On Generalized Spatial Modulation Aided Millimeter Wave MIMO: Spectral Efficiency Analysis and Hybrid Precoder Design. *IEEE Transactions on Wireless Communications*, **2017**, 16, 7658-7671	9.6	23
139	Performance Analysis and Code Optimization of IDMA With 5G New Radio LDPC Code. *IEEE Communications Letters*, **2018**, 22, 1552-1555	3.8	22
138	Indoor hospital communication systems: An integrated solution based on power line and visible light communication **2014**,		22
137	Non-Equiprobable APSK Constellation Labeling Design for BICM Systems. *IEEE Communications Letters*, **2013**, 17, 1276-1279	3.8	22
136	EXIT-Aided Bit Mapping Design for LDPC Coded Modulation with APSK Constellations. *IEEE Communications Letters*, **2012**, 16, 777-780	3.8	22
135	Sparse Vector Coding-Based Multi-Carrier NOMA for In-Home Health Networks. *IEEE Journal on Selected Areas in Communications*, **2021**, 39, 325-337	14.2	22
134	Spectrally Efficient CSI Acquisition for Power Line Communications: A Bayesian Compressive Sensing Perspective. *IEEE Journal on Selected Areas in Communications*, **2016**, 34, 2022-2032	14.2	19
133	Nonorthogonal Time-Frequency Training-Sequence-Based CSI Acquisition for MIMO Systems. *IEEE Transactions on Vehicular Technology*, **2016**, 65, 5714-5719	6.8	18
132	High-Throughput QC-LDPC Decoders. *IEEE Transactions on Broadcasting*, **2009**, 55, 251-259	4.7	18
131	Intercarrier Interference Cancellation with Frequency Diversity for OFDM Systems. *IEEE Transactions on Broadcasting*, **2007**, 53, 132-137	4.7	18
130	Structured Compressive Sensing-Based Channel Estimation for Time Frequency Training OFDM Systems Over Doubly Selective Channel. *IEEE Wireless Communications Letters*, **2017**, 6, 266-269	5.9	17
129	Experimental Demonstration of a Cubic-Receiver-Based MIMO Visible Light Communication System. *IEEE Photonics Journal*, **2017**, 9, 1-7	1.8	17
128	Robust Frame Synchronization for Chinese DTTB System. *IEEE Transactions on Broadcasting*, **2008**, 54, 152-158	4.7	17
127	Spectral-Efficient Analog Precoding for Generalized Spatial Modulation Aided MmWave MIMO. *IEEE Transactions on Vehicular Technology*, **2017**, 66, 9598-9602	6.8	16
126	Intercommunity Detection Scheme for Social Internet of Things: Compressive Sensing Over Graphs Approach. *IEEE Internet of Things Journal*, **2018**, 5, 4550-4557	10.7	16
125	5G Internet of Radio Light Positioning System for Indoor Broadcasting Service. *IEEE Transactions on Broadcasting*, **2020**, 66, 534-544	4.7	15
124	Hybrid PLC-VLC channel model and spectral estimation using a nonparametric approach. *Transactions on Emerging Telecommunications Technologies*, **2017**, 28, e3224	1.9	15

123	Key Technologies and Measurements for DTMB-A System. *IEEE Transactions on Broadcasting*, **2019**, 65, 53-64	4.7	14
122	Scheduling to Minimize Age of Information in Multi-State Time-Varying Networks with Power Constraints **2019**,		14
121	Reception Quality Prediction in a Single Frequency Network for the DTMB Standard. *IEEE Transactions on Broadcasting*, **2012**, 58, 629-636	4.7	13
120	Bit-Interleaved LDPC-Coded Modulation with Iterative Demapping and Decoding **2009**,		13
119	Structured compressive sensing-based non-orthogonal time-domain training channel state information acquisition for multiple input multiple output systems. *IET Communications*, **2016**, 10, 685-690	1.3	12
118	A Low-Complexity Detection Algorithm for Uplink NOMA System Based on Gaussian Approximation **2017**,		11
117	Information-Aided Iterative Equalization: A Novel Approach for Single-Carrier Spatial Modulation in Dispersive Channels. *IEEE Transactions on Vehicular Technology*, **2016**, 1-1	6.8	11
116	ell_infty Minimization Based Symbol Detection for Generalized Space Shift Keying. *IEEE Communications Letters*, **2015**, 19, 1109-1112	3.8	10
115	Clipping Noise Elimination for OFDM Systems by Compressed Sensing With Partially Aware Support. *IEEE Transactions on Broadcasting*, **2017**, 63, 103-110	4.7	10
114	On the Achievable Rate Region of NOMA Under Outage Probability Constraints. *IEEE Communications Letters*, **2019**, 23, 370-373	3.8	10
113	. *IEEE Transactions on Broadcasting*, **2019**, 65, 172-178	4.7	10
112	Spectral-Efficient Hybrid Dimming Scheme for Indoor Visible Light Communication: A Subcarrier Index Modulation Based Approach. *Journal of Lightwave Technology*, **2019**, 37, 5756-5765	4	9
111	Construction of Rate-Compatible Raptor-Like Quasi-Cyclic LDPC Code With Edge Classification for IDMA Based Random Access. *IEEE Access*, **2019**, 7, 30818-30830	3.5	9
110	Deep Convolutional Neural Network-Based Detector for Index Modulation. *IEEE Wireless Communications Letters*, **2020**, 9, 1705-1709	5.9	8
109	Device Activity Detection and Non-Coherent Information Transmission for Massive Machine-Type Communications. *IEEE Access*, **2020**, 8, 41452-41465	3.5	8
108	Non-intrusive power line quality monitoring based on power line communications **2013**,		8
107	A multiple communication standards compatible IoT system for medical usage **2013**,		8
106	Harvesting both rate gain and diversity gain: Combination of NOMA with the Alamouti scheme **2017**,		8

105	Subcarrier Grouping OFDM for Visible-Light Communication Systems. *IEEE Photonics Journal*, **2015**, 7, 1-12	1.8	8
104	Energy-efficient orthogonal frequency division multiplexing scheme based on time-frequency joint channel estimation. *IET Communications*, **2014**, 8, 3406-3413	1.3	8
103	Field trial of advanced DTMB system DTMB-A in Hong Kong **2013**,		8
102	Labeling Optimization for BICM-ID Systems. *IEEE Communications Letters*, **2010**, 14, 1047-1049	3.8	8
101	Quantization Error Reduction for the Phased Array with 2-bit Phase Shifter. *Wireless Personal Communications*, **2010**, 52, 29-41	1.9	8
100	On Massive Spatial Modulation MIMO: Spectral Efficiency Analysis and Optimal System Design **2016** ,		8
99	Sum Rate Maximization for Intelligent Reflecting Surface-Aided Visible Light Communications. *IEEE Communications Letters*, **2021**, 1-1	3.8	8
98	A Novel Noise Suppression Method in Channel Estimation. *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences*, **2011**, E94-A, 2027-2030	0.4	7
97	Embedded Transmission of Multi-Service Over DTMB System. *IEEE Transactions on Broadcasting*, **2010**, 56, 504-513	4.7	7
96	Simplified Closed-Form Single-Scatter Path Loss Model of Non-Line-of-Sight Ultraviolet Communications in Noncoplanar Geometry. *IEEE Journal of Quantum Electronics*, **2021**, 57, 1-9	2	7
95	Quasi-Cyclic Spatially Coupled LDPC Code for Broadcasting. *IEEE Transactions on Broadcasting*, **2020** , 66, 187-194	4.7	7
94	A Novel User Pairing in Downlink Non-Orthogonal Multiple Access **2018**,		7
93	Near capacity LDPC coded MU-BICM-ID for 5G **2015**,		6
92	Analysis of outage capacity of NOMA: SIC vs. JD. *Tsinghua Science and Technology*, **2016**, 21, 538-543	3.4	6
91	Spectral Efficiency Analysis for Spatial Modulation Aided Layered Division Multiplexing Systems With Gaussian and Finite Alphabet Inputs. *IEEE Transactions on Broadcasting*, **2018**, 64, 909-914	4.7	6
90	Genetic algorithm aided gray-APSK constellation optimization **2013**,		6
89	A multi-user uplink TDS-OFDM system based on dual PN sequence padding. *IEEE Transactions on Consumer Electronics*, **2009**, 55, 1098-1106	4.8	6
88	A Novel Equalization Scheme for ZP-OFDM System Over Deep Fading Channels. *IEEE Transactions on Broadcasting*, **2010**, 56, 249-252	4.7	6

87	Channel Estimation for the Chinese DTTB System Based on a Novel Iterative PN Sequence Reconstruction **2008**,		6
86	Progressive Matrix Growth Algorithm for Constructing Rate-Compatible Length-Scalable Raptor-Like Quasi-Cyclic LDPC Codes. *IEEE Transactions on Broadcasting*, **2018**, 64, 816-829	4.7	6
85	Bandwidth Efficiency Maximization for Single-Cell Massive Spatial Modulation MIMO: An Adaptive Power Allocation Perspective. *IEEE Access*, **2017**, 5, 1482-1495	3.5	5
84	Multiuser Detection for FEC-Coded Massive Spatial Modulation MIMO: An Iterative Interference Rejection Approach. *IEEE Transactions on Vehicular Technology*, **2017**, 66, 9567-9571	6.8	5
83	Online Fountain Codes With Unequal Recovery Time. *IEEE Communications Letters*, **2019**, 23, 1136-1140	3.8	5
82	Compressive sensing based time-frequency joint non-orthogonal multiple access **2016**,		5
81	Spectral efficiency analysis for spatial modulation in massive MIMO uplink over dispersive channels **2017**,		5
80	Channel Estimation Based on Space-Time-Frequency Coded Training Sequence for Transmit Diversity System. *IEICE Transactions on Communications*, **2009**, E92-B, 1901-1903	0.5	5
79	Intelligent Reflecting Surface-Aided Visible Light Communications: Potentials and Challenges. *IEEE Vehicular Technology Magazine*, **2021**, 2-11	9.9	5
78	Training Sequence Design for Low Complexity Channel Estimation in Transmit Diversity TDS-OFDM System. *IEICE Transactions on Communications*, **2009**, E92-B, 2308-2311	0.5	5
77	PAPR Reduction for Systems Using SRRC Filters Based on Modified ACE. *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences*, **2013**, E96.A, 1675-1677	0.4	5
76	Single-scatter path loss model of LED-based non-line-of-sight ultraviolet communications. *Optics Letters*, **2021**, 46, 4013-4016	3	5
75	Stochastic Optimization Based Dynamic User Scheduling and Hybrid Precoding for Broadband MmWave MIMO **2019**,		4
74	Simplified Decision-Directed Channel Estimation Method for OFDM System with Transmit Diversity **2009**,		4
73	Near-capacity BICM-ID for MIMO channels **2011**,		4
72	Novel Channel Estimation Method Based on Training Sequence Cyclic Reconstruction for TDS-OFDM System. *IEICE Transactions on Communications*, **2011**, E94-B, 2158-2160	0.5	4
71	Optimizing Age Penalty in Time-Varying Networks with Markovian and Error-Prone Channel State. *Entropy*, **2021**, 23,	2.8	4
70	Approach to suppress out-of-band emission for dual pseudo noise padded time-domain synchronous-orthogonal frequency division multiplexing systems. *IET Communications*, **2015**, 9, 1606-1614	1.3	3

69	Frequency Domain Turbo Equalization under MMSE Criterion for Single Carrier MIMO Systems **2015** ,		3
68	Dual PN padding TDS-OFDM for underwater acoustic communication **2012**,		3
67	Multiple-rate multiple-length QC-LDPC codes design with near shannon limit performance **2013**,		3
66	Joint Code Acquisition and Doppler Frequency Shift Estimation for GPS Signals **2010**,		3
65	Transmit Diversity Scheme and Flexible Channel Estimation for TDS-OFDM System **2009**,		3
64	Two-way digital video transmission over medium-voltage power-lines using time-domain synchronous orthogonal frequency division multiplexing technology. *Tsinghua Science and Technology*, **2008**, 13, 784-789	3.4	3
63	Binarized Aggregated Network with Quantization: Flexible Deep Learning Deployment for CSI Feedback in Massive MIMO System. *IEEE Transactions on Wireless Communications*, **2022**, 1-1	9.6	3
62	A Novel PN Complementary Pair for Synchronization and Channel Estimation. *IEICE Transactions on Communications*, **2010**, E93-B, 3189-3192	0.5	3
61	Successive-Interference-Cancellation-Free NOMA for Indoor VLC: A Generalized Spatial Modulation Based Approach **2020**,		3
60	Scheduling to Minimize Age of Synchronization in Wireless Broadcast Networks with Random Updates **2019**,		3
59	Block-Level Utility Maximization for NOMA-Based Layered Broadcasting. *IEEE Transactions on Broadcasting*, **2020**, 66, 21-33	4.7	3
58	A High-Accuracy Adaptive Beam Training Algorithm for MmWave Communication **2018**,		3
57	Index Modulation Based Hybrid Dimming Scheme for Visible Light Communication **2019**,		2
56	Generalized Spatial Modulation Aided mmWave MIMO with Sub-Connected Hybrid Precoding Scheme **2017**,		2
55	Iterative uniform-cost search of active antenna group selection for generalised spatial modulation **2017**,		2
54	Out-of-band power suppression for TDS-OFDM systems **2013**,		2
53	Monte-Carlo simulation-based characteristics of underwater scattering channel. *Optical Engineering* , **2017**, 56, 070501	1.1	2
52	Energy-efficient resource allocation in OFDMA-based wireless multicast systems **2015**,		2

51	Frequency Domain Turbo Equalization with Iterative Channel Estimation for Single Carrier MIMO Underwater Acoustic Communications **2015**,		2
50	An Improved Spectrum Sensing Method for DTMB System Based on PN Autocorrelation. *IEICE Transactions on Communications*, **2013**, E96.B, 1559-1565	0.5	2
49	TDS-OFDMA: a novel multiple access system based on TDS-OFDM. *IEEE Transactions on Consumer Electronics*, **2011**, 57, 1528-1534	4.8	2
48	Multi-rate QC-LDPC scheme for narrowband powerline communication system **2011**,		2
47	A dynamic hybrid UXP/ARQ method for scalable video transmission **2012**,		2
46	Modeling and Measuring of Weak Frequency Selectivity in OFDM Modulator **2008**,		2
45	Novel decision-directed channel estimation method for TDS-OFDM system **2008**,		2
44	Triple-structured Sparsity-based Channel Feedback for RIS-assisted MU-MIMO System. *IEEE Communications Letters*, **2022**, 1-1	3.8	2
43	Reflection-assisted Non-Line-of-Sight Ultraviolet Communications. *Journal of Lightwave Technology*, **2021**, 1-1	4	2
42	Enhanced Adaptive Normalized Min-Sum Algorithm for Layered Scheduling of 5G-NR LDPC codes **2020**,		2
41	OFDM With Differential Index Modulation for Visible Light Communication. *IEEE Photonics Journal*, **2020**, 12, 1-8	1.8	2
40	Field trial of UHDTV over Digital Television Terrestrial Broadcasting network **2019**,		2
39	Novel Index Modulation Aided Non-Orthogonal Multiple Access for Visible Light Communication **2019**,		2
38	CSMA-and-NOMA-based Random Massive Access in Power Line Communication for Smart Gird Applications **2019**,		2
37	Low Complexity Hybrid Precoding Algorithm for GenSM Aided mmWave MIMO Systems **2018**,		2
36	Joint Resource Management for Intelligent Reflecting SurfaceAided Visible Light Communications. *IEEE Transactions on Wireless Communications*, **2022**, 1-1	9.6	2
35	Joint Illumination and Communication Optimization in Indoor VLC for IoT Applications. *IEEE Internet of Things Journal*, **2022**, 1-1	10.7	2
34	HKA: A Hierarchical Knowledge Attention Mechanism for Multi-Turn Dialogue System **2020**,		1

33	Radio-Optics Hybrid Single Frequency Network for DTTB: Principle, Technology, and Practice. *IEEE Transactions on Broadcasting*, **2020**, 66, 857-866	4.7	1
32	Basis expansion model based spectral efficient channel recovery scheme for spatial-temporal correlated massive MIMO systems. *IET Communications*, **2017**, 11, 2621-2629	1.3	1
31	Bit division multiplexing for MIMO broadcasting system **2014**,		1
30	An iterative-weighted-average algorithm for background modeling in surveillance video scenarios **2017**,		1
29	Play-Out Constrained Dynamic Packet Loss Protection for Scalable Video Transmission. *IEICE Transactions on Communications*, **2013**, E96.B, 1633-1642	0.5	1
28	The novel approach to support multimedia services over DTMB system **2010**,		1
27	Technical Review for Chinese Future DTTB System **2010**,		1
26	Low Complexity Soft Decoder for Nordstrom-Robinson Code With Application to the Chinese DTTB Standard. *IEEE Transactions on Broadcasting*, **2009**, 55, 668-673	4.7	1
25	Simplified Soft Demapping Algorithm for Gray-APSK. *IEICE Transactions on Communications*, **2013**, E96.B, 1814-1818	0.5	1
24	Spatial Multiplexing MIMO Visible Light Communications With Densely Distributed LEDs and PDs. *IEEE Photonics Journal*, **2020**, 12, 1-7	1.8	1
23	Index-Domain Division Multiple Access for IoT Applications. *IEEE Internet of Things Journal*, **2021**, 8, 9014-9029	10.7	1
22	Dynamic Matching Based Distributed Spectrum Trading in Multi-Radio Multi-Channel CRNs **2016**,		1
21	On RF-Chain Limited Spatial Modulation Aided NOMA: Spectral Efficiency Analysis **2019**,		1
20	Task-scheduling scheme based on greedy algorithm in integrated radar and communication systems. *Journal of Engineering*, **2019**, 2019, 5864-5867	0.7	1
19	Performance evaluation of low-density spreading multiple access. *IET Communications*, **2019**, 13, 108-115	1.3	1
18	On the Achievable Spectral Efficiency of Layered Division Multiplexing with Finite Alphabet Inputs **2018**,		1
17	BER Performance Analysis for Downlink Nonorthogonal Multiple Access With Error Propagation Mitigated Method in Visible Light Communications. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 9190-9206	6.8	1
16	Wideband Underwater Wireless Optical Communication Based on Multi-carrier Autoencoder. *IEEE Wireless Communications Letters*, **2021**, 1-1	5.9	1

15	Optimization on Multi-User Physical Layer Security of Intelligent Reflecting Surface-Aided VLC. *IEEE Wireless Communications Letters*, **2022**, 1-1	5.9	1
14	Sliding Window Decoding for QC-SC-LDPC Codes Under the Constraint of Implementation Complexity. *IEEE Transactions on Broadcasting*, **2022**, 1-12	4.7	0
13	Review on 5G NR LDPC Code: Recommendations for DTTB System. *IEEE Access*, **2021**, 1-1	3.5	0
12	Low-Complexity Hybrid Precoding Algorithm Based on Log-Det Expansion for GenSM-Aided MmWave MIMO System. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 1554-1564	6.8	0
11	Spectrum Sensing for DTMB System: A CNN Approach. *IEEE Transactions on Broadcasting*, **2021**, 1-8	4.7	0
10	Spectral efficiency analysis and pilot reuse factor optimisation for multi-cell massive SC-SM MIMO. *IET Communications*, **2018**, 12, 1195-1200	1.3	
9	A Measurement Method of the DTMB Modulator. *IEEE Transactions on Broadcasting*, **2011**, 57, 745-751	4.7	
8	Training Sequence Aided MC-CDMA Scheme with High Spectrum Efficiency. *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences*, **2010**, E93-A, 1857-1860	0.4	
7	Designs of Differential Space-Time and Space-Frequency Coded OFDM Schemes. *Wireless Personal Communications*, **2010**, 52, 195-208	1.9	
6	Field Trials of UHDTV Broadcasting over DTMB-A System. *Smpte Motion Imaging Journal*, **2021**, 130, 47-59	0.4	
5	Joint bandwidth and power allocation for multiple services in TV white space. *IET Communications*, **2019**, 13, 569-577	1.3	
4	Novel Consecutive-Pilot Design for Phase Noise Suppression in OFDM System. *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences*, **2009**, E92-A, 1704-1707	0.4	
3	Digital Television/Terrestrial Multimedia Broadcasting (DTMB)1-13		
2	Underwater Optical Channel Generator: A Generative Adversarial Network Based Approach. *IEEE Transactions on Wireless Communications*, **2022**, 1-1	9.6	
1	Power Line Communication with Robust Timing and Carrier Recovery against Narrowband Interference for Smart Grid. *Sensors*, **2022**, 22, 4013	3.8	