John S Thompson

List of Publications by Year
in descending order

97 papers	2,270 citations	394421 19 h-index	233421 45 g-index
97 all docs	97 docs citations	97 times ranked	2242 citing authors

#	Article	IF	Citations
1	A Survey of Positioning Systems Using Visible LED Lights. IEEE Communications Surveys and Tutorials, 2018, 20, 1963-1988.	39.4	397
2	Energy-Efficient Data Collection and Device Positioning in UAV-Assisted IoT. IEEE Internet of Things Journal, 2020, 7, 1122-1139.	8.7	221
3	Base Station Sleeping and Resource Allocation in Renewable Energy Powered Cellular Networks. IEEE Transactions on Communications, 2014, 62, 3801-3813.	7.8	138
4	Energy Efficiency Optimization of 5G Radio Frequency Chain Systems. IEEE Journal on Selected Areas in Communications, 2016, 34, 758-771.	14.0	127
5	Finite Alphabet Constant-Envelope Waveform Design for MIMO Radar. IEEE Transactions on Signal Processing, 2011, 59, 5326-5337.	5.3	98
6	Toward Location-Enabled IoT (LE-IoT): IoT Positioning Techniques, Error Sources, and Error Mitigation. IEEE Internet of Things Journal, 2021, 8, 4035-4062.	8.7	91
7	Joint Optimization of Computation and Communication Power in Multi-User Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2018, 17, 4051-4063.	9.2	88
8	A Singular-Value-Based Adaptive Modulation and Cooperation Scheme for Virtual-MIMO Systems. IEEE Transactions on Vehicular Technology, 2011, 60, 2495-2504.	6.3	83
9	On combating the half-duplex constraint in modern cooperative networks: protocols and techniques. IEEE Wireless Communications, 2012, 19, 20-27.	9.0	77
10	Reconciling Compressive Sampling Systems for Spectrally Sparse Continuous-Time Signals. IEEE Transactions on Signal Processing, 2012, 60, 155-171.	5.3	65
11	New Approach for SAR Imaging of Ground Moving Targets Based on a Keystone Transform. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 829-833.	3.1	63
12	Dynamic RF Chain Selection for Energy Efficient and Low Complexity Hybrid Beamforming in Millimeter Wave MIMO Systems. IEEE Transactions on Green Communications and Networking, 2019, 3, 886-900.	5.5	52
13	Computational Load Balancing on the Edge in Absence of Cloud and Fog. IEEE Transactions on Mobile Computing, 2019, 18, 1499-1512.	5.8	46
14	Resource Allocation Strategies for Network-Coded Video Broadcasting Services Over LTE-Advanced. IEEE Transactions on Vehicular Technology, 2015, 64, 2186-2192.	6.3	39
15	Wireless Energy Harvesting Assisted Two-Way Cognitive Relay Networks: Protocol Design and Performance Analysis. IEEE Access, 2017, 5, 21447-21460.	4.2	37
16	Spectral, energy and economic efficiency of relayâ€aided cellular networks. IET Communications, 2013, 7, 1476-1486.	2.2	27
17	Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. IEEE Transactions on Green Communications and Networking, 2021, 5, 119-132.	5.5	27
18	Efficient Channel Estimation in Millimeter Wave Hybrid MIMO Systems with Low Resolution ADCs. , 2018, , .		23

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19	Energy Efficient Transmitter with Low Resolution DACs for Massive MIMO with Partially Connected Hybrid Architecture. , 2018, , .		23
20	Energy Efficiency Maximization of Millimeter Wave Hybrid MIMO Systems with Low Resolution DACs. , 2019, , .		23
21	Centralized Random Backoff for Collision Resolution in Wi-Fi Networks. IEEE Transactions on Wireless Communications, 2017, 16, 5838-5852.	9.2	22
22	Frequency analysis of path loss models on WIMAX. , 2011, , .		21
23	On energy efficiency of joint transmission coordinated multi-point in LTE-advanced. , 2012, , .		19
24	A Study of Non-Orthogonal Multiple Access in Underwater Visible Light Communication Systems. , 2018, , .		19
25	Energy-Efficiency Maximization of Hybrid Massive MIMO Precoding With Random-Resolution DACs via RF Selection. IEEE Transactions on Wireless Communications, 2021, 20, 1093-1104.	9.2	19
26	Performance of Optical Spatial Modulation in Indoor Multipath Channel. IEEE Transactions on Wireless Communications, 2018, 17, 6042-6052.	9.2	18
27	Empirical Study of the Underwater Turbulence Effect on Non-Coherent Light. IEEE Photonics Technology Letters, 2020, 32, 1307-1310.	2.5	17
28	UAV Swarm-Enabled Localization in Isolated Region: A Rigidity-Constrained Deployment Perspective. IEEE Wireless Communications Letters, 2021, 10, 2032-2036.	5.0	17
29	Millimeter-Wave MIMO-NOMA-Based Positioning System for Internet-of-Things Applications. IEEE Internet of Things Journal, 2020, 7, 11068-11077.	8.7	17
30	Feasibility Study of UAV-Assisted Anti-Jamming Positioning. IEEE Transactions on Vehicular Technology, 2021, 70, 7718-7733.	6.3	15
31	A Fixed-Complexity Soft-MIMO Detector via Parallel Candidate Adding Scheme and its FPGA Implementation. IEEE Communications Letters, 2011, 15, 241-243.	4.1	13
32	Energy Efficient ADC Bit Allocation and Hybrid Combining for Millimeter Wave MIMO Systems. , 2019, , .		13
33	Pairwise Coding for MIMO-OFDM Visible Light Communication. IEEE Transactions on Wireless Communications, 2020, 19, 1210-1220.	9.2	13
34	Power-Consumption Outage in Beyond Fifth Generation Mobile Communication Systems. IEEE Transactions on Wireless Communications, 2021, 20, 897-910.	9.2	13
35	Multi-Tier Variable Height UAV Networks: User Coverage and Throughput Optimization. IEEE Access, 2021, 9, 119684-119699.	4.2	13
36	Learning Fast Sparsifying Transforms. IEEE Transactions on Signal Processing, 2017, 65, 4367-4378.	5.3	12

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37	Adaptive Sum of Markov Chains for Modelling 3D Blockage in mmWave V2I Communications. IEEE Transactions on Vehicular Technology, 2020, 69, 9431-9444.	6.3	12
38	Radio-frequency chain selection for energy and spectral efficiency maximization in hybrid beamforming under hardware imperfections. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200451.	2.1	12
39	Evaluation of Path Loss Models at WiMAX Cell-Edge. , 2011, , .		11
40	FMCW radar near field three-dimensional imaging. , 2012, , .		11
41	A V2X-Integrated Positioning Methodology in Ultradense Networks. IEEE Internet of Things Journal, 2021, 8, 17014-17028.	8.7	10
42	Bandwidth and energy efficiency of video broadcasting services over LTE/LTE-A. , 2013, , .		9
43	Optical Wireless Underwater Channel Modelling in the Presence of Turbulence. , 2018, , .		9
44	A Study of Spatial and Temporal Dispersion in Turbulent Underwater Optical Wireless Channel. , 2019, , .		9
45	Toward Reliable UAV-Enabled Positioning in Mountainous Environments: System Design and Preliminary Results. IEEE Transactions on Reliability, 2022, 71, 1435-1463.	4.6	9
46	A Simplified Unbiased MMSE Metric Based QRDM Decoder for MIMO Systems. , 2010, , .		8
47	Capacity and Delay Tradeoff of Secondary Cellular Networks With Spectrum Aggregation. IEEE Transactions on Wireless Communications, 2018, 17, 3974-3987.	9.2	8
48	An Overview of Underwater Optical Wireless Channel Modelling Techniques : (Invited Paper). , 2019, , .		8
49	FMCW Radar With Enhanced Resolution and Processing Time by Beam Switching. IEEE Open Journal of Antennas and Propagation, 2021, 2, 882-896.	3.7	8
50	Towards 6G: Spectrally efficient joint radar and communication with radio frequency selection, interference and hardware impairments (invited paper). IET Signal Processing, 2022, 16, 851-863.	1.5	8
51	Aggregate Interference Distribution From Large Wireless Networks With Correlated Shadowing: An Analyticalâ€“Numericalâ€“Simulation Approach. IEEE Transactions on Vehicular Technology, 2011, 60, 2752-2764.	6.3	7
52	Energy efficiency of heterogeneous networks in LTE-advanced. , 2012, , .		7
53	Coexistence and Interference Mitigation for WPANs and WLANs From Traditional Approaches to Deep Learning: A Review. IEEE Sensors Journal, 2021, 21, 25561-25589.	4.7	7
54	Resource allocation in the downlink of cellular multi-hop networks. European Transactions on Telecommunications, 2008, 19, 299-314.	1.2	6

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55	Markov Chain for Modeling 3D Blockage in mmWave V2I Communications. , 2019, , .		6
56	Performance Assessment of UK's Cellular Network for Vehicle to Grid Energy Trading: Opportunities for 5G and Beyond. , 2020, , .		6
57	Cooperative compressive spectrum sensing by sub-Nyquist sampling. , 2009, , .		5
58	Reliable rate-optimized video multicasting services over LTE/LTE-A. , 2013, , .		5
59	Average Rate Analysis of Cooperative NOMA Aided Underwater Optical Wireless Systems. IEEE Open Journal of the Communications Society, 2021, 2, 2292-2310.	6.9	5
60	Deep Reinforcement Learning-Based Beam Training for Spatially Consistent Millimeter Wave Channels. , 2021, , .		5
61	Neural Network-Based Channel Estimation and Detection in Spatial Modulation VLC Systems. IEEE Communications Letters, 2022, 26, 1598-1602.	4.1	5
62	Sectorized FMCW MIMO Radar by Modular Design With Non-Uniform Sparse Arrays. IEEE Journal of Microwaves, 2022, 2, 442-460.	6.5	5
63	Overview of Green Radio research outcomes. , 2012, , .		4
64	Energy efficient resource allocation in wireless systems with control channel overhead. , 2012, , .		4
65	Comment on "Relay Selection for Secure Cooperative Networks with Jamming". IEEE Transactions on Wireless Communications, 2012, 11, 2351-2351.	9.2	4
66	One-bit feedback algorithm with decreasing step size for distributed beamforming. , 2010, , .		3
67	Practical analysis of codebook design and frequency offset estimation for virtualâ€multipleâ€inputâ€“multipleâ€output systems. IET Communications, 2013, 7, 585-594.	2.2	3
68	Green communications and computing networks [Series Editorial]. , 2015, 53, 214-215.		3
69	Multi-Layer FFR-Aided OFDMA-Based Networks Using Channel-Aware Schedulers. IEEE Access, 2018, 6, 7134-7147.	4.2	3
70	Practical Evaluation of UK Internet Network Characteristics For Demand-Side Response Applications. , 2018, , .		3
71	Spectral Smoothing by Multiple Radar Pattern Multiplication for Improved Accuracy. , 2018, , .		3
72	Low-Complexity Beam Training for Tracking Spatially Consistent Millimeter Wave Channels. , 2020, , .		3

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73	Small-Size Blockage Measurements and Modelling for mmWave Communications Systems. , 2020, , .		3
74	Novel Distributed Beamforming Algorithms for Heterogeneous Space Terrestrial Integrated Network. IEEE Internet of Things Journal, 2022, 9, 11351-11364.	8.7	3
75	Editorial A Decade of Green Radio and the Path to â€œNet Zeroâ€• A United Kingdom Perspective. IEEE Transactions on Green Communications and Networking, 2022, 6, 657-664.	5.5	3
76	Implementation of a sic based MCâ€€CDMA base station receiver. European Transactions on Telecommunications, 2002, 13, 513-518.	1.2	2
77	Out of group interference aware precoding for CoMP: A maximum eigenmode based approach. , 2011, , .		2
78	Noise Performance of Orthogonal RF Beamforming for Millimetre Wave Massive MIMO Communication Systems. , 2018, , .		2
79	IEEE Transactions on Green Communications and Computing: New Research Scope. IEEE Transactions on Green Communications and Networking, 2020, 4, 939-943.	5.5	2
80	Performance Analysis of NOMA Multicast Systems Based on Rateless Codes With Delay Constraints. IEEE Transactions on Wireless Communications, 2021, 20, 5003-5017.	9.2	2
81	Impact of Compression and Small Cell Deployment on NB-IoT Devices Coverage and Energy Consumption with a Realistic Simulation Model. Sensors, 2021, 21, 6534.	3.8	2
82	A Real-Time Deep Learning OFDM Receiver. ACM Transactions on Reconfigurable Technology and Systems, 2022, 15, 1-25.	2.5	2
83	Effects of user distribution on the delay performance of downlink packet access in 3GPP WCDMA networks. European Transactions on Telecommunications, 2004, 15, 39-48.	1.2	1
84	MIMO capacity improvement in the presence of antenna mutual coupling. , 2010, , .		1
85	Adaptive matching for compact MIMO systems. , 2010, , .		1
86	Noise Balancing Block Diagonalization precoding for Base Station Cooperation. , 2011, , .		1
87	Energy-aware multiband communications in heterogeneous networks. , 2013, , .		1
88	Performance Analysis of Rateless-Coded Non-Orthogonal Multiple Access. , 2019, , .		1
89	Leveraging Hybrid UAV Relays in Adverse Weather for FSO Link Capacity Maximization. , 2022, , .		1
90	An adaptive rate compress-and-forward cooperation for virtual-MIMO systems. , 2010, , .		0

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91	Feedback based relaying in long term evolution systems. , 2010, , .		0
92	Computer vision aided OFDM-based standards detection and classification technique for cognitive radio systems. , 2013, , .		0
93	Green Communications and Computing Networks. , 2017, 55, 160-161.		0
94	Beamforming with superposition coding in multiple antenna satellite communications. , 2017, , .		0
95	Impact of Timing Offset on Optical Spatial Pulse Position Modulation. , 2018, , .		0
96	Intelligent Signal Detection Under Spatially Correlated Noise. IEEE Access, 2020, 8, 201995-202005.	4.2	0
97	Small-Size Blockage Propagation Modeling at 28 GHz for mmWave Communications System. IEEE Transactions on Antennas and Propagation, 2022, 70, 8578-8583.	5.1	0