Yuanming Shi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3074543/publications.pdf

Version: 2024-02-01

129 papers	4,406 citations	236925 25 h-index	214800 47 g-index
131 all docs	131 docs citations	131 times ranked	2808 citing authors

#	Article	IF	Citations
1	Algorithm Unrolling for Massive Access via Deep Neural Networks With Theoretical Guarantee. IEEE Transactions on Wireless Communications, 2022, 21, 945-959.	9.2	13
2	Federated Learning via Intelligent Reflecting Surface. IEEE Transactions on Wireless Communications, 2022, 21, 808-822.	9.2	78
3	Over-the-air computation for federated learning. , 2022, , 131-151.		0
4	Primer on artificial intelligence. , 2022, , 7-36.		1
5	Mobile edge AI. , 2022, , 57-68.		4
6	Blind over-the-air computation for federated learning. , 2022, , 167-173.		0
7	Motivations and organization. , 2022, , 3-5.		0
8	Model compression for on-device inference. , 2022, , 71-82.		1
9	Coded computing for on-device cooperative inference. , 2022, , 83-101.		1
10	A Proximal Iteratively Reweighted Approach for Efficient Network Sparsification. IEEE Transactions on Computers, 2022, 71, 185-196.	3.4	1
11	UAV Aided Over-the-Air Computation. IEEE Transactions on Wireless Communications, 2022, 21, 4909-4924.	9.2	14
12	Reconfigurable Intelligent Surface Assisted Massive MIMO With Antenna Selection. IEEE Transactions on Wireless Communications, 2022, 21, 4769-4783.	9.2	12
13	Faster Activity and Data Detection in Massive Random Access: A Multiarmed Bandit Approach. IEEE Internet of Things Journal, 2022, 9, 13664-13678.	8.7	8
14	Decentralized Multi-Agent Power Control in Wireless Networks With Frequency Reuse. IEEE Transactions on Communications, 2022, 70, 1666-1681.	7.8	6
15	Edge Artificial Intelligence for 6G: Vision, Enabling Technologies, and Applications. IEEE Journal on Selected Areas in Communications, 2022, 40, 5-36.	14.0	206
16	Distributionally Robust Joint Chance-Constrained Dispatch for Integrated Transmission-Distribution Systems via Distributed Optimization. IEEE Transactions on Smart Grid, 2022, 13, 2132-2147.	9.0	25
17	Sparse and Low-Rank Optimization for Pliable Index Coding via Alternating Projection. IEEE Transactions on Communications, 2022, 70, 3708-3724.	7.8	0
18	Interference Management for Over-the-Air Federated Learning in Multi-Cell Wireless Networks. IEEE Journal on Selected Areas in Communications, 2022, 40, 2361-2377.	14.0	26

#	Article	IF	Citations
19	Over-the-Air Federated Learning via Second-Order Optimization. IEEE Transactions on Wireless Communications, 2022, 21, 10560-10575.	9.2	7
20	Wireless Federated Learning over MIMO Networks: Joint Device Scheduling and Beamforming Design. , 2022, , .		2
21	Over-the-Air Computation for Vertical Federated Learning. , 2022, , .		1
22	Wireless-Powered Over-the-Air Computation in Intelligent Reflecting Surface-Aided IoT Networks. IEEE Internet of Things Journal, 2021, 8, 1585-1598.	8.7	72
23	Graph Neural Networks for Scalable Radio Resource Management: Architecture Design and Theoretical Analysis. IEEE Journal on Selected Areas in Communications, 2021, 39, 101-115.	14.0	105
24	Over-the-Air Computation via Reconfigurable Intelligent Surface. IEEE Transactions on Communications, 2021, 69, 8612-8626.	7.8	28
25	Robust Design for Reconfigurable Intelligent Surface Assisted Over-the-Air Computation. , 2021, , .		3
26	Reconfigurable-Intelligent-Surface Empowered Wireless Communications: Challenges and Opportunities. IEEE Wireless Communications, 2021, 28, 136-143.	9.0	160
27	Large-Scale Beamforming for Massive MIMO <?brk?>via Randomized Sketching. IEEE Transactions on Vehicular Technology, 2021, 70, 4669-4681.	6.3	2
28	Reconfigurable Intelligent Surface Empowered Downlink Non-Orthogonal Multiple Access. IEEE Transactions on Communications, 2021, 69, 3802-3817.	7.8	84
29	Reconfigurable Intelligent Surface for Green Edge Inference. IEEE Transactions on Green Communications and Networking, 2021, 5, 964-979.	5.5	36
30	Over-the-Air Computation via Cloud Radio Access Networks. , 2021, , .		1
31	Byzantine-Resilient Federated Machine Learning via Over-the-Air Computation. , 2021, , .		8
32	Fast Convergence Algorithm for Analog Federated Learning. , 2021, , .		15
33	Saddle Point Approximation Based Delay Analysis for Wireless Federated Learning. , 2021, , .		1
34	Reconfigurable Intelligent Surface for Interference Alignment in MIMO Device-to-Device Networks. , 2021, , .		12
35	Reconfigurable Intelligent Surface Assisted Federated Learning with Privacy Guarantee. , 2021, , .		2
36	Joint Admission Control and Beamforming for Intelligent Reflecting Surface Aided Wireless Networks. , 2021, , .		3

#	Article	IF	Citations
37	Over-the-Air Decentralized Federated Learning. , 2021, , .		22
38	Reconfigurable Intelligent Surface for Massive Connectivity: Joint Activity Detection and Channel Estimation. IEEE Transactions on Signal Processing, 2021, 69, 5693-5707.	5.3	11
39	Delay Analysis of Wireless Federated Learning Based on Saddle Point Approximation and Large Deviation Theory. IEEE Journal on Selected Areas in Communications, 2021, 39, 3772-3789.	14.0	18
40	Nonconvex and Nonsmooth Sparse Optimization via Adaptively Iterative Reweighted Methods. Journal of Global Optimization, 2021, 81, 717-748.	1.8	1
41	Sparse Signal Processing for Massive Connectivity via Mixed-Integer Programming. , 2021, , .		0
42	Multiuser Downlink Beamforming for URLLC in the Short Blocklength Regime. , 2021, , .		0
43	Optimal Receive Beamforming for Over-the-Air Computation. , 2021, , .		2
44	Communication-Efficient Quantized SGD for Learning Polynomial Neural Network. , 2021, , .		1
45	Interference Management for Over-the-Air Computation and Cellular Coexistence Systems. , 2021, , .		0
46	Learning Proximal Operator Methods for Massive Connectivity in IoT Networks. , 2021, , .		2
47	Double-RIS Assisted Over-the-Air Computation. , 2021, , .		2
48	Capacity Region of Intelligent Reflecting Surface Aided Wireless Networks via Active Learning. , 2021, , .		1
49	Fast computation of von Neumann entropy for large-scale graphs via quadratic approximations. Linear Algebra and Its Applications, 2020, 585, 127-146.	0.9	5
50	Federated Learning via Over-the-Air Computation. IEEE Transactions on Wireless Communications, 2020, 19, 2022-2035.	9.2	550
51	LORM: Learning to Optimize for Resource Management in Wireless Networks With Few Training Samples. IEEE Transactions on Wireless Communications, 2020, 19, 665-679.	9.2	77
52	Towards Reconfigurable Intelligent Surfaces Powered Green Wireless Networks. , 2020, , .		21
53	Distributed Optimization for Massive Connectivity. IEEE Wireless Communications Letters, 2020, 9, 1412-1416.	5.0	3
54	Sparse Signal Processing for Massive Device Connectivity via Deep Learning. , 2020, , .		9

#	Article	IF	Citations
55	Wirelessly Powered Data Aggregation via Intelligent Reflecting Surface Assisted Over-the-Air Computation. , 2020, , .		3
56	Coordinated Passive Beamforming for Distributed Intelligent Reflecting Surfaces Network. , 2020, , .		22
57	Reconfigurable Intelligent Surface Assisted Non-Orthogonal Unicast and Broadcast Transmission. , 2020, , .		4
58	Federated Machine Learning for Intelligent IoT via Reconfigurable Intelligent Surface. IEEE Network, 2020, 34, 16-22.	6.9	116
59	Bandit Sampling for Faster Activity and Data Detection in Massive Random Access. , 2020, , .		4
60	Outage Minimization for Intelligent Reflecting Surface Aided MISO Communication Systems via Stochastic Beamforming. , 2020, , .		5
61	An Algebraic-Geometric Approach for Linear Regression Without Correspondences. IEEE Transactions on Information Theory, 2020, 66, 5130-5144.	2.4	14
62	Phase Retrieval via Difference of Convex Programming. , 2020, , .		1
63	Communication-Efficient Edge AI: Algorithms and Systems. IEEE Communications Surveys and Tutorials, 2020, 22, 2167-2191.	39.4	200
64	Blind Over-the-Air Computation and Data Fusion via Provable Wirtinger Flow. IEEE Transactions on Signal Processing, 2020, 68, 1136-1151.	5.3	41
65	Energy-Efficient Processing and Robust Wireless Cooperative Transmission for Edge Inference. IEEE Internet of Things Journal, 2020, 7, 9456-9470.	8.7	27
66	Intelligent Reflecting Surface for Massive Device Connectivity: Joint Activity Detection and Channel Estimation. , 2020, , .		29
67	Low-overhead Communications in IoT Networks. , 2020, , .		7
68	Reconfigurable Intelligent Surface Enhanced Cognitive Radio Networks. , 2020, , .		15
69	Blind Demixing. , 2020, , 35-58.		0
70	Stochastic Beamforming for Reconfigurable Intelligent Surface Aided Over-the-Air Computation. , 2020, , .		7
71	Age of Aggregated Information: Timely Status Update with Over-The-Air Computation. , 2020, , .		4
72	Sparse Blind Demixing. , 2020, , 59-74.		0

#	Article	IF	Citations
73	Sparse Linear Model. , 2020, , 13-34.		0
74	Noisy Demixing: Convex Relaxation Meets Nonconvex Optimization. , 2020, , .		0
75	Multigroup Multicast Transmission via Intelligent Reflecting Surface. , 2020, , .		2
76	The Roadmap to 6G: AI Empowered Wireless Networks. IEEE Communications Magazine, 2019, 57, 84-90.	6.1	1,139
77	Pliable Data Shuffling for On-device Distributed Learning. , 2019, , .		2
78	Sparse Blind Demixing for Low-latency Signal Recovery in Massive Iot Connectivity. , 2019, , .		4
79	Federated Learning Based on Over-the-Air Computation. , 2019, , .		38
80	Stochastic Submodular Maximization for Scalable Network Adaptation in Dense Cloud-RAN. , 2019, , .		1
81	Layer-wise Deep Neural Network Pruning via Iteratively Reweighted Optimization. , 2019, , .		11
82	Learning Shallow Neural Networks via Provable Gradient Descent with Random Initialization. , 2019, , .		5
83	Transfer Learning for Mixed-Integer Resource Allocation Problems in Wireless Networks. , 2019, , .		20
84	Flexible Functional Split Design for Downlink C-RAN With Capacity-Constrained Fronthaul. IEEE Transactions on Vehicular Technology, 2019, 68, 6050-6063.	6.3	19
85	Data Shuffling in Wireless Distributed Computing via Low-Rank Optimization. IEEE Transactions on Signal Processing, 2019, 67, 3087-3099.	5.3	26
86	Comparing large-scale graphs based on quantum probability theory. Applied Mathematics and Computation, 2019, 358, 1-15.	2.2	4
87	Generalized Low-Rank Optimization for Topological Cooperation in Ultra-Dense Networks. IEEE Transactions on Wireless Communications, 2019, 18, 2539-2552.	9.2	12
88	Blind Deconvolution Meets Phase Retrieval in Optical Wireless Communications. , 2019, , .		2
89	Intelligent Reflecting Surface for Downlink Non-Orthogonal Multiple Access Networks. , 2019, , .		127
90	Learning to Branch-and-Bound for Header-Free Communications. , 2019, , .		2

#	Article	IF	Citations
91	Reconfigurable Intelligent Surface for Green Edge Inference in Machine Learning. , 2019, , .		24
92	Randomized Sketching Based Beamforming for Massive MIMO. , 2019, , .		1
93	A Graph Neural Network Approach for Scalable Wireless Power Control. , 2019, , .		45
94	Over-the-Air Computation via Intelligent Reflecting Surfaces. , 2019, , .		97
95	Sparse Blind Demixing for Low-Latency Wireless Random Access with Massive Connectivity. , 2019, , .		2
96	Blind Demixing for Low-Latency Communication. IEEE Transactions on Wireless Communications, 2019, 18, 897-911.	9.2	17
97	Joint Activity Detection and Channel Estimation for IoT Networks: Phase Transition and Computation-Estimation Tradeoff. IEEE Internet of Things Journal, 2019, 6, 6212-6225.	8.7	41
98	Massive CSI Acquisition for Dense Cloud-RANs With Spatial-Temporal Dynamics. IEEE Transactions on Wireless Communications, 2018, 17, 2557-2570.	9.2	9
99	Enhanced Group Sparse Beamforming for Green Cloud-RAN: A Random Matrix Approach. IEEE Transactions on Wireless Communications, 2018, 17, 2511-2524.	9.2	18
100	Permuted Linear Model for Header-Free Communication via Symmetric Polynomials. , 2018, , .		8
101	Generalized Low-Rank Matrix Completion via Nonconvex Schatten p-Norm Minimization. , 2018, , .		0
102	Blind demixing for low-latency communication. , 2018, , .		4
103	RANDOMIZED METHOD FOR ESTIMATING THE VON NEUMANN ENTROPY OF LARGE-SCALE DENSITY MATRICES. , 2018, , .		1
104	Comparing Massive Networks via Moment Matrices. , 2018, , .		0
105	L_{2}-Box Optimization for Green Cloud-RAN via Network Adaptation. , 2018, , .		0
106	Nonconvex Demixing from Bilinear Measurements. , 2018, , .		0
107	SPARSE AND LOW-RANK OPTIMIZATION FOR PLIABLE INDEX CODING. , 2018, , .		2
108	SCALABLE NETWORK ADAPTATION FOR CLOUD-RANS: AN IMITATION LEARNING APPROACH. , 2018, , .		3

#	Article	IF	Citations
109	Phase Transitions of Massive Device Connectivity via Convex Geometry. , 2018, , .		0
110	Low-Rank Optimization for Data Shuffling in Wireless Distributed Computing. , 2018, , .		7
111	Topological Interference Alignment via Generalized Low-Rank Optimization with Sequential Convex Approximations. , 2018, , .		0
112	Nonconvex Demixing From Bilinear Measurements. IEEE Transactions on Signal Processing, 2018, 66, 5152-5166.	5.3	32
113	Generalized Sparse and Low-Rank Optimization for Ultra-Dense Networks. , 2018, 56, 42-48.		36
114	Layered Group Sparse Beamforming for Cache-Enabled Green Wireless Networks. IEEE Transactions on Communications, 2017, 65, 5589-5603.	7.8	29
115	Ranking from Crowdsourced Pairwise Comparisons via Smoothed Matrix Manifold Optimization. , 2017, , .		1
116	Generalized matrix completion for low complexity transceiver processing in cache-aided Fog-RAN via the Burer-Monteiro approach. , 2017, , .		1
117	Topological Interference Management With User Admission Control via Riemannian Optimization. IEEE Transactions on Wireless Communications, 2017, 16, 7362-7375.	9.2	16
118	Massive CSI acquisition in dense cloud-RAN with spatial and temporal prior information. , 2017, , .		3
119	Statistical group sparse beamforming for green Cloud-RAN via large system analysis. , 2016, , .		2
120	Low-Rank Matrix Completion for Mobile Edge Caching in Fog-RAN via Riemannian Optimization. , 2016, , .		7
121	Low-Rank Matrix Completion for Topological Interference Management by Riemannian Pursuit. IEEE Transactions on Wireless Communications, 2016, , 1-1.	9.2	37
122	Computation offloading in cloud-RAN based mobile cloud computing system. , 2016, , .		35
123	A low-rank approach for interference management in dense wireless networks. , 2016, , .		0
124	Optimal stochastic power control with compressive CSI acquisition for Cloud-RAN. , 2016, , .		0
125	Smoothed -Minimization for Green Cloud-RAN With User Admission Control. IEEE Journal on Selected Areas in Communications, 2016, 34, 1022-1036.	14.0	62
126	Robust Group Sparse Beamforming for Multicast Green Cloud-RAN With Imperfect CSI. IEEE Transactions on Signal Processing, 2015, 63, 4647-4659.	5.3	59

#	Article	IF	Citations
127	Optimal Stochastic Coordinated Beamforming for Wireless Cooperative Networks With CSI Uncertainty. IEEE Transactions on Signal Processing, 2015, 63, 960-973.	5.3	46
128	Large-Scale Convex Optimization for Dense Wireless Cooperative Networks. IEEE Transactions on Signal Processing, 2015, 63, 4729-4743.	5.3	97
129	Large-scale convex optimization for ultra-dense cloud-RAN. IEEE Wireless Communications, 2015, 22, 84-91.	9.0	88