Shengli Xie

List of Publications by Year
in descending order

102 papers	7,220 citations	57758 44 h-index	54911 84 g-index
103 all docs	103 docs citations	103 times ranked	6166 citing authors

#	Article	IF	Citations
1	Blockchain for Secure and Efficient Data Sharing in Vehicular Edge Computing and Networks. IEEE Internet of Things Journal, 2019, 6, 4660-4670.	8.7	547
2	Incentive Mechanism for Reliable Federated Learning: A Joint Optimization Approach to Combining Reputation and Contract Theory. IEEE Internet of Things Journal, 2019, 6, 10700-10714.	8.7	520
3	Intelligent Edge Computing for IoT-Based Energy Management in Smart Cities. IEEE Network, 2019, 33, 111-117.	6.9	368
4	Cognitive machine-to-machine communications: visions and potentials for the smart grid. IEEE Network, 2012, 26, 6-13.	6.9	346
5	Deep Reinforcement Learning for Offloading and Resource Allocation in Vehicle Edge Computing and Networks. IEEE Transactions on Vehicular Technology, 2019, 68, 11158-11168.	6.3	339
6	Underdetermined blind source separation based on sparse representation. IEEE Transactions on Signal Processing, 2006, 54, 423-437.	5.3	261
7	Cognitive radio based hierarchical communications infrastructure for smart grid. IEEE Network, 2011, 25, 6-14.	6.9	235
8	Symmetric Nonnegative Matrix Factorization: Algorithms and Applications to Probabilistic Clustering. IEEE Transactions on Neural Networks, 2011, 22, 2117-2131.	4.2	202
9	Fast Nonnegative Matrix/Tensor Factorization Based on Low-Rank Approximation. IEEE Transactions on Signal Processing, 2012, 60, 2928-2940.	5.3	182
10	Peak-to-Average Ratio Constrained Demand-Side Management With Consumer's Preference in Residential Smart Grid. IEEE Journal on Selected Topics in Signal Processing, 2014, 8, 1084-1097.	10.8	179
11	Blind Spectral Unmixing Based on Sparse Nonnegative Matrix Factorization. IEEE Transactions on Image Processing, 2011, 20, 1112-1125.	9.8	149
12	Detecting the Number of Clusters in n-Way Probabilistic Clustering. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2010, 32, 2006-2021.	13.9	148
13	Linked Component Analysis From Matrices to High-Order Tensors: Applications to Biomedical Data. Proceedings of the IEEE, 2016, 104, 310-331.	21.3	148
14	Balancing Power Demand Through EV Mobility in Vehicle-to-Grid Mobile Energy Networks. IEEE Transactions on Industrial Informatics, 2016, 12, 79-90.	11.3	145
15	Efficient Mobility-Aware Task Offloading for Vehicular Edge Computing Networks. IEEE Access, 2019, 7, 26652-26664.	4.2	143
16	Efficient Nonnegative Tucker Decompositions: Algorithms and Uniqueness. IEEE Transactions on Image Processing, 2015, 24, 4990-5003.	9.8	135
17	Reinforcement Learning-Based Adaptive Optimal Exponential Tracking Control of Linear Systems With Unknown Dynamics. IEEE Transactions on Automatic Control, 2019, 64, 4423-4438.	5.7	134
18	Online Blind Source Separation Using Incremental Nonnegative Matrix Factorization With Volume Constraint. IEEE Transactions on Neural Networks, 2011, 22, 550-560.	4.2	129

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19	Electricity Cost Minimization for a Microgrid With Distributed Energy Resource Under Different Information Availability. IEEE Transactions on Industrial Electronics, 2015, 62, 2571-2583.	7.9	126
20	Minimum-Volume-Constrained Nonnegative Matrix Factorization: Enhanced Ability of Learning Parts. IEEE Transactions on Neural Networks, 2011, 22, 1626-1637.	4.2	125
21	A Parallel Cooperative Spectrum Sensing in Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2010, 59, 4079-4092.	6.3	118
22	Cooperative Offloading and Resource Management for UAV-Enabled Mobile Edge Computing in Power IoT System. IEEE Transactions on Vehicular Technology, 2020, 69, 12229-12239.	6.3	105
23	Time-Frequency Approach to Underdetermined Blind Source Separation. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 306-316.	11.3	102
24	PHEV Charging and Discharging Cooperation in V2G Networks: A Coalition Game Approach. IEEE Internet of Things Journal, 2014, 1, 578-589.	8.7	96
25	Computing Resource Trading for Edge-Cloud-Assisted Internet of Things. IEEE Transactions on Industrial Informatics, 2019, 15, 3661-3669.	11.3	96
26	Nonnegative Matrix and Tensor Factorizations : An algorithmic perspective. IEEE Signal Processing Magazine, 2014, 31, 54-65.	5.6	91
27	Mixing Matrix Estimation From Sparse Mixtures With Unknown Number of Sources. IEEE Transactions on Neural Networks, 2011, 22, 211-221.	4.2	90
28	Fair Energy Scheduling for Vehicle-to-Grid Networks Using Adaptive Dynamic Programming. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 1697-1707.	11.3	85
29	Auction Mechanisms for Energy Trading in Multi-Energy Systems. IEEE Transactions on Industrial Informatics, 2018, 14, 1511-1521.	11.3	82
30	Nonorthogonal Approximate Joint Diagonalization With Well-Conditioned Diagonalizers. IEEE Transactions on Neural Networks, 2009, 20, 1810-1819.	4.2	76
31	Convolutive Blind Source Separation in the Frequency Domain Based on Sparse Representation. IEEE Transactions on Audio Speech and Language Processing, 2007, 15, 1551-1563.	3.2	68
32	A Note on Stone's Conjecture of Blind Signal Separation. Neural Computation, 2005, 17, 321-330.	2.2	66
33	Deep graph regularized non-negative matrix factorization for multi-view clustering. Neurocomputing, 2020, 390, 108-116.	5.9	66
34	K-hyperline clustering learning for sparse component analysis. Signal Processing, 2009, 89, 1011-1022.	3.7	65
35	Topology-Aware Vehicle-to-Grid Energy Trading for Active Distribution Systems. IEEE Transactions on Smart Grid, 2019, 10, 2137-2147.	9.0	64
36	Multi-Resource Allocation of Shared Energy Storage: A Distributed Combinatorial Auction Approach. IEEE Transactions on Smart Grid, 2020, 11, 4105-4115.	9.0	58

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37	Online Control and Near-Optimal Algorithm for Distributed Energy Storage Sharing in Smart Grid. IEEE Transactions on Smart Grid, 2020, 11, 2552-2562.	9.0	57
38	Credit-Based Payments for Fast Computing Resource Trading in Edge-Assisted Internet of Things. IEEE Internet of Things Journal, 2019, 6, 6606-6617.	8.7	56
39	Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. IEEE Transactions on Smart Grid, 2020, , 1-1.	9.0	54
40	FedParking: A Federated Learning Based Parking Space Estimation With Parked Vehicle Assisted Edge Computing. IEEE Transactions on Vehicular Technology, 2021, 70, 9355-9368.	6.3	54
41	ADMM-Based Distributed Auction Mechanism for Energy Hub Scheduling in Smart Buildings. IEEE Access, 2018, 6, 45635-45645.	4.2	50
42	Off-policy learning for adaptive optimal output synchronization of heterogeneous multi-agent systems. Automatica, 2020, 119, 109081.	5.0	49
43	NOMA-Enabled Cooperative Computation Offloading for Blockchain-Empowered Internet of Things: A Learning Approach. IEEE Internet of Things Journal, 2021, 8, 2364-2378.	8.7	47
44	Nonnegative Blind Source Separation by Sparse Component Analysis Based on Determinant Measure. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 1601-1610.	11.3	45
45	Efficient Workload Allocation and User-Centric Utility Maximization for Task Scheduling in Collaborative Vehicular Edge Computing. IEEE Transactions on Vehicular Technology, 2021, 70, 3773-3787.	6.3	45
46	Blockchain Empowered Wireless Power Transfer for Green and Secure Internet of Things. IEEE Network, 2019, 33, 164-171.	6.9	44
47	Improved FOCUSS Method With Conjugate Gradient Iterations. IEEE Transactions on Signal Processing, 2009, 57, 399-404.	5.3	42
48	Task-Container Matching Game for Computation Offloading in Vehicular Edge Computing and Networks. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 6242-6255.	8.0	38
49	Toward secure energy harvesting cooperative networks. , 2015, 53, 114-121.		35
50	On Solving WCDMA Network Planning Using Iterative Power Control Scheme and Evolutionary Multiobjective Algorithm [Application Notes]. IEEE Computational Intelligence Magazine, 2014, 9, 44-52.	3.2	33
51	Cooperative Federated Learning and Model Update Verification in Blockchain-Empowered Digital Twin Edge Networks. IEEE Internet of Things Journal, 2022, 9, 11154-11167.	8.7	32
52	STUDY ON THE GLOBAL PROPERTY OF THE SMOOTH CHUA'S SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 2815-2841.	1.7	31
53	Sparse representation and blind source separation of ill-posed mixtures. Science in China Series F: Information Sciences, 2006, 49, 639-652.	1.1	30
54	Joint Transaction Relaying and Block Verification Optimization for Blockchain Empowered D2D Communication. IEEE Transactions on Vehicular Technology, 2020, 69, 828-841.	6.3	30

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55	Energy-Efficient Hybrid Spectrum Access Scheme in Cognitive Vehicular Ad hoc Networks. IEEE Communications Letters, 2013, 17, 329-332.	4.1	28
56	Resource Allocation for Edge Computing-Based Vehicle Platoon on Freeway: A Contract-Optimization Approach. IEEE Transactions on Vehicular Technology, 2020, 69, 15988-16000.	6.3	28
57	Learning the Hierarchical Parts of Objects by Deep Non-Smooth Nonnegative Matrix Factorization. IEEE Access, 2018, 6, 58096-58105.	4.2	27
58	Under-Determined Convolutive Blind Source Separation Combining Density-Based Clustering and Sparse Reconstruction in Time-Frequency Domain. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 3015-3027.	5.4	27
59	A Multi-Dimensional Contract Approach for Data Rewarding in Mobile Networks. IEEE Transactions on Wireless Communications, 2020, 19, 5779-5793.	9.2	27
60	A Note on Lewicki-Sejnowski Gradient for Learning Overcomplete Representations. Neural Computation, 2008, 20, 636-643.	2.2	26
61	On Demand Response Management Performance Optimization for Microgrids Under Imperfect Communication Constraints. IEEE Internet of Things Journal, 2017, 4, 881-893.	8.7	26
62	Equivalence Probability and Sparsity of Two Sparse Solutions in Sparse Representation. IEEE Transactions on Neural Networks, 2008, 19, 2009-2021.	4.2	23
63	Cross-Layer Optimized Call Admission Control in Cognitive Radio Networks. Mobile Networks and Applications, 2010, 15, 610-626.	3.3	22
64	Optimal WCDMA network planning by multiobjective evolutionary algorithm with problem-specific genetic operation. Knowledge and Information Systems, 2015, 45, 679-703.	3.2	22
65	MEC-Driven UAV-Enabled Routine Inspection Scheme in Wind Farm Under Wind Influence. IEEE Access, 2019, 7, 179252-179265.	4.2	22
66	Nonnegative Matrix Factorization Applied to Nonlinear Speech and Image Cryptosystems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 2356-2367.	5.4	21
67	Underdetermined convolutive blind separation of sources integrating tensor factorization and expectation maximization. , 2019, 87, 145-154.		19
68	Incentivizing Resource Cooperation for Blockchain Empowered Wireless Power Transfer in UAV Networks. IEEE Transactions on Vehicular Technology, 2020, 69, 15828-15841.	6.3	19
69	Projection-Pursuit-Based Method for Blind Separation of Nonnegative Sources. IEEE Transactions on Neural Networks and Learning Systems, 2013, 24, 47-57.	11.3	18
70	Accelerated Canonical Polyadic Decomposition Using Mode Reduction. IEEE Transactions on Neural Networks and Learning Systems, 2013, 24, 2051-2062.	11.3	18
71	Energy-Efficient Spectrum Discovery for Cognitive Radio Green Networks. Mobile Networks and Applications, 2012, 17, 64-74.	3.3	17
72	Distributed Demand Response for Multienergy Residential Communities With Incomplete Information. IEEE Transactions on Industrial Informatics, 2021, 17, 547-557.	11.3	16

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73	ADMM Empowered Distributed Computational Intelligence for Internet of Energy. IEEE Computational Intelligence Magazine, 2019, 14, 42-51.	3.2	15
74	Modeling the Tracking Area Planning Problem Using an Evolutionary Multi-Objective Algorithm. IEEE Computational Intelligence Magazine, 2017, 12, 29-41.	3.2	13
75	Eliminating the Permutation Ambiguity of Convolutive Blind Source Separation by Using Coupled Frequency Bins. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 589-599.	11.3	13
76	A second-order blind equalization method robust to ill-conditioned SIMO FIR channels. , 2014, 32, 57-66.		11
77	Exploiting temporal and spatial diversities for spectrum sensing and access in cognitive vehicular networks. Wireless Communications and Mobile Computing, 2015, 15, 2079-2094.	1.2	11
78	Underdetermined Blind Source Separation Combining Tensor Decomposition and Nonnegative Matrix Factorization. Symmetry, 2018, 10, 521.	2.2	11
79	Underdetermined Reverberant Audio-Source Separation Through Improved Expectation–Maximization Algorithm. Circuits, Systems, and Signal Processing, 2019, 38, 2877-2889.	2.0	11
80	Underdetermined Blind Source Separation of Speech Mixtures Based on K-means Clustering. , 2019, , .		10
81	Chance Constrained Scheduling and Pricing for Multi-Service Battery Energy Storage. IEEE Transactions on Smart Grid, 2021, 12, 5030-5042.	9.0	9
82	Graph Regularized Nonnegative Tucker Decomposition for Tensor Data Representation. , 2019, , .		7
83	Source Number Estimation and Effective Channel Order Determination Based on Higher-Order Tensors. Circuits, Systems, and Signal Processing, 2019, 38, 5393-5408.	2.0	6
84	Underdetermined blind source separation of speech mixtures unifying dictionary learning and sparse representation. International Journal of Machine Learning and Cybernetics, 2021, 12, 3573-3583.	3.6	6
85	Dynamic Scheduling of Multi-Type Battery Charging Stations for EV Battery Swapping. , 2019, , .		4
86	Fast nonnegative tensor ring decomposition based on the modulus method and low-rank approximation. Science China Technological Sciences, 2021, 64, 1843-1853.	4.0	4
87	FIR Convolutive BSS Based on Sparse Representation. Lecture Notes in Computer Science, 2005, , 532-537.	1.3	3
88	On Blind Separability Based on the Temporal Predictability Method. Neural Computation, 2009, 21, 3519-3531.	2.2	3
89	QoS Differentiated and Fair Packet Scheduling in Broadband Wireless Access Networks. Eurasip Journal on Wireless Communications and Networking, 2009, 2009, .	2.4	3
90	Blind Source Separation by Fully Nonnegative Constrained Iterative Volume Maximization. IEEE Signal Processing Letters, 2010, 17, 799-802.	3.6	3

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91	Asynchronous cooperative spectrum sensing in multi-hop cognitive radio networks. , 2012, , .		2
92	MEC-Driven Fast Deformation Monitoring Based on GNSS Signal. Wireless Communications and Mobile Computing, 2021, 2021, 1-9.	1.2	2
93	Coalition Game Approach for Electricity Sharing in Multi-Energy Multi-Microgrid Network. , 2021, , .		2
94	Fast multiplicative algorithms for symmetric nonnegative tensor factorization. Neurocomputing, 2022, 500, 255-267.	5.9	2
95	Blind Source Separation. , 2017, , .		1
96	K-Hyperplanes Clustering and Its Application to Sparse Component Analysis. Lecture Notes in Computer Science, 2006, , 1038-1047.	1.3	1
97	Sparse representation of complex valued signals. , 2006, , .		0
98	A Penalty Function Based Algorithm of Blind Separation. , 2006, , .		0
99	Statistically non-sparse decomposition of two underdetermined audio mixtures. , 2008, , .		0
100	Blind Extraction Using Fractional Lower-Order Statistics. , 2009, , .		0
101	Optimized projections for nonnegative linear reconstruction classification. Neurocomputing, 2016, 173, 1743-1751.	5.9	0
102	Blind Separation of Heart Sound Convolutive Mixtures Utilizing Independent Vector Analysis. , 2021, , .		0