Mingyan Liu

List of Publications by Citations

97 papers	**1,838** citations
22 h-index	**41** g-index
119 ext. papers	**2,235** ext. citations
5 avg, IF	**5.08** L-index

#	Paper	IF	Citations
97	Optimality of Myopic Sensing in Multichannel Opportunistic Access. *IEEE Transactions on Information Theory*, **2009**, 55, 4040-4050	2.8	229
96	Mining Spectrum Usage Data: A Large-Scale Spectrum Measurement Study. *IEEE Transactions on Mobile Computing*, **2012**, 11, 1033-1046	4.6	131
95	Data-gathering wireless sensor networks: organization and capacity. *Computer Networks*, **2003**, 43, 519-537	5.4	121
94	Analysis of energy consumption and lifetime of heterogeneous wireless sensor networks		111
93	Online Learning of Rested and Restless Bandits. *IEEE Transactions on Information Theory*, **2012**, 58, 5588-5611	2.8	73
92	A Wireless Soil Moisture Smart Sensor Web Using Physics-Based Optimal Control: Concept and Initial Demonstrations. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2010**, 3, 522-535	4.7	70
91	Optimal Channel Probing and Transmission Scheduling for Opportunistic Spectrum Access. *IEEE/ACM Transactions on Networking*, **2009**, 17, 1805-1818	3.8	66
90	A general framework to construct stationary mobility models for the simulation of mobile networks. *IEEE Transactions on Mobile Computing*, **2006**, 5, 860-871	4.6	66
89	Atomic Congestion Games on Graphs and Their Applications in Networking. *IEEE/ACM Transactions on Networking*, **2012**, 20, 1541-1552	3.8	64
88	Profit Incentive in Trading Nonexclusive Access on a Secondary Spectrum Market Through Contract Design. *IEEE/ACM Transactions on Networking*, **2014**, 22, 1190-1203	3.8	60
87	Online learning in opportunistic spectrum access: A restless bandit approach **2011**,		52
86	Controlled Flooding Search in a Large Network. *IEEE/ACM Transactions on Networking*, **2007**, 15, 436-449	3.8	52
85	Networked Computing in Wireless Sensor Networks for Structural Health Monitoring. *IEEE/ACM Transactions on Networking*, **2012**, 20, 1203-1216	3.8	39
84	Mitigating Large Errors in WiFi-Based Indoor Localization for Smartphones. *IEEE Transactions on Vehicular Technology*, **2017**, 66, 6246-6257	6.8	38
83	Randomly Duty-cycled Wireless Sensor Networks: Dynamics of Coverage. *IEEE Transactions on Wireless Communications*, **2006**, 5, 3182-3192	9.6	36
82	When simplicity meets optimality: Efficient transmission power control with stochastic energy harvesting **2013**,		33
81	. *IEEE Transactions on Information Forensics and Security*, **2018**, 13, 2226-2239	8	30

80	Distributed Reference-Free Fault Detection Method for Autonomous Wireless Sensor Networks. *IEEE Sensors Journal*, **2013**, 13, 2009-2019	4	30
79	Price of Anarchy for Congestion Games in Cognitive Radio Networks. *IEEE Transactions on Wireless Communications*, **2012**, 11, 3778-3787	9.6	27
78	Online algorithms for the multi-armed bandit problem with Markovian rewards **2010**,		27
77	Channel Estimation for Opportunistic Spectrum Access: Uniform and Random Sensing. *IEEE Transactions on Mobile Computing*, **2012**, 11, 1304-1316	4.6	23
76	Measurement Scheduling for Soil Moisture Sensing: From Physical Models to Optimal Control. *Proceedings of the IEEE*, **2010**, 98, 1918-1933	14.3	22
75	Approximately optimal adaptive learning in opportunistic spectrum access **2012**,		21
74	Optimal controlled flooding search in a large wireless network		20
73	Dynamic pricing of power in Smart-Grid networks **2012**,		19
72	Price of Anarchy for Cognitive MAC Games **2009**,		19
71	Efficient Sensor Fault Detection Using Combinatorial Group Testing **2013**,		17
70	Risky business: Fine-grained data breach prediction using business profiles. *Translational Research in Oral Oncology*, **2016**, 2, 15-28	3.8	16
69	On the optimality of an index policy for bandwidth allocation with delayed state observation and differentiated services		16
68	Optimal Sleep Scheduling for a Wireless Sensor Network Node **2006**,		15
67	Fixed point approximation for multirate multihop loss networks with state-dependent routing. *IEEE/ACM Transactions on Networking*, **2004**, 12, 361-374	3.8	14
66	. *IEEE Transactions on Information Forensics and Security*, **2016**, 11, 2790-2803	8	14
65	Optimal Competitive Algorithms for Opportunistic Spectrum Access. *IEEE Journal on Selected Areas in Communications*, **2008**, 26, 1183-1192	14.2	13
64	Evaluation of performance enhancing proxies in internet over satellite. *International Journal of Communication Systems*, **2003**, 16, 513-534	1.7	13
63	Provision of Public Goods on Networks: On Existence, Uniqueness, and Centralities. *IEEE Transactions on Network Science and Engineering*, **2018**, 5, 225-236	4.9	12

62	Energy-Efficient Transmission Scheduling With Strict Underflow Constraints. *IEEE Transactions on Information Theory*, **2011**, 57, 1344-1367	2.8	12
61	Recycled ADMM: Improve Privacy and Accuracy with Less Computation in Distributed Algorithms **2018**,		10
60	Adaptive learning of uncontrolled restless bandits with logarithmic regret **2011**,		9
59	Online learning for combinatorial network optimization with restless Markovian rewards **2012**,		9
58	To Stay or To Switch: Multiuser Multi-Channel Dynamic Access. *IEEE Transactions on Mobile Computing*, **2015**, 14, 858-871	4.6	8
57	An Online Approach to Dynamic Channel Access and Transmission Scheduling **2015**,		8
56	To stay or to switch: Multiuser dynamic channel access **2013**,		8
55	Hitchhike: Riding control on preambles **2014**,		8
54	Inter-temporal incentives in security information sharing agreements **2016**,		8
53	Perceptions and Truth: A Mechanism Design Approach to Crowd-Sourcing Reputation. *IEEE/ACM Transactions on Networking*, **2016**, 24, 163-176	3.8	7
52	On the uniqueness and stability of equilibria of network games **2017**,		7
51	Exit equilibrium: Towards understanding voluntary participation in security games **2016**,		7
50	CD-MAC: A contention detectable MAC for low duty-cycled wireless sensor networks **2015**,		7
49	Learning in Hide-and-Seek. *IEEE/ACM Transactions on Networking*, **2016**, 24, 1279-1292	3.8	6
48	Data-Driven Channel Modeling Using Spectrum Measurement. *IEEE Transactions on Mobile Computing*, **2015**, 14, 1794-1805	4.6	6
47	. *IEEE Journal on Selected Areas in Communications*, **2006**, 24, 1614-1626	14.2	6
46	Modeling TCP performance with proxies. *Computer Communications*, **2004**, 27, 961-975	5.1	6
45	Recycled ADMM: Improving the Privacy and Accuracy of Distributed Algorithms. *IEEE Transactions on Information Forensics and Security*, **2020**, 15, 1723-1734	8	6

44	Profit incentive in a secondary spectrum market: A contract design approach **2013**,		5
43	. *IEEE Journal on Selected Areas in Communications*, **2013**, 31, 2301-2311	14.2	5
42	Server allocation with delayed state observation: Sufficient conditions for the optimality of an index policy. *IEEE Transactions on Wireless Communications*, **2009**, 8, 1693-1705	9.6	5
41	In-situ soil moisture sensing: Measurement scheduling and estimation using compressive sensing **2012**,		5
40	Partial clustering: maintaining connectivity in a low duty-cycled dense wireless sensor network		5
39	Contract design for purchasing private data using a biased differentially private algorithm **2019**,		4
38	Throughput Optimal Switching in Multichannel WLANs. *IEEE Transactions on Mobile Computing*, **2013**, 12, 2470-2482	4.6	4
37	A reputation-based contract for repeated crowdsensing with costly verification **2017**,		4
36	**2014**,		4
35	Preference-Based Privacy Markets. *IEEE Access*, **2020**, 8, 146006-146026	3.5	4
34	Aggregate Cyber-Risk Management in the IoT Age: Cautionary Statistics for (Re)Insurers and Likes. *IEEE Internet of Things Journal*, **2021**, 8, 7360-7371	10.7	4
33	Incentivizing effort in interdependent security games using resource pooling **2019**,		3
32	Hitchhike: A Preamble-Based Control Plane for SNR-Sensitive Wireless Networks. *IEEE Transactions on Wireless Communications*, **2016**, 15, 1239-1251	9.6	3
31	Secondary User Data Capturing for Cognitive Radio Network Forensics under Capturing Uncertainty **2014**,		3
30	Analysis of TCP transient behavior and its effect on file transfer latency		3
29	Using Private and Public Assessments in Security Information Sharing Agreements. *IEEE Transactions on Information Forensics and Security*, **2020**, 15, 1801-1814	8	3
28	A Reputation-Based Contract for Repeated Crowdsensing With Costly Verification. *IEEE Transactions on Signal Processing*, **2019**, 67, 6092-6104	4.8	3
27	Distributive Model-Based Sensor Fault Diagnosis in Wireless Sensor Networks **2013**,		2

26	Poster abstract: Pair-wise reference-free fault detection in wireless sensor networks **2012**,		2
25	Price of anarchy of congestion games with player-specific constants **2011**,		2
24	An Efficient and Robust Computational Framework for Studying Lifetime and Information Capacity in Sensor Networks. *Mobile Networks and Applications*, **2005**, 10, 811-824	2.9	2
23	Privacy Risk is a Function of Information Type: Learnings for the Surveillance Capitalism Age. *IEEE Transactions on Network and Service Management*, **2021**, 18, 3280-3296	4.8	2
22	Data Trading with a Monopoly Social Network: Outcomes Are Mostly Privacy Welfare Damaging. *IEEE Networking Letters*, **2020**, 2, 185-189	2.8	1
21	Joint control of transmission power and channel switching against adaptive jamming **2013**,		1
20	Dynamic clock calibration via temperature measurement **2009**,		1
19	A stochastic differential equation model for spectrum utilization **2011**,		1
18	ZigBee Wireless Sensor Network Using Physics-Based Optimally Sampling for Soil Moisture Measurement **2011**,		1
17	In-Situ Soil Moisture Sensing: Efficient Random Sensor Placement and Field Estimation Using Compressive Sensing **2011**,		1
16	. *IEEE Transactions on Information Theory*, **2008**, 54, 4946-4965	2.8	1
15	An approach to rate allocation in multicast		1
14	**2004**,		1
13	Asymptotic connectivity of low duty-cycled wireless sensor networks		1
12	Data Trading with Competitive Social Platforms: Outcomes are Mostly Privacy Welfare Damaging. *IEEE Transactions on Network and Service Management*, **2020**, 1-1	4.8	1
11	Network Games with Strategic Machine Learning. *Lecture Notes in Computer Science*, **2021**, 118-137	0.9	0
10	Designing Contracts for Trading Private and Heterogeneous Data Using a Biased Differentially Private Algorithm. *IEEE Access*, **2021**, 9, 70732-70745	3.5	0
9	Sequential Learning and Decision-Making in Dynamic Channel Access and Transmission Scheduling **2019**, 869-897		

8	Optimal Server Allocation in Wireless Networks: The Use of Index Policies **2006**, 87-115	
7	Sequential Learning and Decision-Making in Dynamic Channel Access and Transmission Scheduling **2017**, 1-29	7
6	Opportunistic Scheduling with Deadline Constraints in Wireless Networks. *Springer Optimization and Its Applications*, **2011**, 127-155	0.4
5	Resource Pooling for Shared Fate: Incentivizing Effort in Interdependent Security Games Through Cross-Investments. *IEEE Transactions on Control of Network Systems*, **2021**, 8, 964-975	4
4	Corrections to Preference-Based Privacy Markets *IEEE Access*, **2021**, 9, 14179-14180	3.5
3	Corrections to Aggregate Cyber-Risk Management in the IoT Age: Cautionary Statistics for (Re)Insurers and Likes. *IEEE Internet of Things Journal*, **2021**, 8, 11773-11775	10.7
2	Smart Internet Probing: Scanning Using Adaptive Machine Learning **2021**, 411-437	
1	Cyber-Insurance Market **2021**, 1-6	