

Farhad Farokhi

List of Publications by Year in descending order

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101
papers

1,993
citations

567281

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289244

40
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103
all docs

103
docs citations

103
times ranked

1224
citing authors

#	ARTICLE	IF	CITATIONS
1	Federated Learning With Differential Privacy: Algorithms and Performance Analysis. IEEE Transactions on Information Forensics and Security, 2020, 15, 3454-3469.	6.9	773
2	When Machine Learning Meets Privacy. ACM Computing Surveys, 2022, 54, 1-36.	23.0	148
3	Secure and private control using semi-homomorphic encryption. Control Engineering Practice, 2017, 67, 13-20.	5.5	118
4	Towards Encrypted MPC for Linear Constrained Systems. , 2018, 2, 195-200.		82
5	Fisher Information as a Measure of Privacy: Preserving Privacy of Households With Smart Meters Using Batteries. IEEE Transactions on Smart Grid, 2018, 9, 4726-4734.	9.0	53
6	The Value of Collaboration in Convex Machine Learning with Differential Privacy. , 2020, , .		49
7	Distributed MPC Via Dual Decomposition and Alternative Direction Method of Multipliers. Intelligent Systems, Control and Automation: Science and Engineering, 2014, , 115-131.	0.5	47
8	Estimation With Strategic Sensors. IEEE Transactions on Automatic Control, 2017, 62, 724-739.	5.7	44
9	Secure and Private Cloud-Based Control Using Semi-Homomorphic Encryption**The work was, in part, supported by a McKenzie Fellowship, ARC grant LP130100605, and Defence Science and Technology Group through the Research Agreement My IP:6288.. IFAC-PapersOnLine, 2016, 49, 163-168.	0.9	41
10	Ensuring privacy with constrained additive noise by minimizing Fisher information. Automatica, 2019, 99, 275-288.	5.0	38
11	Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption. IEEE Transactions on Automatic Control, 2020, 65, 3950-3957.	5.7	37
12	Optimal structured static state-feedback control design with limited model information for fully-actuated systems. Automatica, 2013, 49, 326-337.	5.0	27
13	A piecewise-constant congestion taxing policy for repeated routing games. Transportation Research Part B: Methodological, 2015, 78, 123-143.	5.9	24
14	A game-theoretic framework for studying truck platooning incentives. , 2013, , .		22
15	Secure Control of Nonlinear Systems Using Semi-Homomorphic Encryption. , 2018, , .		22
16	Review of results on smart meter privacy by data manipulation, demand shaping, and load scheduling. IET Smart Grid, 2020, 3, 605-613.	2.2	22
17	Information Patterns in the Modeling and Design of Mobility Management Services. Proceedings of the IEEE, 2018, 106, 554-576.	21.3	21
18	Implementing homomorphic encryption based secure feedback control. Control Engineering Practice, 2020, 97, 104350.	5.5	21

#	ARTICLE	IF	CITATIONS
19	Security analysis of cyber-physical systems using norm. IET Control Theory and Applications, 2017, 11, 1749-1755.	2.1	20
20	Quadratic Gaussian privacy games. , 2015, , .		19
21	Stochastic Sensor Scheduling for Networked Control Systems. IEEE Transactions on Automatic Control, 2014, 59, 1147-1162.	5.7	17
22	Optimal privacy-preserving policy using constrained additive noise to minimize the fisher information. , 2017, , .		16
23	Optimal state estimation with measurements corrupted by Laplace noise. , 2016, , .		15
24	A faithful distributed implementation of dual decomposition and average consensus algorithms. , 2013, , .		13
25	Privacy-Constrained Communication**The work of F. Farokhi was supported by a McKenzie Fellowship, ARC grant LP130100605, a grant from Melbourne School of Engineering. The work of G. Nair was supported by ARC grants DP140100819 and FT140100527.. IFAC-PapersOnLine, 2016, 49, 43-48.	0.9	13
26	On Privacy of Quantized Sensor Measurements through Additive Noise. , 2018, , .		11
27	Development and Analysis of Deterministic Privacy-Preserving Policies Using Non- Stochastic Information Theory. IEEE Transactions on Information Forensics and Security, 2019, 14, 2567-2576.	6.9	11
28	Gaussian cheap talk game with quadratic cost functions: When herding between strategic senders is a virtue. , 2014, , .		10
29	Optimal Control Design Under Limited Model Information for Discrete-Time Linear Systems With Stochastically-Varying Parameters. IEEE Transactions on Automatic Control, 2015, 60, 684-699.	5.7	10
30	Faithful Implementations of Distributed Algorithms and Control Laws. IEEE Transactions on Control of Network Systems, 2017, 4, 191-201.	3.7	10
31	Preserving Privacy of Finite Impulse Response Systems. , 2017, 1, 128-133.		10
32	Temporally Discounted Differential Privacy for Evolving Datasets on an Infinite Horizon. , 2020, , .		10
33	Drug-induced thrombocytopenia after anticoagulation with rivaroxaban. American Journal of Emergency Medicine, 2018, 36, 531.e1-531.e2.	1.6	9
34	On Privacy of Dynamical Systems: An Optimal Probabilistic Mapping Approach. IEEE Transactions on Information Forensics and Security, 2021, 16, 2608-2620.	6.9	9
35	Security Versus Privacy. , 2018, , .		8
36	Privacy-Preserving Public Release of Datasets for Support Vector Machine Classification. IEEE Transactions on Big Data, 2021, 7, 893-899.	6.1	8

#	ARTICLE	IF	CITATIONS
37	A Study of Truck Platooning Incentives Using a Congestion Game. IEEE Transactions on Intelligent Transportation Systems, 2014, , 1-15.	8.0	7
38	The Cost of Privacy in Asynchronous Differentially-Private Machine Learning. IEEE Transactions on Information Forensics and Security, 2021, 16, 2118-2129.	6.9	7
39	Decentralized Disturbance Accommodation with Limited Plant Model Information. SIAM Journal on Control and Optimization, 2013, 51, 1543-1573.	2.1	6
40	A heterogeneous routing game. , 2013, , .		6
41	Estimation and Control over a Nonstochastic Binary Erasure Channel. IFAC-PapersOnLine, 2018, 51, 265-270.	0.9	6
42	Structured computation of optimal controls for constrained cascade systems. International Journal of Control, 2020, 93, 30-39.	1.9	6
43	Information-Theoretic Privacy Through Chaos Synchronization and Optimal Additive Noise. , 2020, , 103-129.		6
44	Zero-Error Feedback Capacity for Bounded Stabilization and Finite-State Additive Noise Channels. IEEE Transactions on Information Theory, 2022, 68, 6335-6355.	2.4	6
45	Optimal state-feedback design for non-linear feedback-linearisable systems. IET Control Theory and Applications, 2011, 5, 323-333.	2.1	5
46	Control design with limited model information. , 2011, , .		5
47	Dynamic control design based on limited model information. , 2011, , .		5
48	Promoting Truthful Behavior in Participatory-Sensing Mechanisms. IEEE Signal Processing Letters, 2015, 22, 1538-1542.	3.6	5
49	Private and Secure Coordination of Match-Making for Heavy-Duty Vehicle Platooning * * The work of F. Farokhi and I. Shames was supported by a McKenzie Fellowship and a grant (MyLP: ID6874) from Defence Science and Technology Group (DSTG). The work of K.H. Johansson was supported by Knut och Alice Wallenbergs Foundation (KAW), Swedish Foundation for Strategic Research (SSF), and Swedish Research Council (VR). IFAC-PapersOnLine, 2017, 50, 7245-7250.	0.9	5
50	State Estimation via Worst-Case Erasure and Symmetric Channels with Memory. , 2019, , .		5
51	Non-Stochastic Hypothesis Testing with Application to Privacy Against Hypothesis-Testing Adversaries. , 2019, , .		5
52	An Explicit Formula for the Zero-Error Feedback Capacity of a Class of Finite-State Additive Noise Channels. , 2020, , .		5
53	Developing Non-Stochastic Privacy-Preserving Policies Using Agglomerative Clustering. IEEE Transactions on Information Forensics and Security, 2020, , 1-1.	6.9	5
54	Inverted U wave, a specific electrocardiographic sign of cardiac ischemia. American Journal of Emergency Medicine, 2007, 25, 235-237.	1.6	4

#	ARTICLE	IF	CITATIONS
55	Investigating the Interaction Between Traffic Flow and Vehicle Platooning Using a Congestion Game. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4170-4177.	0.4	4
56	On reconstructability of quadratic utility functions from the iterations in gradient methods. Automatica, 2016, 66, 254-261.	5.0	4
57	Optimal control computation for cascade systems by structured Jacobi iterations. IFAC-PapersOnLine, 2019, 52, 291-296.	0.9	4
58	Optimal contract design for effort-averse sensors. International Journal of Control, 2020, 93, 738-745.	1.9	4
59	Deconvoluting kernel density estimation and regression for locally differentially private data. Scientific Reports, 2020, 10, 21361.	3.3	4
60	Noiseless Privacy: Definition, Guarantees, and Applications. IEEE Transactions on Big Data, 2023, 9, 51-62.	6.1	4
61	When the heart remembers. American Journal of Emergency Medicine, 2007, 25, 831-833.	1.6	3
62	A robust control-design method using Bode's ideal transfer function. , 2011, , .		3
63	Limited model information control design for linear discrete-time systems with stochastic parameters. , 2012, , .		3
64	Privacy-Preserving Constrained Quadratic Optimization With Fisher Information. IEEE Signal Processing Letters, 2020, 27, 545-549.	3.6	3
65	Why Does Regularization Help with Mitigating Poisoning Attacks?. Neural Processing Letters, 2021, 53, 2933-2945.	3.2	3
66	A Linear Reduction Method for Local Differential Privacy and Log-lift. , 2021, , .		3
67	Private routing and ride-sharing using homomorphic encryption. IET Cyber-Physical Systems: Theory and Applications, 2020, 5, 311-320.	3.3	3
68	Optimal disturbance accommodation with limited model information. , 2012, , .		2
69	Scheduling rigid demands on continuous-time linear shift-invariant systems. , 2015, , .		2
70	Cooperation patterns between fleet owners for transport assignments. , 2015, , .		2
71	Conditions and strategies for uniqueness of the solutions to cooperative localization and mapping problems using rigidity theory. , 2015, , .		2
72	A game-theoretic approach to distributed scheduling of rigid demands on dynamical systems. , 2016, , .		2

#	ARTICLE	IF	CITATIONS
73	Preserving privacy of agents in participatory-sensing schemes for traffic estimation. , 2016, , .		2
74	Guaranteed maximum power point tracking by scalar iterations with quadratic convergence rate. , 2016, , .		2
75	Do Auto-Regressive Models Protect Privacy? Inferring Fine-Grained Energy Consumption From Aggregated Model Parameters. IEEE Transactions on Services Computing, 2022, 15, 3198-3209.	4.6	2
76	Distributionally-robust machine learning using locally differentially-private data. Optimization Letters, 0, , 1.	1.6	2
77	Bounded Estimation Over Finite-State Channels: Relating Topological Entropy and Zero-Error Capacity. IEEE Transactions on Automatic Control, 2022, 67, 4029-4044.	5.7	2
78	A Fundamental Bound on Performance of Non-Intrusive Load Monitoring Algorithms with Application to Smart-Meter Privacy. IFAC-PapersOnLine, 2020, 53, 2280-2285.	0.9	2
79	Stochastic sensor scheduling with application to networked control. , 2013, , .		1
80	Adaptive control design under structured model information limitation: A cost-biased maximum-likelihood approach. Systems and Control Letters, 2015, 75, 8-13.	2.3	1
81	A scalable QP solver for optimal control of cascades with constraints. , 2016, , .		1
82	Bilateral Trade Under Information Asymmetry and Quantized Measurements. , 2018, , .		1
83	Optimal Stochastic Evasive Maneuvers Using the Schrödinger's Equation. , 2019, 3, 517-522.		1
84	Feedback control using a strategic sensor. International Journal of Control, 2021, 94, 1-6.	1.9	1
85	Measuring Information Leakage in Non-stochastic Brute-Force Guessing. , 2021, , .		1
86	Non-Stochastic Private Function Evaluation. , 2021, , .		1
87	A game-theoretic approach to adversarial linear Gaussian classification. IFAC Journal of Systems and Control, 2021, 17, 100163.	1.7	1
88	Privacy Against State estimation: An Optimization Framework based on the Data Processing Inequality. IFAC-PapersOnLine, 2020, 53, 7368-7373.	0.9	1
89	Non-stochastic hypothesis testing for privacy. IET Information Security, 2020, 14, 754-763.	1.7	1
90	Gradient Sparsification Can Improve Performance of Differentially-Private Convex Machine Learning. , 2021, , .		1

#	ARTICLE	IF	CITATIONS
91	Optimal H ₂ and H _∞ control design under model information limitations and state measurement constraints. , 2013, , .		0
92	Complexity reduction for parameter-dependent linear systems. , 2013, , .		0
93	Networked Estimation using Sparsifying Basis Prediction*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 174-181.	0.4	0
94	SiMPLify: A toolbox for structured model reduction. , 2015, , .		0
95	Compressive Sensing in Fault Detection. , 2018, , .		0
96	Secure Networked Control Systems Design Using Semi-homomorphic Encryption. Lecture Notes in Control and Information Sciences, 2021, , 257-285.	1.0	0
97	Using Rényi-divergence and Arimoto-Rényi Information to Quantify Membership Information Leakage. , 2021, , .		0
98	Structured Preconditioning of Conjugate Gradients for Path-Graph Network Optimal Control Problems. IEEE Transactions on Automatic Control, 2022, 67, 4115-4122.	5.7	0
99	Rigid-Profile Input Scheduling Under Constrained Dynamics With a Water Network Application. IEEE Transactions on Control Systems Technology, 2021, 29, 2457-2472.	5.2	0
100	Comparing Numerical Methods for Solving Nonlinear Fractional Order Differential Equations. , 2010, , 171-179.		0
101	Linear quadratic control computation for systems with a directed tree structure. IFAC-PapersOnLine, 2020, 53, 6536-6541.	0.9	0