Soura Dasgupta

List of Publications by Year
in descending order

92 papers	1,581 citations	567281 15 h-index	434195 31 g-index
93 all docs	93 docs citations	93 times ranked	1164 citing authors

#	Article	IF	Citations
1	Source Localization in Wireless Sensor Networks From Signal Time-of-Arrival Measurements. IEEE Transactions on Signal Processing, 2011, 59, 2887-2897.	5.3	217
2	Circumnavigation Using Distance Measurements Under Slow Drift. IEEE Transactions on Automatic Control, 2012, 57, 889-903.	5.7	177
3	Control of Minimally Persistent Leader-Remote-Follower and Coleader Formations in the Plane. IEEE Transactions on Automatic Control, 2011, 56, 2778-2792.	5.7	120
4	Multiple Source Localization in Wireless Sensor Networks Based on Time of Arrival Measurement. IEEE Transactions on Signal Processing, 2014, 62, 1938-1949.	5.3	118
5	Distance Estimation From Received Signal Strength Under Log-Normal Shadowing: Bias and Variance. IEEE Signal Processing Letters, 2009, 16, 216-218.	3.6	80
6	A Semidefinite Programming Approach to Source Localization in Wireless Sensor Networks. IEEE Signal Processing Letters, 2008, 15, 253-256.	3.6	72
7	Linear predictive coding distinguishes spectral EEG features of Parkinson's disease. Parkinsonism and Related Disorders, 2020, 79, 79-85.	2.2	65
8	A Kharitonov like theorem for systems under nonlinear passive feedback. , 1987, , .		53
9	Adaptive range€measurement€based target pursuit. International Journal of Adaptive Control and Signal Processing, 2013, 27, 66-81.	4.1	49
10	Output-error identification methods for partially known systems. International Journal of Control, 1986, 43, 177-191.	1.9	47
11	Reduced Complexity Semidefinite Relaxation Algorithms for Source Localization Based on Time Difference of Arrival. IEEE Transactions on Mobile Computing, 2011, 10, 1276-1282.	5.8	44
12	Receiver-coordinated distributed transmit nullforming with channel state uncertainty. , 2012, , .		30
13	5. Parametric Lyapunov Functions for Uncertain Systems: The Multiplier Approach. , 2000, , 95-108.		29
14	Adaptive Source Localization Based Station Keeping of Autonomous Vehicles. IEEE Transactions on Automatic Control, 2017, 62, 3122-3135.	5.7	29
15	Integral quadratic constraint approach vs. multiplier approach. Automatica, 2005, 41, 281-287.	5.0	28
16	Adaptive Source Localization by Mobile Agents. , 2006, , .		28
17	Control of directed formations with a leader-first follower structure. , 2007, , .		22
18	Maximum Likelihood Localization of Radioactive Sources Against a Highly Fluctuating Background. IEEE Transactions on Nuclear Science, 2015, 62, 3274-3282.	2.0	22

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19	Robustness of the Adaptive Bellman â€"Ford Algorithm: Global Stability and Ultimate Bounds. IEEE Transactions on Automatic Control, 2019, 64, 4121-4136.	5.7	20
20	On the Gradient Descent Localization of Radioactive Sources. IEEE Signal Processing Letters, 2013, 20, 1046-1049.	3.6	19
21	Experimental demonstration of retrodirective beamforming from a fully wireless distributed array. , 2016, , .		16
22	A Scalable Feedback Mechanism for Distributed Nullforming With Phase-Only Adaptation. IEEE Transactions on Signal and Information Processing Over Networks, 2015, 1, 58-70.	2.8	14
23	Experimental demonstration of a distributed antenna array pre-synchronized for retrodirective transmission. , 2016, , .		13
24	On Forward Channel Estimation for MIMO Precoding in Cooperative Relay Wireless Transmission Systems. IEEE Transactions on Signal Processing, 2014, 62, 1265-1278.	5.3	12
25	A New Measure of Wireless Network Connectivity. IEEE Transactions on Mobile Computing, 2015, 14, 1765-1779.	5.8	11
26	A Lyapunov analysis for the robust stability of an adaptive Bellman-Ford algorithm. , 2016, , .		11
27	Tensor scale: An analytic approach with efficient computation and applications. Computer Vision and Image Understanding, 2012, 116, 1060-1075.	4.7	10
28	Identifiability and excitation of polynomial systems. , 2013, , .		9
29	The maximum likelihood estimate for radiation source localization: Initializing an iterative search. , 2014, , .		9
30	Optimal Precoder Design for Distributed Transmit Beamforming Over Frequency-Selective Channels. IEEE Transactions on Wireless Communications, 2018, 17, 7759-7773.	9.2	9
31	Tuning leakage for robust adaptive control. , 1987, , .		8
32	Distance estimation from received signal strength under log-normal shadowing: Bias and variance. , 2008, , .		8
33	Optimum sensor placement for source monitoring under log-normal shadowing in three dimensions. , 2009, , .		8
34	Wireless source localization based on time of arrival measurement. , 2010, , .		8
35	Optimum sensor placement for localization in three dimensional under log normal shadowing. , 2012, , .		8
36	Distributed MIMO Multicast With Protected Receivers: A Scalable Algorithm for Joint Beamforming and Nullforming. IEEE Transactions on Wireless Communications, 2017, 16, 512-525.	9.2	8

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37	An Aggregate Computing Approach to Self-Stabilizing Leader Election. , 2018, , .		8
38	Error in Self-Stabilizing Spanning-Tree Estimation of Collective State. , 2017, , .		7
39	Heartbeat Measurement with Millimeter Wave Radar in the Driving Environment. , 2021, , .		7
40	A Resilient Leader Election Algorithm Using Aggregate Computing Blocks. IFAC-PapersOnLine, 2020, 53, 3336-3341.	0.9	7
41	Robust and Low Complexity Source Localization in Wireless Sensor Networks Using Time Difference of Arrival Measurement. , 2010, , .		6
42	Coprime conditions for Fourier sampling for sparse recovery. , 2014, , .		6
43	Toward Predicting Distributed Systems Dynamics. , 2015, , .		6
44	A Framework for Self-Adaptive Dispersal of Computing Services. , 2019, , .		6
45	Linear Predictive Approaches Separate Field Potentials in Animal Model of Parkinson's Disease. Frontiers in Neuroscience, 2020, 14, 394.	2.8	6
46	Circumnavigation using distance measurements. , 2009, , .		6
47	The relation between redundancy and convergence rate in distributed multi-agent formation control. , 2008, , .		5
48	Optimum sensor placement for localization under log-normal shadowing. , 2010, , .		5
49	Coordinated fault tolerant optimal control of autonomous agents: geometry and communication architecture. Communications in Information and Systems, 2011, 11, 173-196.	0.5	5
50	Source Localization from Received Signal Strength Under Log-Normal Shadowing: Bias and Variance. , 2009, , .		4
51	On the quality of wireless network connectivity. , 2012, , .		4
52	A class of scalable feedback algorithms for beam and null-forming from distributed arrays. , 2016, , .		4
53	Maximizing wireless power transfer using distributed beamforming. , 2016, , .		4
54	Convergence of an Adaptive Filter with Signed Error Filtering. , 1988, , .		3

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55	Certifying non-existence of undesired locally stable equilibria in formation shape control problems. , 2013, , .		3
56	Channel State Tracking for Large-Scale Distributed MIMO Communication Systems. IEEE Transactions on Signal Processing, 2015, 63, 2559-2571.	5.3	3
57	Capacity maximization for distributed broadband beamforming. , 2016, , .		3
58	Subspace Aware Recovery of Low Rank and Jointly Sparse Signals. IEEE Transactions on Computational Imaging, 2017, 3, 22-35.	4.4	3
59	Robust Stability of Spreading Blocks in Aggregate Computing. , 2018, , .		3
60	Improving Collection Dynamics by Monotonic Filtering. , 2020, , .		3
61	NONLINEAR OPTIMAL CONTROL. , 2007, , 569-586.		3
62	Robust control design of sampled systems. International Journal of Systems Science, 1990, 21, 985-992.	5.5	2
63	Fault Tolerant Scalable Coordinated Control of Agent Formations with Arbitrary Trajectories. , 2007, , .		2
64	Optimumisi-free DMT systems withconcave SNR tobit rate relations: when does othonornmality suffice?. , 2007, , .		2
65	Stability of adaptive delta modulators with forgetting factor and constant inputs. International Journal of Adaptive Control and Signal Processing, 2011, 25, 723-739.	4.1	2
66	An empirical study of the statistics of phase drift of off-the-shelf oscillators for distributed MIMO applications. , 2014, , .		2
67	Asymptotic oscillator tracking performance analysis for distributed massive MIMO systems. , 2014, , .		2
68	Rigid formation control with nonlinear passive actuation. , 2016, , .		2
69	Distributed multiagent formation control with enhanced scalability. , 2007, , .		2
70	Performance Analysis of a Forward Link Channel Estimation Method for Wireless Multicarrier Systems. IEEE Transactions on Wireless Communications, 2008, 7, 3026-3035.	9.2	1
71	Achieving formations under medium access, relative position and velocity constraints. , 2008, , .		1
72	A distributed control law for optimum sensor placement for source localization. , 2014, , .		1

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73	A bayesian approach to multiple target localization. , 2015, , .		1
74	An approach to Kalman filtering for oscillator tracking. , 2015, , .		1
75	Spark under 2-D fourier sampling. , 2015, , .		1
76	A hermitian analogue of the Morita theorems. Communications in Algebra, 2017, 45, 2281-2295.	0.6	1
77	Experimental demonstration of nullforming from a fully wireless distributed array. , 2017, , .		1
78	Control of formations: Stepping beyond passivity. , 2018, , .		1
79	Global Uniform Asymptotic Stability of a Generalized Adaptive Bellman-Ford Algorithm. , 2019, , .		1
80	Effect of Monotonic Filtering on Graph Collection Dynamics. , 2021, , .		1
81	Stability and Resilience of Distributed Information Spreading in Aggregate Computing. IEEE Transactions on Automatic Control, 2023, 68, 454-461.	5.7	1
82	Improved small gain conditions for input-to-state stability with respect to measurement functions: Discrete time networked system. , 2021, , .		1
83	Uncertainties in Sampled Data Systems. , 1989, , .		1
84	Optimum compaction filters for cyclostationary signals. , 2002, , .		0
85	Toward a Theory of Multirate Nonlinear Systems. , 2006, , .		0
86	An exponentially convergent adaptive algorithm for time-varying IIR filters. , 2009, , .		0
87	An exponentially convergent adaptive algorithm for time-varying IIR filters. , 2010, , .		0
88	Urban source localization based on time of arrival measurement and street information. , 2012, , .		0
89	Adaptive docking using range measurements. , 2012, , .		0
90	Poster abstract: Cybermussels: A biological sensor network using freshwater mussels. , 2012, , .		0

#	Article	IF	Citations
91	Control of Formations with Nonlinear Non-Passive Actuation. , 2019, , .		0
92	A Lyapunov Analysis of a Most Probable Path Finding Algorithm. , 2022, 6, 1052-1057.		0