Joao Xavier

List of Publications by Year
in descending order

102 papers	2,310 citations	304602 22 h-index	302012 39 g-index
102 all docs	102 docs citations	102 times ranked	1727 citing authors

#	Article	IF	Citations
1	Fast Distributed Gradient Methods. IEEE Transactions on Automatic Control, 2014, 59, 1131-1146.	3.6	419
2	Distributed Basis Pursuit. IEEE Transactions on Signal Processing, 2012, 60, 1942-1956.	3.2	158
3	Cooperative Convex Optimization in Networked Systems: Augmented Lagrangian Algorithms With Directed Gossip Communication. IEEE Transactions on Signal Processing, 2011, 59, 3889-3902.	3.2	97
4	Factorization for non-rigid and articulated structure using metric projections. , 2009, , .		96
5	Linear Convergence Rate of a Class of Distributed Augmented Lagrangian Algorithms. IEEE Transactions on Automatic Control, 2015, 60, 922-936.	3.6	83
6	Distributed Detection via Gaussian Running Consensus: Large Deviations Asymptotic Analysis. IEEE Transactions on Signal Processing, 2011, 59, 4381-4396.	3.2	82
7	Distributed Optimization With Local Domains: Applications in MPC and Network Flows. IEEE Transactions on Automatic Control, 2015, 60, 2004-2009.	3.6	79
8	Sensor Selection for Event Detection in Wireless Sensor Networks. IEEE Transactions on Signal Processing, 2011, 59, 4938-4953.	3.2	66
9	Simple and Fast Convex Relaxation Method for Cooperative Localization in Sensor Networks Using Range Measurements. IEEE Transactions on Signal Processing, 2015, 63, 4532-4543.	3.2	64
10	Empirical Centroid Fictitious Play: An Approach for Distributed Learning in Multi-Agent Games. IEEE Transactions on Signal Processing, 2015, 63, 3888-3901.	3.2	59
11	Robust Localization of Nodes and Time-Recursive Tracking in Sensor Networks Using Noisy Range Measurements. IEEE Transactions on Signal Processing, 2011, 59, 3930-3942.	3.2	58
12	Bilinear Modeling via Augmented Lagrange Multipliers (BALM). IEEE Transactions on Pattern Analysis and Machine Intelligence, 2012, 34, 1496-1508.	9.7	55
13	Distributed Detection Over Noisy Networks: Large Deviations Analysis. IEEE Transactions on Signal Processing, 2012, 60, 4306-4320.	3.2	52
14	Weight Optimization for Consensus Algorithms With Correlated Switching Topology. IEEE Transactions on Signal Processing, 2010, 58, 3788-3801.	3.2	49
15	Optimal Metric Projections for Deformable and Articulated Structure-from-Motion. International Journal of Computer Vision, 2012, 96, 252-276.	10.9	49
16	Distributed ADMM for model predictive control and congestion control. , 2012, , .		48
17	Large Deviations Performance of Consensus+Innovations Distributed Detection With Non-Gaussian Observations. IEEE Transactions on Signal Processing, 2012, 60, 5987-6002.	3.2	45
18	Filter Design With Secrecy Constraints: The MIMO Gaussian Wiretap Channel. IEEE Transactions on Signal Processing, 2013, 61, 3799-3814.	3.2	36

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19	Noncoherent Communication in Multiple-Antenna Systems: Receiver Design and Codebook Construction. IEEE Transactions on Signal Processing, 2007, 55, 5703-5715.	3.2	32
20	6D pose estimation of textureless shiny objects using random ferns for bin-picking. , 2012, , .		32
21	Convergence Rates of Distributed Nesterov-Like Gradient Methods on Random Networks. IEEE Transactions on Signal Processing, 2014, 62, 868-882.	3.2	32
22	Identification of switched ARX models via convex optimization and expectation maximization. Journal of Process Control, 2015, 28, 9-16.	1.7	31
23	Bi-Virus SIS Epidemics over Networks: Qualitative Analysis. IEEE Transactions on Network Science and Engineering, 2015, 2, 17-29.	4.1	29
24	Primalâ€"Dual Methods for Large-Scale and Distributed Convex Optimization and Data Analytics. Proceedings of the IEEE, 2020, 108, 1923-1938.	16.4	28
25	Closed-form blind channel identification and source separation in SDMA systems through correlative coding. IEEE Journal on Selected Areas in Communications, 1998, 16, 1506-1517.	9.7	27
26	Closed-form correlative coding (CFC/sub 2/) blind identification of MIMO channels: isometry fitting to second order statistics. IEEE Transactions on Signal Processing, 2001, 49, 1073-1086.	3.2	25
27	Spectrally optimal factorization of incomplete matrices. , 2008, , .		23
28	Consensus and Products of Random Stochastic Matrices: Exact Rate for Convergence in Probability. IEEE Transactions on Signal Processing, 2013, 61, 2557-2571.	3.2	23
29	Blind array channel division multiple access (AChDMA) for mobile communications. IEEE Transactions on Signal Processing, 1998, 46, 737-752.	3.2	22
30	Further Results on the Capacity and Error Probability Analysis of Noncoherent MIMO Systems in the Low SNR Regime. IEEE Transactions on Signal Processing, 2008, 56, 2915-2930.	3.2	19
31	An Angular Approach for Range-Based Approximate Maximum Likelihood Source Localization Through Convex Relaxation. IEEE Transactions on Wireless Communications, 2014, 13, 3951-3964.	6.1	19
32	Newton Algorithms for Riemannian Distance Related Problems on Connected Locally Symmetric Manifolds. IEEE Journal on Selected Topics in Signal Processing, 2013, 7, 634-645.	7.3	18
33	Convex ultrasound image reconstruction with log-Euclidean priors. , 2008, 2008, 435-8.		17
34	Distributed Nesterov-like gradient algorithms. , 2012, , .		17
35	Distributed learning in large-scale multi-agent games: A modified fictitious play approach. , 2012, , .		16
36	Factorization for non-rigid and articulated structure using metric projections. , 2009, , .		15

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37	Intrinsic Variance Lower Bound (IVLB): An Extension of the Cramer-Rao Bound to Riemannian Manifolds. , 0, , .		14
38	Basis Pursuit in sensor networks. , 2011, , .		14
39	ANSIG&#x2014;An analytic signature for permutation-invariant two-dimensional shape representation. , 2008, , .		13
40	Sensor selection for hypothesis testing in wireless sensor networks: a Kullback-Leibler based approach. , 2009, , .		13
41	3D to 2D bijection for spherical objects under equidistant fisheye projection. Computer Vision and Image Understanding, 2014, 125, 172-183.	3.0	13
42	Massive MIMO full-duplex relaying with optimal power allocation for independent multipairs. , 2015, , .		12
43	Bilinear Factorization via Augmented Lagrange Multipliers. Lecture Notes in Computer Science, 2010, , 283-296.	1.0	12
44	A convex relaxation for approximate maximum-likelihood 2D source localization from range measurements. , 2010, , .		11
45	Estimation of Attitude and Position from Range-Only Measurements using Geometric Descent Optimization on the Special Euclidean Group. , 2006, , .		10
46	Projection on the intersection of convex sets. Linear Algebra and Its Applications, 2016, 509, 191-205.	0.4	9
47	FADE: Fast and Asymptotically Efficient Distributed Estimator for Dynamic Networks. IEEE Transactions on Signal Processing, 2019, 67, 2080-2092.	3.2	9
48	Optimal Point Correspondence through the Use of Rank Constraints. , 0, , .		8
49	D-ADMM: A distributed algorithm for compressed sensing and other separable optimization problems. , 2012, , .		8
50	D-ADMM based distributed MPC with input-output models. , 2014, , .		8
51	Distributed Inference Over Directed Networks: Performance Limits and Optimal Design. IEEE Transactions on Signal Processing, 2016, 64, 3308-3323.	3.2	8
52	Distributed, simple and stable network localization. , 2014, , .		7
53	On minimizing a quadratic function on Stiefel manifold. Linear Algebra and Its Applications, 2015, 475, 251-264.	0.4	7
54	Single Sample Fictitious Play. IEEE Transactions on Automatic Control, 2017, 62, 6026-6031.	3.6	7

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55	DJAM: Distributed Jacobi Asynchronous Method for Learning Personal Models. IEEE Signal Processing Letters, 2018, 25, 1389-1392.	2.1	7
56	Filter Design with Secrecy Constraints: The Degraded Multiple-Input Multiple-Output Gaussian Wiretap Channel. , 2011, , .		6
57	Fluorescence Confocal Microscopy Imaging denoising with photobleaching. , 2008, 2008, 2205-8.		5
58	Distributed detection over time varying networks: Large deviations analysis. , 2010, , .		5
59	Filter design with secrecy constraints: The multiple-input multiple-output Gaussian wiretap channel with zero forcing receive filters. , 2011, , .		5
60	ADMM for consensus on colored networks. , 2012, , .		5
61	Shape From Motion of Nonrigid Objects: The Case of Isometrically Deformable Flat Surfaces. , 2009, , .		5
62	Multi-view correspondence by enforcement of rigidity constraints. Image and Vision Computing, 2007, 25, 1008-1020.	2.7	4
63	On singular values of partially prescribed matrices. Linear Algebra and Its Applications, 2008, 429, 2136-2145.	0.4	4
64	Large deviations analysis of consensus+innovations detection in random networks. , 2011, , .		4
65	Products of stochastic matrices: Large deviation rate for Markov chain temporal dependencies. , 2012, , .		4
66	Selecting observers for source localization via error exponents. , 2015, , .		4
67	Codebook Design for the Non-Coherent GLRT Receiver and Low SNR MIMO Block Fading Channel. , 2006, , .		3
68	LASIC: A model invariant framework for correspondence. , 2008, , .		3
69	Classification of unlabeled point sets using ANSIG. , 2008, , .		3
70	Codebook design for communication in spread and nonspread space-time block codes-based systems. , 2009, , .		3
71	Asymptotic performance of distributed detection over random networks. , 2011, , .		3
72	Exact rate for convergence in probability of averaging processes via generalized min-cut. , 2012, , .		3

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73	Convergence rate analysis of distributed gradient methods for smooth optimization. , 2012, , .		3
74	Distributed augmented Lagrangian algorithms: Convergence rate. , 2013, , .		3
75	A computationally efficient implementation of fictitious play in a distributed setting. , 2015, , .		3
76	Capacity and Error Probability Analysis of Non-Coherent MIMO Systems in the Low SNR Regime. , 2007, , .		2
77	Robust linear dimensionality reduction for hypothesis testing with application to sensor selection. , 2009, , .		2
78	Consensus in correlated random topologies: Weights for finite time horizon. , 2010, , .		2
79	Consensus&#x002B;innovations detection: Phase transition under communication noise. , 2012, , .		2
80	Fast cooperative distributed learning. , 2012, , .		2
81	Mean-centric equilibrium: An equilibrium concept for learning in large-scale games. , 2013, , .		2
82	Distributed Linear Estimation Via a Roaming Token. IEEE Transactions on Signal Processing, 2020, 68, 780-792.	3.2	2
83	Contour Point Tracking by Enforcement of Rigidity Constraints. , 0, , .		1
84	Globally optimal solution to exploit rigidity when recovering structure from motion under occlusion. , 2008, , .		1
85	2D-3D registration of deformable shapes with manifold projection Alessio Del Bue. , 2009, , .		1
86	Products of stochastic matrices: Exact rate for convergence in probability for directed networks. , 2012, , .		1
87	Distributed compressed sensing algorithms: Completing the puzzle. , 2013, , .		1
88	A unified algorithmic approach to distributed optimization. , 2013, , .		1
89	On robustness properties in Empirical Centroid Fictitious Play. , 2015, , .		1
90	On asynchronous implementations of fictitious play for distributed learning. , 2015, , .		1

#	Article	IF	Citations
91	Low complexity blind minimum variance zero forcing equalization of SIMO channels. , 0, , .		0
92	An interior point method for joint symbol detection and multichannel acquisition in fast-fading narrowband channels. , 0, , .		0
93	Low SNR analysis of the non-coherent MIMO channel under arbitrary channel and noise correlation structures. , 2008, , .		0
94	Design of filters for reliable and secure communications conditional mean estimation at the eavesdropper. , 2011, , .		0
95	Filter design with secrecy constraints: Zero-forcing constraint at the legitimate receiver. , 2012, , .		0
96	Game-theoretic learning in a distributed-information setting: Distributed convergence to mean-centric equilibria. , 2014, , .		0
97	Distributed Nesterov gradient methods for random networks: Convergence in probability and convergence rates. , 2014, , .		0
98	Strong convergence to mixed equilibria in fictitious play. , 2014, , .		0
99	Thermodynamic limit of interacting particle systems over dynamical networks. , 2016, , .		0
100	Computationally efficient learning in large-scale games: Sampled fictitious play revisited. , 2016, , .		0
101	Distributed Learning With Time Correlated Information. IEEE Signal Processing Letters, 2017, 24, 1636-1640.	2.1	0
102	Robust Localization With Bounded Noise: Creating a Superset of the Possible Target Positions via Linear-Fractional Representations. IEEE Transactions on Signal Processing, 2022, 70, 3743-3757.	3.2	0