Marco Campi

List of Publications by Year
in descending order

69 papers	4,577 citations	257450 24 h-index	330143 37 g-index
69 all docs	69 docs citations	69 times ranked	1743 citing authors

#	Article	IF	Citations
1	Risk and complexity in scenario optimization. Mathematical Programming, 2022, 191, 243-279.	2.4	24
2	State Conditional Filtering. IEEE Transactions on Automatic Control, 2022, 67, 3381-3395.	5.7	0
3	The risk of making decisions from data through the lens of the scenario approach. IFAC-PapersOnLine, 2021, 54, 607-612.	0.9	11
4	Facing undermodelling in Sign-Perturbed-Sums system identification. Systems and Control Letters, 2021, 153, 104936.	2.3	7
5	Novel Bounds on the Probability of Misclassification in Majority Voting: Leveraging the Majority Size. , 2021, 5, 1513-1518.		1
6	A Theory of the Risk for Empirical CVaR with Application to Portfolio Selection. Journal of Systems Science and Complexity, 2021, 34, 1879-1894.	2.8	5
7	The scenario approach: A tool at the service of data-driven decision making. Annual Reviews in Control, 2021, 52, 1-17.	7.9	16
8	On the consistency of the risk evaluation in the scenario approach. , 2021, , .		1
9	A study on majority-voting classifiers with guarantees on the probability of error. IFAC-PapersOnLine, 2020, 53, 1013-1018.	0.9	1
10	The wait-and-judge scenario approach applied to antenna array design. Computational Management Science, 2019, 16, 481-499.	1.3	9
11	On a class of interval predictor models with universal reliability. Automatica, 2019, 110, 108542.	5.0	19
12	Complexity-based modulation of the data-set in scenario optimization. , 2019, , .		7
13	Deterministic continuous-time Virtual Reference Feedback Tuning (VRFT) with application to PID design. Systems and Control Letters, 2019, 127, 25-34.	2.3	55
14	The Scenario Approach Meets Uncertain Game Theory and Variational Inequalities. , 2019, , .		14
15	Learning for Control: a Bayesian Scenario Approach. , 2019, , .		3
16	Consensus and Reliability: The Case of Two Binary Classifiers. IFAC-PapersOnLine, 2019, 52, 73-78.	0.9	2
17	Scenario-Based Economic Dispatch With Tunable Risk Levels in High-Renewable Power Systems. IEEE Transactions on Power Systems, 2019, 34, 5103-5114.	6.5	43
18	Scenario-Based Economic Dispatch With Uncertain Demand Response. IEEE Transactions on Smart Grid, 2019, 10, 1858-1868.	9.0	65

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19	A General Scenario Theory for Nonconvex Optimization and Decision Making. IEEE Transactions on Automatic Control, 2018, 63, 4067-4078.	5.7	95
20	Expected shortfall: Heuristics and certificates. European Journal of Operational Research, 2018, 267, 1003-1013.	5.7	15
21	Wait-and-judge scenario optimization. Mathematical Programming, 2018, 167, 155-189.	2.4	94
22	Finite-Sample System Identification: An Overview and a New Correlation Method. , 2018, 2, 61-66.		46
23	Kernel-based SPS. IFAC-PapersOnLine, 2018, 51, 31-36.	0.9	8
24	UNCERTAINTY BOUNDS FOR KERNEL-BASED REGRESSION: A BAYESIAN SPS APPROACH. , 2018, , .		5
25	A New Classification Algorithm With Guaranteed Sensitivity and Specificity for Medical Applications. , 2018, 2, 393-398.		21
26	Asymptotic properties of SPS confidence regions. Automatica, 2017, 82, 287-294.	5.0	28
27	A Coverage Theory for Least Squares. Journal of the Royal Statistical Society Series B: Statistical Methodology, 2017, 79, 1367-1389.	2.2	8
28	Undermodelling Detection with Sign-Perturbed Sums * *The work of A. CarÃ¨ was supported by the European Re-search Consortium for Informatics and Mathematics (ERCIM) and the Australian Research Council (ARC) under Discovery Grant DP130104028. The work of M.C. Campi was partly supported by MIUR - Ministero dellâ€™Istruzione, dellâ€™UniversitÃ e della Ricerca and by the H & W program of the University of Brescia under the project CLAFITE. The work of B. Cs. CsÃ¡ji was supported by the GINOP-2.3.2-15-2016-00002 grant. IFAC-PapersOnLine, 2017, 50, 2744-2749.	0.9	2
29	Tuning regularization via scenario optimization. , 2017, , .		1
30	Ventricular defibrillation: Classification with G.E.M. and a roadmap for future investigations. , 2017, , .		5
31	Non-convex scenario optimization with application to system identification. , 2015, , .		18
32	Sign-Perturbed Sums (SPS) with instrumental variables for the identification of ARX systems. , 2015, , .		9
33	On the choice of the event trigger in event-based estimation. , 2015, , .		31
34	Sign-Perturbed Sums: A New System Identification Approach for Constructing Exact Non-Asymptotic Confidence Regions in Linear Regression Models. IEEE Transactions on Signal Processing, 2015, 63, 169-181.	5.3	45
35	Scenario Min-Max Optimization and the Risk of Empirical Costs. SIAM Journal on Optimization, 2015, 25, 2061-2080.	2.0	46
36	Advanced optimization methods for power systems. , 2014, , .		26

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37	Strong consistency of the Sign-Perturbed Sums method. , 2014, , .		4
38	FASTâ€"Fast Algorithm for the Scenario Technique. Operations Research, 2014, 62, 662-671.	1.9	41
39	Random Convex Programs with L_1-Regularization: Sparsity and Generalization. SIAM Journal on Control and Optimization, 2013, 51, 3532-3557.	2.1	37
40	Guaranteed non-asymptotic confidence ellipsoids for FIR systems. , 2013, , .		4
41	Sign-perturbed sums (SPS): A method for constructing exact finite-sample confidence regions for general linear systems. , 2012, , .		8
42	Risk-Return Trade-off with the Scenario Approach in Practice: A Case Study in Portfolio Selection. Journal of Optimization Theory and Applications, 2012, 155, 707-722.	1.5	26
43	A Sampling-and-Discarding Approach toÂChance-Constrained Optimization: FeasibilityÂandÂOptimality. Journal of Optimization Theory and Applications, 2011, 148, 257-280.	1.5	279
44	State estimation algorithms with guaranteed confidence intervals for first order systems. , 2011, , .		2
45	Prediction, filtering and smoothing using LSCR: State estimation algorithms with guaranteed confidence sets. , 2011, , .		1
46	Classification with guaranteed probability of error. Machine Learning, 2010, 80, 63-84.	5.4	28
47	Finite sample properties of system identification with quantized output data. , 2009, , .		15
48	The scenario approach for systems and control design. Annual Reviews in Control, 2009, 33, 149-157.	7.9	302
49	Interval predictor models: Identification and reliability. Automatica, 2009, 45, 382-392.	5.0	103
50	The Exact Feasibility of Randomized Solutions of Uncertain Convex Programs. SIAM Journal on Optimization, 2008, 19, 1211-1230.	2.0	412
51	The Scenario Approach for Systems and Control Design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 381-389.	0.4	63
52	Non-asymptotic confidence regions for model parameters in the presence of unmodelled dynamics. , 2007, , .		1
53	Non-asymptotic uncertainty assessment of frequency responses using the LSCR approach. , 2007, , .		2
54	Parameter identification for nonlinear systems: Guaranteed confidence regions through LSCR. Automatica, 2007, 43, 1418-1425.	5.0	26

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55	The Scenario Approach to Robust Control Design. IEEE Transactions on Automatic Control, 2006, 51, 742-753.	5.7	801
56	Guaranteed non-asymptotic confidence regions in system identification. Automatica, 2005, 41, 1751-1764.	5.0	84
57	Uncertain convex programs: randomized solutions and confidence levels. Mathematical Programming, 2005, 102, 25-46.	2.4	515
58	Assessing the quality of identified models through the asymptotic theoryâ€"when is the result reliable?. Automatica, 2004, 40, 1319-1332.	5.0	51
59	Finite sample properties of system identification methods. IEEE Transactions on Automatic Control, 2002, 47, 1329-1334.	5.7	64
60	Virtual reference feedback tuning: a direct method for the design of feedback controllers. Automatica, 2002, 38, 1337-1346.	5.0	871
61	Optimal adaptive control of an LQG system. , 0, , .		2
62	Learning dynamical systems in a stationary environment. , 0, , .		10
63	Achieving optimality in adaptive control: the "bet on the best" approach. , 0, , .		4
64	Finite sample properties of system identification methods. , 0, , .		7
65	Non-asymptotic confidence ellipsoids for the least squares estimate. , 0, , .		12
66	Non-asymptotic quality assessment of generalised FIR models. , 0, , .		4
67	New results on the asymptotic theory of system identification for the assessment of the quality of estimated models. , 0, , .		6
68	Finite sample quality assessment of system identification models of irrigation channels. , 0, , .		3
69	Model quality assessment for instrumental variable methods: use of the asymptotic theory in practice. , 0, , .		3