

Guillaume Mercière

List of Publications by Year in descending order

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75
papers

842
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687363

13
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77
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77
times ranked

517
citing authors

#	ARTICLE	IF	CITATIONS
1	Parameterization and identification of multivariable state-space systems: A canonical approach. <i>Automatica</i> , 2011, 47, 1547-1555.	5.0	96
2	Propagator-based methods for recursive subspace model identification. <i>Signal Processing</i> , 2008, 88, 468-491.	3.7	88
3	Identification for gain-scheduling: a balanced subspace approach. <i>Proceedings of the American Control Conference</i> , 2007, , .	0.0	55
4	Recursive subspace identification based on instrumental variable unconstrained quadratic optimization. <i>International Journal of Adaptive Control and Signal Processing</i> , 2004, 18, 771-797.	4.1	48
5	Continuous-Time Linear Parameter-Varying Identification of a Cross Flow Heat Exchanger: A Local Approach. <i>IEEE Transactions on Control Systems Technology</i> , 2011, 19, 64-76.	5.2	40
6	Recursive subspace identification of Hammerstein models based on least squares support vector machines. <i>IET Control Theory and Applications</i> , 2009, 3, 1209-1216.	2.1	36
7	Convergence analysis of instrumental variable recursive subspace identification algorithms. <i>Automatica</i> , 2007, 43, 1377-1386.	5.0	35
8	Identification of Parameterized Gray-Box State-Space Systems: From a Black-Box Linear Time-Invariant Representation to a Structured One. <i>IEEE Transactions on Automatic Control</i> , 2014, 59, 2873-2885.	5.7	35
9	On-line structured subspace identification with application to switched linear systems. <i>International Journal of Control</i> , 2009, 82, 1496-1515.	1.9	34
10	Realization Theory for LPV State-Space Representations With Affine Dependence. <i>IEEE Transactions on Automatic Control</i> , 2017, 62, 4667-4674.	5.7	20
11	Identification of a flexible robot manipulator using a linear parameter-varying descriptor state-space structure. , 2011, , .		19
12	A Null-Space-based Technique for the Estimation of Linear-Time Invariant Structured State-Space Representations. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012, 45, 191-196.	0.4	16
13	Subspace based methods for continuous-time model identification of MIMO systems from filtered sampled data. , 2007, , .		15
14	Identification of switched linear state space models without minimum dwell time. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009, 42, 569-574.	0.4	15
15	Affine LPV systems: Realization theory, input-output equations and relationship with linear switched systems. , 2012, , .		14
16	Linear fractional LPV model identification from local experiments: An H_2 -based optimization technique. , 2013, , .		14
17	Subspace identification with constraints on the impulse response. <i>International Journal of Control</i> , 2017, 90, 1728-1735.	1.9	14
18	Image modeling based on a 2-D stochastic subspace system identification algorithm. <i>Multidimensional Systems and Signal Processing</i> , 2017, 28, 1133-1165.	2.6	11

#	ARTICLE	IF	CITATIONS
19	A methodology to enhance the convergence of Output Error identification algorithms. , 2007, , .		10
20	Subspace Identification of 2-D CRSD Roesser Models With Deterministic-Stochastic Inputs: A State Computation Approach. IEEE Transactions on Control Systems Technology, 2017, 25, 1108-1115.	5.2	10
21	A New Recursive Method for Subspace Identification of Noisy Systems: EIVPM. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 1597-1602.	0.4	9
22	SEQUENTIAL CORRELATION BASED PROPAGATOR ALGORITHM FOR RECURSIVE SUBSPACE IDENTIFICATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 922-927.	0.4	9
23	Comparing global input-output behavior of frozen-equivalent LPV state-space models. IFAC-PapersOnLine, 2017, 50, 9766-9771.	0.9	9
24	Optimal identification experiment design for LPV systems using the local approach. Automatica, 2018, 87, 258-266.	5.0	9
25	Subspace algorithms for identifying separable-in-denominator 2D systems with deterministic stochastic inputs. International Journal of Control, 2016, 89, 2584-2610.	1.9	8
26	Identifiability of affine linear parameter-varying models. Automatica, 2017, 80, 62-74.	5.0	8
27	SUBSPACE-BASED OPTIMAL IV METHOD FOR CLOSED-LOOP SYSTEM IDENTIFICATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 1068-1073.	0.4	7
28	Evaluating time-dependent heat fluxes using artificial neural networks. Inverse Problems in Science and Engineering, 2006, 14, 97-109.	1.2	7
29	Analytical Modelling and Grey-box Identification of a Flexible Arm using a Linear Parameter-varying Model. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1251-1256.	0.4	7
30	Innovation-based subspace identification in open- and closed-loop. , 2016, , .		7
31	ξ^2 <small> xmins:xocs= http://www.elsevier.com/xml/xocs/dtd xmins:xs= http://www.w3.org/2001/XMLSchema xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:tbl="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:tbl_struct="http://www.elsevier.com/xml/common/struct-bib/dtd" </small>	2.3	7
32	MODELLING OF NON STATIONARY SYSTEMS BASED ON A DYNAMICAL DECISION SPACE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 1222-1227.	0.4	6
33	A local approach framework for black-box and gray-box LPV system identification. , 2013, , .		6
34	Frequency-domain identification of aircraft structural modes from short-duration flight tests. International Journal of Control, 2014, 87, 1352-1372.	1.9	6
35	Gray-box LPV model identification of a 2-DoF surgical robotic manipulator by using an H_{∞} -norm-based local approach. IFAC-PapersOnLine, 2015, 48, 79-84.	0.9	6
36	Fouling Detection in a Parallel Flow Heat Exchanger via a Roesser Model Identification Procedure. IFAC-PapersOnLine, 2017, 50, 12866-12871.	0.9	6

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37	A stochastic subspace system identification algorithm for state-space systems in the general 2-D Roesser model form. <i>International Journal of Control</i> , 2018, 91, 2743-2771.	1.9	6
38	Combining least-squares and gradient-based algorithms for the identification of a co-current flow heat exchanger. <i>International Journal of Control</i> , 2019, 92, 191-203.	1.9	6
39	Model learning of the tire's road friction slip dependency under standard driving conditions. <i>Control Engineering Practice</i> , 2022, 121, 105048.	5.5	6
40	On-line structured identification of switching systems with possibly varying orders. , 2007, , .		5
41	Initialization of Gradient-based Optimization Algorithms for the Identification of Structured State-Space Models. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011, 44, 10782-10787.	0.4	5
42	Combining Linear Algebra and Numerical Optimization for Gray-Box Affine State-Space Model Identification. <i>IEEE Transactions on Automatic Control</i> , 2020, 65, 3272-3285.	5.7	5
43	Identification de systèmes multivariables à temps continu par approche des sous-espaces. <i>Journal European Des Systemes Automatises</i> , 2008, 42, 261-285.	0.4	5
44	A least squares approach to the subspace identification problem. , 2008, , .		4
45	An H _∞ -norm-based approach for operating point selection and LPV model identification from local experiments. <i>Periodica Polytechnica Electrical Engineering and Computer Science</i> , 2014, 58, 121-131.	1.0	4
46	Identification of 2D Roesser models by using linear fractional transformations. , 2014, , .		4
47	H _∞ -based LPV model identification from local experiments with a gap metric-based operating point selection. , 2014, , .		4
48	An Iterative Algorithm for Modal Analysis based on Structured Matrix Fractions. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012, 45, 518-523.	0.4	3
49	Combining Analytic and Experimental Information for Linear Parameter-Varying Model Identification: Application to a Flexible Robotic Manipulator. <i>Periodica Polytechnica Electrical Engineering and Computer Science</i> , 2014, 58, 133-148.	1.0	3
50	A new parametrisation of matrix fraction descriptions to improve gradient-based optimisation methods. , 2014, , .		3
51	Heat equation parameter estimation based on the POD-Galerkin approach. <i>IFAC-PapersOnLine</i> , 2018, 51, 245-250.	0.9	3
52	Dynamic models for bird population – A parameter-varying partial differential equation identification approach. <i>Control Engineering Practice</i> , 2019, 91, 104091.	5.5	3
53	Foreword Identification and Control in Biomedical Applications. <i>IEEE Transactions on Control Systems Technology</i> , 2020, 28, 1-2.	5.2	3
54	Identification of single flexible-joint robot dynamics: a nonparametric approach. , 2020, , .		3

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55	Identifying second-order models of mechanical structures in physical coordinates: An orthogonal complement approach. , 2013, , .		3
56	Phase estimation of a 2D fringe pattern using a monogenic-based multiscale analysis. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, C143.	1.5	3
57	CONVERGENCE ANALYSIS OF INSTRUMENTAL VARIABLE RECURSIVE SUBSPACE IDENTIFICATION ALGORITHMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 279-284.	0.4	2
58	Identification and Uncertainty Domain Quantification: Experimental Validation on a "Smart" Wind Turbine. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 4404-4409.	0.4	2
59	Reinitialized partial moments for the identification of the heat equation parameters. , 2015, , .		2
60	Structural properties of affine LPV to LFR transformation: Minimality, input-output behavior and identifiability. , 2016, , .		2
61	Noise covariance matrix estimation with subspace model identification for Kalman filtering. International Journal of Adaptive Control and Signal Processing, 2021, 35, 591-611.	4.1	2
62	MIMO system identification using common denominator and numerators with known degrees. International Journal of Adaptive Control and Signal Processing, 2022, 36, 870-881.	4.1	2
63	Identification of Multivariable Canonical State-Space Representations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1638-1643.	0.4	1
64	Bounded-error uncertainty domain description for continuous-time state-space model. IET Control Theory and Applications, 2012, 6, 261.	2.1	1
65	A benchmark for identification of a flexible serial manipulator using a camera. IFAC-PapersOnLine, 2015, 48, 1483-1488.	0.9	1
66	New developments for matrix fraction descriptions: A fully-parametrised approach. Automatica, 2016, 66, 15-24.	5.0	1
67	Shaping multisine excitation for closed-loop identification of a flexible transmission. IFAC-PapersOnLine, 2021, 54, 643-648.	0.9	1
68	System identification and uncertainty domain determination: a subspace-based approach. , 2010, , .		0
69	Filtered-Covariance Function-Based Subspace Identification with Bound Effects Integration. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 9504-9509.	0.4	0
70	Structured model identification algorithm based on constrained optimisation. , 2015, , .		0
71	New developments for experimental modal analysis of aircraft structures. MATEC Web of Conferences, 2015, 20, 01001.	0.2	0
72	Comparison of a gradient-based algorithm and a proximity control algorithm for gray-box LTI model identification. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
73	Technical Committee on System Identification and Adaptive Control [Technical Activities]. IEEE Control Systems, 2017, 37, 13-16.	0.8	0
74	Technical Committee on System Identification and Adaptive Control [Technical Activities]. IEEE Control Systems, 2019, 39, 21-23.	0.8	0
75	Nonlinear identification of continuous-time radio frequency Power Amplifier model. , 2007, , .		0