

# Guillaume Mercière

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2023852/publications.pdf>

Version: 2024-02-01

75  
papers

842  
citations

687363

13  
h-index

552781

26  
g-index

77  
all docs

77  
docs citations

77  
times ranked

517  
citing authors

#	ARTICLE	IF	CITATIONS
1	Model learning of the tire–road friction slip dependency under standard driving conditions. Control Engineering Practice, 2022, 121, 105048.	5.5	6
2	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
3	Shaping multisine excitation for closed-loop identification of a flexible transmission. IFAC-PapersOnLine, 2021, 54, 643-648.	0.9	1
4	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
5	Combining Linear Algebra and Numerical Optimization for Gray-Box Affine State-Space Model Identification. IEEE Transactions on Automatic Control, 2020, 65, 3272-3285.	5.7	5
6	Foreword Identification and Control in Biomedical Applications. IEEE Transactions on Control Systems Technology, 2020, 28, 1-2.	5.2	3
7	Identification of single flexible-joint robot dynamics: a nonparametric approach. , 2020, , .		3
8	Technical Committee on System Identification and Adaptive Control [Technical Activities]. IEEE Control Systems, 2019, 39, 21-23.	0.8	0
9	Dynamic models for bird population–A parameter-varying partial differential equation identification approach. Control Engineering Practice, 2019, 91, 104091.	5.5	3
10	Combining least-squares and gradient-based algorithms for the identification of a co-current flow heat exchanger. International Journal of Control, 2019, 92, 191-203.	1.9	6
11	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
12	A stochastic subspace system identification algorithm for state-space systems in the general 2-D Roesser model form. International Journal of Control, 2018, 91, 2743-2771.	1.9	6
13	Optimal identification experiment design for LPV systems using the local approach. Automatica, 2018, 87, 258-266.	5.0	9
14	Heat equation parameter estimation based on the POD-Galerkin approach. IFAC-PapersOnLine, 2018, 51, 245-250.	0.9	3
15	Image modeling based on a 2-D stochastic subspace system identification algorithm. Multidimensional Systems and Signal Processing, 2017, 28, 1133-1165.	2.6	11
16	Identifiability of affine linear parameter-varying models. Automatica, 2017, 80, 62-74.	5.0	8
17	Technical Committee on System Identification and Adaptive Control [Technical Activities]. IEEE Control Systems, 2017, 37, 13-16.	0.8	0
18	Realization Theory for LPV State-Space Representations With Affine Dependence. IEEE Transactions on Automatic Control, 2017, 62, 4667-4674.	5.7	20

#	ARTICLE	IF	CITATIONS
19	Subspace identification with constraints on the impulse response. International Journal of Control, 2017, 90, 1728-1735.	1.9	14
20	Fouling Detection in a Parallel Flow Heat Exchanger via a Roesser Model Identification Procedure. IFAC-PapersOnLine, 2017, 50, 12866-12871.	0.9	6
21	Comparing global input-output behavior of frozen-equivalent LPV state-space models. IFAC-PapersOnLine, 2017, 50, 9766-9771.	0.9	9
22	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
23	Innovation-based subspace identification in open- and closed-loop. , 2016, , .		7
24	Structural properties of affine LPV to LFR transformation: Minimality, input-output behavior and identifiability. , 2016, , .		2
25	Subspace algorithms for identifying separable-in-denominator 2D systems with deterministic and stochastic inputs. International Journal of Control, 2016, 89, 2584-2610.	1.9	8
26	xml:ns:xocs="http://www.elsevier.com/xml/xocs/dtd" xml:ns:xs="http://www.w3.org/2001/XMLSchema" xml:ns:xsi="http://www.w3.org/2001/XMLSchema-instance" xml:ns="http://www.elsevier.com/xml/ja/dtd" xml:ns:ja="http://www.elsevier.com/xml/ja/dtd" xml:ns:mml="http://www.w3.org/1998/Math/MathML" xml:ns:tb="http://www.elsevier.com/xml/common/table/dtd" xml:ns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xml:ns:ce="http://www.elsevier.com/x	2.3	7
27	New developments for matrix fraction descriptions: A fully-parametrised approach. Automatica, 2016, 66, 15-24.	5.0	1
28	Structured model identification algorithm based on constrained optimisation. , 2015, , .		0
29	Gray-box LPV model identification of a 2-DoF surgical robotic manipulator by using an $H^{\infty}$ -norm-based local approach. IFAC-PapersOnLine, 2015, 48, 79-84.	0.9	6
30	New developments for experimental modal analysis of aircraft structures. MATEC Web of Conferences, 2015, 20, 01001.	0.2	0
31	Comparison of a gradient-based algorithm and a proximity control algorithm for gray-box LTI model identification. , 2015, , .		0
32	Reinitialized partial moments for the identification of the heat equation parameters. , 2015, , .		2
33	A benchmark for identification of a flexible serial manipulator using a camera. IFAC-PapersOnLine, 2015, 48, 1483-1488.	0.9	1
34	An $H^{\infty}$ -norm-based approach for operating point selection and LPV model identification from local experiments. Periodica Polytechnica Electrical Engineering and Computer Science, 2014, 58, 121-131.	1.0	4
35	Combining Analytic and Experimental Information for Linear Parameter-Varying Model Identification: Application to a Flexible Robotic Manipulator. Periodica Polytechnica Electrical Engineering and Computer Science, 2014, 58, 133-148.	1.0	3
36	Identification of 2D Roesser models by using linear fractional transformations. , 2014, , .		4

#	ARTICLE	IF	CITATIONS
37	A new parametrisation of matrix fraction descriptions to improve gradient-based optimisation methods. , 2014, , .		3
38	H <sub>∞</sub> -based LPV model identification from local experiments with a gap metric-based operating point selection. , 2014, , .		4
39	Frequency-domain identification of aircraft structural modes from short-duration flight tests. International Journal of Control, 2014, 87, 1352-1372.	1.9	6
40	Identification of Parameterized Gray-Box State-Space Systems: From a Black-Box Linear Time-Invariant Representation to a Structured One. IEEE Transactions on Automatic Control, 2014, 59, 2873-2885.	5.7	35
41	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
42	Linear fractional LPV model identification from local experiments: An H <sub>∞</sub> -based optimization technique. , 2013, , .		14
43	A local approach framework for black-box and gray-box LPV system identification. , 2013, , .		6
44	Identifying second-order models of mechanical structures in physical coordinates: An orthogonal complement approach. , 2013, , .		3
45	An Iterative Algorithm for Modal Analysis based on Structured Matrix Fractions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 518-523.	0.4	3
46	A Null-Space-based Technique for the Estimation of Linear-Time Invariant Structured State-Space Representations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 191-196.	0.4	16
47	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
48	Affine LPV systems: Realization theory, input-output equations and relationship with linear switched systems. , 2012, , .		14
49	Bounded-error uncertainty domain description for continuous-time state-space model. IET Control Theory and Applications, 2012, 6, 261.	2.1	1
50	Continuous-Time Linear Parameter-Varying Identification of a Cross Flow Heat Exchanger: A Local Approach. IEEE Transactions on Control Systems Technology, 2011, 19, 64-76.	5.2	40
51	Identification of a flexible robot manipulator using a linear parameter-varying descriptor state-space structure. , 2011, , .		19
52	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
53	Initialization of Gradient-based Optimization Algorithms for the Identification of Structured State-Space Models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10782-10787.	0.4	5
54	Parameterization and identification of multivariable state-space systems: A canonical approach. Automatica, 2011, 47, 1547-1555.	5.0	96

#	ARTICLE	IF	CITATIONS
55	System identification and uncertainty domain determination: a subspace-based approach. , 2010, , .		0
56	On-line structured subspace identification with application to switched linear systems. International Journal of Control, 2009, 82, 1496-1515.	1.9	34
57	Recursive subspace identification of Hammerstein models based on least squares support vector machines. IET Control Theory and Applications, 2009, 3, 1209-1216.	2.1	36
58	Identification of switched linear state space models without minimum dwell time. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 569-574.	0.4	15
59	Identification of Multivariable Canonical State-Space Representations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1638-1643.	0.4	1
60	Propagator-based methods for recursive subspace model identification. Signal Processing, 2008, 88, 468-491.	3.7	88
61	A least squares approach to the subspace identification problem. , 2008, , .		4
62	Identification de systèmes multivariables à temps continu par approche des sous-espaces. Journal European Des Systemes Automatisés, 2008, 42, 261-285.	0.4	5
63	Identification for gain-scheduling: a balanced subspace approach. Proceedings of the American Control Conference, 2007, , .	0.0	55
64	On-line structured identification of switching systems with possibly varying orders. , 2007, , .		5
65	A methodology to enhance the convergence of Output Error identification algorithms. , 2007, , .		10
66	Subspace based methods for continuous-time model identification of MIMO systems from filtered sampled data. , 2007, , .		15
67	Convergence analysis of instrumental variable recursive subspace identification algorithms. Automatica, 2007, 43, 1377-1386.	5.0	35
68	Nonlinear identification of continuous-time radio frequency Power Amplifier model. , 2007, , .		0
69	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
70	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
71	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
72	Evaluating time-dependent heat fluxes using artificial neural networks. Inverse Problems in Science and Engineering, 2006, 14, 97-109.	1.2	7

#	ARTICLE	IF	CITATIONS
73	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
74	Recursive subspace identification based on instrumental variable unconstrained quadratic optimization. International Journal of Adaptive Control and Signal Processing, 2004, 18, 771-797.	4.1	48
75	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