

Maria Seron

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8478409/maria-seron-publications-by-year.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

132
papers

2,726
citations

24
h-index

49
g-index

149
ext. papers

3,332
ext. citations

3.7
avg, IF

5.28
L-index

#	Paper	IF	Citations
132	Towards a Simple Sampled-Data Control Law for Stably Invertible Linear Systems. <i>IFAC-PapersOnLine</i> , 2020 , 53, 4582-4587	0.7	1
131	A systematic stochastic design strategy achieving an optimal tradeoff between peak BGL and probability of hypoglycaemic events for individuals having type 1 diabetes mellitus. <i>Biomedical Signal Processing and Control</i> , 2020 , 57, 101813	4.9	5
130	Fundamental performance properties of a general class of observers for linear systems having predictable disturbances. <i>Automatica</i> , 2020 , 113, 108717	5.7	1
129	Geometric MPC for three-phase AC inverters with performance bounds. <i>International Journal of Control</i> , 2020 , 93, 156-169	1.5	
128	Feedback and feedforward control in the context of model predictive control with application to the management of type 1 diabetes mellitus. <i>Control Engineering Practice</i> , 2019 , 89, 228-237	3.9	1
127	A performance bound for optimal insulin infusion in individuals with Type 1 diabetes ingesting a meal with slow postprandial response. <i>Automatica</i> , 2019 , 103, 531-537	5.7	5
126	Actuator fault tolerant control based on probabilistic ultimate bounds. <i>ISA Transactions</i> , 2019 , 84, 20-30	5.5	4
125	Set theoretic approach to fault-tolerant control of linear parameter-varying systems with sensor reintegration. <i>International Journal of Control</i> , 2019 , 92, 858-874	1.5	2
124	Stochastic model predictive control: Insights and performance comparisons for linear systems. <i>International Journal of Robust and Nonlinear Control</i> , 2019 , 29, 5038-5057	3.6	5
123	Fault estimation and controller compensation in Lure systems by LPV-embedding. <i>International Journal of Control</i> , 2019 , 92, 1914-1927	1.5	2
122	Control Limitations in Models of T1DM and the Robustness of Optimal Insulin Delivery. <i>Journal of Diabetes Science and Technology</i> , 2018 , 12, 926-936	4.1	3
121	Fault-tolerant fusion-based MPC with sensor recovery for constrained LPV systems. <i>International Journal of Robust and Nonlinear Control</i> , 2018 , 28, 3589-3605	3.6	3
120	Lyapunov-Function-Free Backstepping Design with Application to the Lorenz System. <i>IFAC-PapersOnLine</i> , 2018 , 51, 223-228	0.7	1
119	A fundamental control performance limit for a class of positive nonlinear systems. <i>Automatica</i> , 2018 , 95, 14-22	5.7	10
118	A modified relay autotuner for systems having large broadband disturbances. <i>Automatica</i> , 2018 , 94, 178-185	5.1	3
117	Vehicular platoons in cyclic interconnections. <i>Automatica</i> , 2018 , 94, 283-293	5.7	15
116	Ultimate boundedness and regions of attraction of frequency droop controlled microgrids with secondary control loops. <i>Automatica</i> , 2017 , 81, 416-428	5.7	9

115	Model Predictive Control of Distributed Air-Conditioning Loads to Compensate Fluctuations in Solar Power. <i>IEEE Transactions on Smart Grid</i> , 2017 , 8, 3055-3065	10.7	69
114	Characterisation of Optimal Responses to Pulse Inputs in the Bergman Minimal Model. <i>IFAC-PapersOnLine</i> , 2017 , 50, 15163-15168	0.7	1
113	Vehicular Platoons in cyclic interconnections with constant inter-vehicle spacing. <i>IFAC-PapersOnLine</i> , 2017 , 50, 2511-2516	0.7	4
112	From vehicular platoons to general networked systems: String stability and related concepts. <i>Annual Reviews in Control</i> , 2017 , 44, 157-172	10.3	35
111	Actuator fault tolerant control of systems with polytopic uncertainties using set-based diagnosis and virtual-actuator-based reconfiguration. <i>Automatica</i> , 2017 , 75, 182-190	5.7	27
110	Continuous-time probabilistic ultimate bounds and invariant sets: Computation and assignment. <i>Automatica</i> , 2016 , 71, 98-105	5.7	4
109	Actuator Fault Diagnosis Using Probabilistic Ultimate Bounds. <i>IEEE Latin America Transactions</i> , 2016 , 14, 2550-2555	0.7	2
108	Integration of invariant-set-based FDI with varying sampling rate virtual actuator and controller. <i>International Journal of Adaptive Control and Signal Processing</i> , 2016 , 30, 393-411	2.8	3
107	Ultimate bound minimisation by state feedback in discrete-time switched linear systems under arbitrary switching. <i>Nonlinear Analysis: Hybrid Systems</i> , 2016 , 21, 84-102	4.5	1
106	Eigenstructure Assignment for Componentwise Ultimate Bound Minimization in Discrete-Time Linear Systems. <i>IEEE Transactions on Automatic Control</i> , 2016 , 61, 3669-3675	5.9	1
105	Fault Tolerant Control for Lure Systems Via LPV Embedding. <i>Advanced Science Letters</i> , 2016 , 22, 2719-2723		2
104	Integrated framework for constrained minimum-time trajectory generation, fault detection and reconfiguration: A case-study. <i>International Journal of Adaptive Control and Signal Processing</i> , 2016 , 30, 986-1001	2.8	0
103	On invariant sets and closed-loop boundedness of Lure-type nonlinear systems by LPV-embedding. <i>International Journal of Robust and Nonlinear Control</i> , 2016 , 26, 1092-1111	3.6	4
102	A cost-effective sparse communication strategy for networked linear control systems: an SVD-based approach. <i>International Journal of Robust and Nonlinear Control</i> , 2015 , 25, 2223-2240	3.6	6
101	On robust stability and set invariance of switched linear parameter varying systems. <i>International Journal of Control</i> , 2015 , 88, 2588-2597	1.5	6
100	Ultimate bounds and regions of attraction for two-inverter microgrids with primary and secondary frequency control loops 2015 ,		1
99	Set Invariance Approach for Fault Detection and Isolation in Lure Systems by LPV-embedding. <i>IFAC-PapersOnLine</i> , 2015 , 48, 1036-1041	0.7	3
98	Robust fault estimation and compensation for LPV systems under actuator and sensor faults. <i>Automatica</i> , 2015 , 52, 294-301	5.7	54

97	Invariant-set-based fault diagnosis in Lure systems. <i>International Journal of Robust and Nonlinear Control</i> , 2014 , 24, 2405-2422	3.6	8
96	Bounds and invariant sets for a class of discrete-time switching systems with perturbations. <i>International Journal of Control</i> , 2014 , 87, 371-383	1.5	18
95	Robust model predictive control: reflections and opportunities. <i>Journal of Control and Decision</i> , 2014 , 1, 115-148	0.9	38
94	Ultimate boundedness of droop controlled microgrids with secondary loops 2014 ,		2
93	An investigation of set-theoretic methods for fault detection in Lure systems 2014 ,		1
92	A set separation sensor switching approach to the fault tolerant control of linear parameter varying systems 2014 ,		1
91	Robust actuator fault compensation accounting for uncertainty in the fault estimation. <i>International Journal of Adaptive Control and Signal Processing</i> , 2014 , 28, 1440-1453	2.8	6
90	A discussion on sensor recovery techniques for fault tolerant multisensor schemes. <i>International Journal of Systems Science</i> , 2014 , 45, 1708-1722	2.3	1
89	A fault tolerant control scheme based on sensor-actuation channel switching and dwell time. <i>International Journal of Robust and Nonlinear Control</i> , 2014 , 24, 775-792	3.6	6
88	Bounds and invariant sets for a class of switching systems with delayed-state-dependent perturbations. <i>Automatica</i> , 2013 , 49, 748-754	5.7	25
87	Predictive metamorphic control. <i>Automatica</i> , 2013 , 49, 3670-3676	5.7	16
86	Fault-tolerant control under controller-driven sampling using a virtual actuator strategy 2013 ,		1
85	Robust multiactuator fault-tolerant MPC design for constrained systems. <i>International Journal of Robust and Nonlinear Control</i> , 2013 , 23, 1828-1845	3.6	16
84	Fault-tolerant control of systems with convex polytopic linear parameter varying model uncertainty using virtual-sensor-based controller reconfiguration. <i>Annual Reviews in Control</i> , 2013 , 37, 146-153	10.3	19
83	Integrated sensor and actuator fault-tolerant control. <i>International Journal of Control</i> , 2013 , 86, 689-708	1.5	14
82	Application of nonlinear model predictive control to an industrial induction heating furnace. <i>Annual Reviews in Control</i> , 2013 , 37, 271-277	10.3	9
81	Eigenvalue assignment for componentwise ultimate bound minimisation in LTI discrete-time systems 2013 ,		4
80	Reference governor design for tracking problems with fault detection guarantees. <i>Journal of Process Control</i> , 2012 , 22, 829-836	3.9	33

79	Robust multisensor fault tolerant model-following MPC design for constrained systems. <i>International Journal of Applied Mathematics and Computer Science</i> , 2012 , 22, 211-223	1.7	18
78	Fault tolerant control using virtual actuators and set-separation detection principles. <i>International Journal of Robust and Nonlinear Control</i> , 2012 , 22, 709-742	3.6	22
77	Splines and polynomial tools for flatness-based constrained motion planning. <i>International Journal of Systems Science</i> , 2012 , 43, 1396-1411	2.3	11
76	Probabilistic set invariance and ultimate boundedness. <i>Automatica</i> , 2012 , 48, 2670-2676	5.7	25
75	Fault Tolerant Control Allowing Sensor Healthy-to-Faulty and Faulty-to-Healthy Transitions. <i>IEEE Transactions on Automatic Control</i> , 2012 , 57, 1657-1669	5.9	36
74	Predictive control: a historical perspective. <i>International Journal of Robust and Nonlinear Control</i> , 2012 , 22, 1296-1313	3.6	13
73	A revisit to inverse optimality of linear systems. <i>International Journal of Control</i> , 2012 , 85, 1506-1514	1.5	16
72	Fault-Tolerant Control of Convex Polytopic Linear Parameter Varying Systems Using Virtual-Sensor-Based Reconfiguration. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 240-246		
71	Set-based Actuator Fault Diagnosis in Lure Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 234-239		1
70	Opportunities and Challenges in the Application of Nonlinear MPC to Industrial Problems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 39-49		3
69	Virtual actuator for Lure systems with Lipschitz-continuous nonlinearity. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 222-227		14
68	Minimum-time trajectory generation for constrained linear systems using flatness and B-splines. <i>International Journal of Control</i> , 2011 , 84, 1565-1585	1.5	4
67	A combined model predictive control/space vector modulation (MPC-SVM) strategy for direct torque and flux control of induction motors 2011 ,		4
66	Bank of Virtual Actuators for Fault Tolerant Control. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 5436-5441		8
65	Zonotopic ultimate bounds for linear systems with bounded disturbances. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 9224-9229		4
64	Flatness-based Minimum-time Trajectory Generation for Constrained Linear Systems Using B-Splines. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 6674-6679		3
63	Robust MPC multicontroller design for actuator fault tolerance of constrained systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 4678-4683		3
62	Preview and Feedforward in Model Predictive Control: Conceptual and Design Issues*. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 5555-5560		6

61	Invariant-set-based fault tolerant control using virtual sensors. <i>IET Control Theory and Applications</i> , 2011 , 5, 1092-1103	2.5	9
60	Maximal controllability of input constrained unstable systems by the addition of implicit constraints. <i>Automatica</i> , 2011 , 47, 2260-2266	5.7	
59	Multisensor fusion fault tolerant control. <i>Automatica</i> , 2011 , 47, 1461-1466	5.7	16
58	A fault tolerant control scheme based on sensor-actuation channel switching and dwell time 2010 ,		2
57	Actuator fault tolerant multi-controller scheme using set separation based diagnosis. <i>International Journal of Control</i> , 2010 , 83, 2328-2339	1.5	25
56	Switching strategy for sensor fault tolerant vector control of doubly fed induction machines 2010 ,		1
55	Robust MPC design for fault tolerance of constrained multisensor linear systems 2010 ,		8
54	Speed-sensorless control of induction motors with improved fault tolerance against current sensor failure 2010 ,		3
53	Fault detection, isolation, and recovery using spline tools and differential flatness with application to a magnetic levitation system 2010 ,		2
52	Fault-tolerant control of a magnetic levitation system using virtual-sensor-based reconfiguration 2010 ,		6
51	Multisensor fusion fault-tolerant control of a magnetic levitation system 2010 ,		4
50	. <i>IEEE Transactions on Automatic Control</i> , 2010 , 55, 1531-1543	5.9	19
49	Positive invariant sets for fault tolerant multisensor control schemes. <i>International Journal of Control</i> , 2010 , 83, 2622-2640	1.5	102
48	Reference governor for tracking with fault detection capabilities 2010 ,		2
47	DTFC versus MPC for induction motor control reconfiguration after inverter faults 2010 ,		6
46	Methods for trajectory generation in a magnetic-levitation system under constraints 2010 ,		11
45	On splines and polynomial tools for constrained motion planning 2010 ,		5
44	Sensor fault-tolerant vector control of induction motors. <i>IET Control Theory and Applications</i> , 2010 , 4, 1707-1724	2.5	45

43	Actuator fault-tolerant control based on set separation. <i>International Journal of Adaptive Control and Signal Processing</i> , 2010 , 24, 1070-1090	2.8	21
42	Componentwise ultimate bound and invariant set computation for switched linear systems. <i>Automatica</i> , 2010 , 46, 1897-1901	5.7	28
41	Sensor fault-tolerant control of a magnetic levitation system. <i>International Journal of Robust and Nonlinear Control</i> , 2010 , 20, 2108-2121	3.6	13
40	Improved multisensor switching scheme for fault tolerant control 2009 ,		1
39	Componentwise ultimate bound computation for switched linear systems 2009 ,		5
38	Multisensor fusion fault-tolerant control with diagnosis via a set separation principle 2009 ,		5
37	A Flatness-Based Iterative Method for Reference Trajectory Generation in Constrained NMPC. <i>Lecture Notes in Control and Information Sciences</i> , 2009 , 325-333	0.5	18
36	Inverse minimax optimality of model predictive control policies. <i>Systems and Control Letters</i> , 2009 , 58, 31-38	2.4	3
35	Fault tolerant control using virtual actuators and invariant-set based fault detection and identification 2009 ,		8
34	When does QP yield the exact solution to constrained NMPC?. <i>International Journal of Control</i> , 2009 , 82, 812-821	1.5	1
33	Quadratic Leaky Integrate-and-Fire Neural Network Tuned with an Evolution-Strategy for a Simulated 3D Biped Walking Controller 2008 ,		1
32	Optimization opportunities in mining, metal and mineral processing. <i>Annual Reviews in Control</i> , 2008 , 32, 17-32	10.3	5
31	Robust output-feedback model predictive control for systems with unstructured uncertainty. <i>Automatica</i> , 2008 , 44, 1933-1943	5.7	74
30	Control design with guaranteed ultimate bound for perturbed systems. <i>Automatica</i> , 2008 , 44, 1815-1821	5.7	27
29	Multivariable quadratically-stabilizing quantizers with finite density. <i>Automatica</i> , 2008 , 44, 1880-1885	5.7	5
28	Multisensor switching control strategy with fault tolerance guarantees. <i>Automatica</i> , 2008 , 44, 88-97	5.7	100
27	A systematic method to obtain ultimate bounds for perturbed systems. <i>International Journal of Control</i> , 2007 , 80, 167-178	1.5	122
26	Systematic ultimate bound computation for sampled-data systems with quantization. <i>Automatica</i> , 2007 , 43, 1117-1123	5.7	21

25	A dissipativity approach to robustness in constrained model predictive control 2007 ,		7
24	Diagnosis and actuator fault tolerant control in vehicle active suspension 2007 ,		8
23	Open-cut Mine Planning via Closed-loop Receding-horizon Optimal Control 2007 , 43-62		2
22	Geometric characterization of multivariable quadratically stabilizing quantizers. <i>International Journal of Control</i> , 2006 , 79, 845-857	1.5	8
21	Receding horizon control applied to optimal mine planning. <i>Automatica</i> , 2006 , 42, 1337-1342	5.7	24
20	BACKLASH COMPENSATION USING RECEDING HORIZON CONTROL. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2005 , 38, 508-513		
19	Robust model predictive control of constrained linear systems with bounded disturbances. <i>Automatica</i> , 2005 , 41, 219-224	5.7	812
18	Lagrangian duality between constrained estimation and control. <i>Automatica</i> , 2005 , 41, 935-944	5.7	21
17	Performance degradation in feedback control due to constraints. <i>IEEE Transactions on Automatic Control</i> , 2003 , 48, 1381-1385	5.9	11
16	Enlarged terminal sets guaranteeing stability of receding horizon control. <i>Systems and Control Letters</i> , 2002 , 47, 57-63	2.4	29
15	Cheap control tracking performance for non-right-invertible systems. <i>International Journal of Robust and Nonlinear Control</i> , 2002 , 12, 1253-1273	3.6	11
14	Non-stationary stochastic embedding for transfer function estimation. <i>Automatica</i> , 2002 , 38, 47-62	5.7	21
13	Finitely parameterised implementation of receding horizon control for constrained linear systems 2002 ,		9
12	Anti-windup and Model Predictive Control: Reflections and Connections*. <i>European Journal of Control</i> , 2000 , 6, 467-477	2.5	29
11	Robustification of backstepping against input unmodeled dynamics. <i>IEEE Transactions on Automatic Control</i> , 2000 , 45, 1358-1363	5.9	18
10	Limiting performance of optimal linear filters. <i>Automatica</i> , 1999 , 35, 189-199	5.7	32
9	Feedback limitations in nonlinear systems: from Bode integrals to cheap control. <i>IEEE Transactions on Automatic Control</i> , 1999 , 44, 829-833	5.9	94
8	Fundamental design tradeoffs in filtering, prediction, and smoothing. <i>IEEE Transactions on Automatic Control</i> , 1997 , 42, 1240-1251	5.9	15

7	Nonlinear tracking and input disturbance rejection with application to pH control. <i>Journal of Process Control</i> , 1996 , 6, 195-202	3.9	14
6	Sensitivity limitations in nonlinear feedback control. <i>Systems and Control Letters</i> , 1996 , 27, 249-254	2.4	9
5	Control system design issues for unstable linear systems with saturated inputs. <i>IET Control Theory and Applications</i> , 1995 , 142, 335-344		14
4	Nonlinear adaptive control of feedback passive systems. <i>Automatica</i> , 1995 , 31, 1053-1060	5.7	56
3	On Infimum Quantization Density for Multiple-input Systems		2
2	Global analytical model predictive control with input constraints		49
1	On fundamental limitations for rudder roll stabilization of ships		5