Olivier Bachelier

List of Publications by Year
in descending order

		471509	345221
65 papers	**1,432** citations	**17** h-index	**36** g-index
65 all docs	**65** docs citations	**65** times ranked	**661** citing authors

#	Article	IF	Citations
1	On exponential stability of a class of descriptor continuous linear 2D Roesser models. International Journal of Control, 2023, 96, 1582-1593.	1.9	2
2	New Tests for the Stability of 2-D Roesser Models. IEEE Transactions on Automatic Control, 2021, 66, 406-412.	5.7	17
3	Conception and control of a new hybrid four-level inverter associated with a multi-source system. Electrical Engineering, 2021, 103, 579-593.	2.0	2
4	Study of Asymptotic Stability for 2D Fornasini-Marchesini linear models. , 2021, , .		0
5	Stability of one-dimensioned spatially interconnected systems. Multidimensional Systems and Signal Processing, 2020, 31, 1005-1028.	2.6	3
6	Hybrid four‐level FC inverter using an internal supercapacitor storage system for a microgrid connected application. IET Power Electronics, 2020, 13, 4043-4050.	2.1	0
7	On the stability and the stabilization of linear discrete repetitive processes. Multidimensional Systems and Signal Processing, 2019, 30, 963-987.	2.6	8
8	A Simple Necessary and Sufficient Condition of Asymptotic Stability for Scalar Fornasini-Marchesini Models. , 2019, , .		1
9	Comments on â€œOn Stabilization of 2-D Roesser Modelsâ€• IEEE Transactions on Automatic Control, 2018, 63, 2745-2749.	5.7	23
10	On the robust state-feedback stabilisation of nD hybrid Roesser models with implicit LFR uncertainty. International Journal of Control, 2018, 91, 2705-2713.	1.9	2
11	Structural stability, asymptotic stability and exponential stability for linear multidimensional systems: the good, the bad and the ugly. International Journal of Control, 2018, 91, 2714-2725.	1.9	16
12	Asymptotic Stability and Attractivity for 2D Linear Systems. , 2018, , .		5
13	Towards Less Conservative Conditions for ILC Design in the Two-Dimensional (2D) Systems Setting. , 2018, , .		2
14	A multi-function hybrid inverter for optimal performance in multi-source renewable energy. , 2018, , .		2
15	Modelling and control of a new hybrid compensator for grid power fluctuations. , 2018, , .		2
16	Hybrid synchronous generator output voltage control with energy storage. IET Electric Power Applications, 2018, 12, 991-998.	1.8	0
17	Roesser form of (wave) linear repetitive processes and structural stability. , 2018, , .		1
18	An Algebraic Approach to the Observer-Based Feedback Stabilization of Linear 2D Discrete Models. IFAC-PapersOnLine, 2017, 50, 1859-1864.	0.9	1

#	Article	IF	Citations
19	Structural stabilization of linear 2D discrete systems using equivalence transformations. Multidimensional Systems and Signal Processing, 2017, 28, 1629-1652.	2.6	18
20	Stability of 2D Discrete Takagiâ€"Sugeno Systems. Circuits, Systems, and Signal Processing, 2017, 36, 2256-2274.	2.0	1
21	On Stabilization of 2D Roesser Models. IEEE Transactions on Automatic Control, 2017, 62, 2505-2511.	5.7	32
22	Digression on the equivalence between linear 2D discrete repetitive processes and roesser models. , 2017, , .		6
23	Structural Stability and Asymptotic Stability for Linear Multidimensional Systems: a Counterexample * *This work was supported by the ANR MSDOS grant ANR-13-BS03-0005.. IFAC-PapersOnLine, 2017, 50, 1853-1858.	0.9	2
24	Structural Stability and Equivalence of Linear 2D Discrete Systems11This work was supported by the ANR-13-BS03-0005 (MSDOS).. IFAC-PapersOnLine, 2016, 49, 136-141.	0.9	1
25	LMI Stability Conditions for 2D Roesser Models. IEEE Transactions on Automatic Control, 2016, 61, 766-770.	5.7	56
26	Existence and uniqueness of the solutions of continuous nonlinear 2D Roesser Models: The globally Lipschitz case. , 2015, , .		2
27	Modeling and simulation of soft sensor design for real-time speed and position estimation of PMSM. ISA Transactions, 2015, 57, 329-339.	5.7	22
28	State feedback structural stabilization of 2D discrete Roesser models. , 2015, , .		5
29	LMI approach of state-feedback controller design for a STATCOM-supercapacitors energy storage system associated with a wind generation. Energy Conversion and Management, 2015, 96, 463-472.	9.2	22
30	$$H_{infty }$$ H âˆž Performance Analysis of 2D Continuous Time-Varying Delay Systems. Circuits, Systems, and Signal Processing, 2015, 34, 3489-3504.	2.0	7
31	Strong practical stability and stabilization of uncertain discrete linear repetitive processes. Numerical Linear Algebra With Applications, 2013, 20, 220-233.	1.6	8
32	Robust stability of hybrid Roesser models against parametric uncertainty: a general approach. Multidimensional Systems and Signal Processing, 2013, 24, 667-684.	2.6	10
33	Robust control with finite frequency specification for uncertain discrete linear repetitive processes. Multidimensional Systems and Signal Processing, 2013, 24, 727-745.	2.6	20
34	Sensorless control of PMSM based on a nonlinear observer and a high-frequency signal injection for automotive applications. , 2013, , .		3
35	Control of differential linear repetitive processes using strong practical stability and â"‹âˆždisturbance attenuation. International Journal of Control, 2013, 86, 636-649.	1.9	3
36	On <scp>G</scp>eneralised <scp>S</scp>tein's <scp>I</scp>nequalites and the Inertias of Their Solutions: Application to Pencil Rootâ€Clustering. Asian Journal of Control, 2013, 15, 420-429.	3.0	0

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37	Robust state feedback admissibilisation of discrete linear polytopic descriptor systems: a strict linear matrix inequality approach. IET Control Theory and Applications, 2012, 6, 1097-1108.	2.1	16
38	Control of discrete linear repetitive processes using strong practical stability and disturbance attenuation. Systems and Control Letters, 2012, 61, 1138-1144.	2.3	11
39	Fractional and nD systems: a continuous case. Multidimensional Systems and Signal Processing, 2012, 23, 329-347.	2.6	10
40	S-procedure for deriving stability conditions of hybrid Roesser models. , 2011, , .		3
41	Exponential stability conditions for 2D continuous state-delayed systems. , 2011, , .		7
42	Robust S-regularity of matrix pencils applied to the analysis of descriptor models. Linear Algebra and Its Applications, 2011, 435, 923-942.	0.9	10
43	Pole placement in non connected regions for descriptor models. Mathematics and Computers in Simulation, 2011, 81, 2617-2631.	4.4	11
44	Stability and stabilization of 2D continuous state-delayed systems. , 2011, , .		6
45	S-régularité et analyse robuste des systèmes implicites vis-à-vis d'incertitudes rationnelles. Journal Europeen Des Systemes Automatises, 2011, 45, 299-337.	0.4	0
46	Strong practical stability and stabilization of differential linear repetitive processes. Systems and Control Letters, 2010, 59, 639-644.	2.3	3
47	New robust stability and stabilization conditions for linear repetitive processes. , 2009, , .		3
48	Non-iterative pole placement technique: A step further. Journal of the Franklin Institute, 2008, 345, 267-281.	3.4	8
49	On the Kalman–Yakubovich–Popov lemma and the multidimensional models. Multidimensional Systems and Signal Processing, 2008, 19, 425-447.	2.6	30
50	Robust root-clustering analysis in a union of subregions for descriptor systems. IET Control Theory and Applications, 2008, 2, 615-624.	2.1	17
51	An S-regularity approach to the robust analysis of descriptor models. , 2008, , .		2
52	Robust Matrix Root-Clustering Analysis through Extended KYP Lemma. SIAM Journal on Control and Optimization, 2006, 45, 368-381.	2.1	13
53	On Pole Placement via Eigenstructure Assignment Approach. IEEE Transactions on Automatic Control, 2006, 51, 1554-1558.	5.7	34
54	Stability and stabilization of continuous descriptor systems: An LMI approach. Mathematical Problems in Engineering, 2006, 2006, 1-15.	1.1	38

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55	Pole placement in a union of regions with prespecified subregion allocation. Mathematics and Computers in Simulation, 2006, 72, 38-46.	4.4	21
56	Stabilization of Discrete Linear Repetitive Processes with Switched Dynamics. Multidimensional Systems and Signal Processing, 2006, 17, 271-295.	2.6	9
57	An approach for robust matrix root-clustering analysis in a union of regions. IMA Journal of Mathematical Control and Information, 2005, 22, 227-239.	1.7	24
58	Static output feedback design for uncertain linear discrete time systems. IMA Journal of Mathematical Control and Information, 2004, 21, 1-13.	1.7	106
59	Robust Root-Clustering of a Matrix in Intersections or Unions of Regions. SIAM Journal on Control and Optimization, 2004, 43, 1078-1093.	2.1	27
60	Parameter-dependent Lyapunov functions applied to analysis of induction motor stability. Control Engineering Practice, 2002, 10, 337-345.	5.5	7
61	D-stability of polynomial matrices. International Journal of Control, 2001, 74, 845-856.	1.9	48
62	Low-order robust controller design for interval plants. International Journal of Control, 2001, 74, 1-9.	1.9	20
63	Rank-one LMI Approach to Stability of 2-D Polynomial Matrices. Multidimensional Systems and Signal Processing, 2001, 12, 33-48.	2.6	8
64	A new robust -stability condition for real convex polytopic uncertainty. Systems and Control Letters, 2000, 40, 21-30.	2.3	635
65	Bounds for robust eigenvalue assignment in a sector. , 1997, , .		0