

# Olivier Bachelier

## List of Publications by Year in descending order

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65  
papers

1,432  
citations

471371

17  
h-index

345118

36  
g-index

65  
all docs

65  
docs citations

65  
times ranked

661  
citing authors

#	ARTICLE	IF	CITATIONS
1	A new robust -stability condition for real convex polytopic uncertainty. Systems and Control Letters, 2000, 40, 21-30.	1.3	635
2	Static output feedback design for uncertain linear discrete time systems. IMA Journal of Mathematical Control and Information, 2004, 21, 1-13.	1.1	106
3	LMI Stability Conditions for 2D Roesser Models. IEEE Transactions on Automatic Control, 2016, 61, 766-770.	3.6	56
4	D-stability of polynomial matrices. International Journal of Control, 2001, 74, 845-856.	1.2	48
5	Stability and stabilization of continuous descriptor systems: An LMI approach. Mathematical Problems in Engineering, 2006, 2006, 1-15.	0.6	38
6	On Pole Placement via Eigenstructure Assignment Approach. IEEE Transactions on Automatic Control, 2006, 51, 1554-1558.	3.6	34
7	On Stabilization of 2D Roesser Models. IEEE Transactions on Automatic Control, 2017, 62, 2505-2511.	3.6	32
8	On the Kalmanâ€“Yakubovichâ€“Popov lemma and the multidimensional models. Multidimensional Systems and Signal Processing, 2008, 19, 425-447.	1.7	30
9	Robust Root-Clustering of a Matrix in Intersections or Unions of Regions. SIAM Journal on Control and Optimization, 2004, 43, 1078-1093.	1.1	27
10	An approach for robust matrix root-clustering analysis in a union of regions. IMA Journal of Mathematical Control and Information, 2005, 22, 227-239.	1.1	24
11	Comments on â€œOn Stabilization of 2-D Roesser Modelsâ€“. IEEE Transactions on Automatic Control, 2018, 63, 2745-2749.	3.6	23
12	Modeling and simulation of soft sensor design for real-time speed and position estimation of PMSM. ISA Transactions, 2015, 57, 329-339.	3.1	22
13	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.	4.4	22
14	Pole placement in a union of regions with prespecified subregion allocation. Mathematics and Computers in Simulation, 2006, 72, 38-46.	2.4	21
15	Low-order robust controller design for interval plants. International Journal of Control, 2001, 74, 1-9.	1.2	20
16	Robust control with finite frequency specification for uncertain discrete linear repetitive processes. Multidimensional Systems and Signal Processing, 2013, 24, 727-745.	1.7	20
17	Structural stabilization of linear 2D discrete systems using equivalence transformations. Multidimensional Systems and Signal Processing, 2017, 28, 1629-1652.	1.7	18
18	Robust root-clustering analysis in a union of subregions for descriptor systems. IET Control Theory and Applications, 2008, 2, 615-624.	1.2	17

#	ARTICLE	IF	CITATIONS
19	New Tests for the Stability of 2-D Roesser Models. IEEE Transactions on Automatic Control, 2021, 66, 406-412.	3.6	17
20	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.	1.2	16
21	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.	1.2	16
22	Robust Matrix Root-Clustering Analysis through Extended KYP Lemma. SIAM Journal on Control and Optimization, 2006, 45, 368-381.	1.1	13
23	Pole placement in non connected regions for descriptor models. Mathematics and Computers in Simulation, 2011, 81, 2617-2631.	2.4	11
24	Control of discrete linear repetitive processes using strong practical stability and disturbance attenuation. Systems and Control Letters, 2012, 61, 1138-1144.	1.3	11
25	Robust S-regularity of matrix pencils applied to the analysis of descriptor models. Linear Algebra and Its Applications, 2011, 435, 923-942.	0.4	10
26	Fractional and nD systems: a continuous case. Multidimensional Systems and Signal Processing, 2012, 23, 329-347.	1.7	10
27	Robust stability of hybrid Roesser models against parametric uncertainty: a general approach. Multidimensional Systems and Signal Processing, 2013, 24, 667-684.	1.7	10
28	Stabilization of Discrete Linear Repetitive Processes with Switched Dynamics. Multidimensional Systems and Signal Processing, 2006, 17, 271-295.	1.7	9
29	Rank-one LMI Approach to Stability of 2-D Polynomial Matrices. Multidimensional Systems and Signal Processing, 2001, 12, 33-48.	1.7	8
30	Non-iterative pole placement technique: A step further. Journal of the Franklin Institute, 2008, 345, 267-281.	1.9	8
31	Strong practical stability and stabilization of uncertain discrete linear repetitive processes. Numerical Linear Algebra With Applications, 2013, 20, 220-233.	0.9	8
32	On the stability and the stabilization of linear discrete repetitive processes. Multidimensional Systems and Signal Processing, 2019, 30, 963-987.	1.7	8
33	Parameter-dependent Lyapunov functions applied to analysis of induction motor stability. Control Engineering Practice, 2002, 10, 337-345.	3.2	7
34	Exponential stability conditions for 2D continuous state-delayed systems. , 2011, , .		7
35	Performance Analysis of 2D Continuous Time-Varying Delay Systems. Circuits, Systems, and Signal Processing, 2015, 34, 3489-3504.	1.2	7
36	Stability and stabilization of 2D continuous state-delayed systems. , 2011, , .		6

#	ARTICLE	IF	CITATIONS
37	Digression on the equivalence between linear 2D discrete repetitive processes and roesser models. , 2017, , .		6
38	State feedback structural stabilization of 2D discrete Roesser models. , 2015, , .		5
39	Asymptotic Stability and Attractivity for 2D Linear Systems. , 2018, , .		5
40	New robust stability and stabilization conditions for linear repetitive processes. , 2009, , .		3
41	Strong practical stability and stabilization of differential linear repetitive processes. Systems and Control Letters, 2010, 59, 639-644.	1.3	3
42	S-procedure for deriving stability conditions of hybrid Roesser models. , 2011, , .		3
43	Sensorless control of PMSM based on a nonlinear observer and a high-frequency signal injection for automotive applications. , 2013, , .		3
44	Control of differential linear repetitive processes using strong practical stability and $\hat{\alpha}$ disturbance attenuation. International Journal of Control, 2013, 86, 636-649.	1.2	3
45	Stability of one-dimensioned spatially interconnected systems. Multidimensional Systems and Signal Processing, 2020, 31, 1005-1028.	1.7	3
46	An S-regularity approach to the robust analysis of descriptor models. , 2008, , .		2
47	Existence and uniqueness of the solutions of continuous nonlinear 2D Roesser Models: The globally Lipschitz case. , 2015, , .		2
48	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.	0.5	2
49	On the robust state-feedback stabilisation of $n \times D$ hybrid Roesser models with implicit LFR uncertainty. International Journal of Control, 2018, 91, 2705-2713.	1.2	2
50	Towards Less Conservative Conditions for ILC Design in the Two-Dimensional (2D) Systems Setting. , 2018, , .		2
51	A multi-function hybrid inverter for optimal performance in multi-source renewable energy. , 2018, , .		2
52	Modelling and control of a new hybrid compensator for grid power fluctuations. , 2018, , .		2
53	Conception and control of a new hybrid four-level inverter associated with a multi-source system. Electrical Engineering, 2021, 103, 579-593.	1.2	2
54	On exponential stability of a class of descriptor continuous linear 2D Roesser models. International Journal of Control, 2023, 96, 1582-1593.	1.2	2

#	ARTICLE	IF	CITATIONS
55	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.	0.5	1
56	An Algebraic Approach to the Observer-Based Feedback Stabilization of Linear 2D Discrete Models. IFAC-PapersOnLine, 2017, 50, 1859-1864.	0.5	1
57	Stability of 2D Discrete Takagi-Sugeno Systems. Circuits, Systems, and Signal Processing, 2017, 36, 2256-2274.	1.2	1
58	A Simple Necessary and Sufficient Condition of Asymptotic Stability for Scalar Fornasini-Marchesini Models. , 2019, , .		1
59	Roesser form of (wave) linear repetitive processes and structural stability. , 2018, , .		1
60	Bounds for robust eigenvalue assignment in a sector. , 1997, , .		0
61	On Generalised Stein's Inequalities and the Inertias of Their Solutions: Application to Pencil Finite Root Clustering. Asian Journal of Control, 2013, 15, 420-429.	1.9	0
62	Hybrid synchronous generator output voltage control with energy storage. IET Electric Power Applications, 2018, 12, 991-998.	1.1	0
63	Singularité et analyse robuste des systèmes implicites vis-à-vis des incertitudes rationnelles. Journal European Des Systemes Automatisés, 2011, 45, 299-337.	0.3	0
64	Hybrid four-level FC inverter using an internal supercapacitor storage system for a microgrid connected application. IET Power Electronics, 2020, 13, 4043-4050.	1.5	0
65	Study of Asymptotic Stability for 2D Fornasini-Marchesini linear models. , 2021, , .		0