Pierre-Alexandre Bliman

List of Publications by Year
in descending order

78	2,378	430754 18	233338 45
papers	citations	h-index	g-index

78	78	78	1472
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Robust control strategy by the Sterile Insect Technique for reducing epidemiological risk in presence of vector migration. Mathematical Biosciences, 2022, 350, 108856.	0.9	2
2	A feedback control perspective on biological control of dengue vectors by Wolbachia infection. European Journal of Control, 2021, 59, 188-206.	1.6	4
3	How best can finite-time social distancing reduce epidemic final size?. Journal of Theoretical Biology, 2021, 511, 110557.	0.8	25
4	Optimal Immunity Control and Final Size Minimization by Social Distancing for the SIR Epidemic Model. Journal of Optimization Theory and Applications, 2021, 189, 408-436.	0.8	19
5	Modelling and control of Mendelian and maternal inheritance for biological control of dengue vectors. , 2021, , .		1
6	A class of fastâ€“slow models for adaptive resistance evolution. Theoretical Population Biology, 2020, 135, 32-48.	0.5	3
7	Feedback Control Principles for Biological Control of Dengue Vectors*. , 2019, , .		3
8	Implementation of control strategies for sterile insect techniques. Mathematical Biosciences, 2019, 314, 43-60.	0.9	37
9	Ensuring successful introduction of Wolbachia in natural populations of Aedes aegypti by means of feedback control. Journal of Mathematical Biology, 2018, 76, 1269-1300.	0.8	26
10	Stabilization of periodic orbits of discrete-time dynamical systems using the Prediction-Based Control: New control law and practical aspects. Journal of the Franklin Institute, 2018, 355, 4771-4793.	1.9	7
11	Approximate Prediction-Based Control Method for Nonlinear Oscillatory Systems with Applications to Chaotic Systems. Journal of Control Science and Engineering, 2018, 2018, 1-21.	0.8	0
12	A cooperative conjugate gradient method for linear systems permitting efficient multi-thread implementation. Computational and Applied Mathematics, 2018, 37, 1601-1628.	1.3	1
13	Establishing Traveling Wave in Bistable Reaction-Diffusion System by Feedback. , 2017, 1, 62-67.		6
14	Cooperative concurrent asynchronous computation of the solution of symmetric linear systems. Numerical Algorithms, 2017, 75, 587-617.	1.1	1
15	Convergence results for continuous-time dynamics arising in ant colony optimization. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7031-7036.	0.4	3
16	A cooperative conjugate gradient method for linear systems permitting multithread implementation of low complexity. , 2012, , .		3
17	Reduced-Order Models for a LNT-SCR Diesel After-treatment Architecture with NO/NO2 Differentiation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 745-750.	0.4	1
18	A new method for stabilizing unstable periodic orbits of continuous-time systems. Application to control of chaos. , 2012, , .		0

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19	Control-Oriented Modeling of a LNT-SCR Diesel After-Treatment Architecture. SAE International Journal of Engines, 2011, 4, 1764-1775.	0.4	1
20	On the conservatism of the sum-of-squares method for analysis of time-delayed systems. Automatica, 2011, 47, 2406-2411.	3.0	9
21	New feedback laws for stabilization of unstable periodic orbits. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 1005-1010.	0.4	3
22	Cooperative parallel asynchronous computation of the solution of symmetric linear systems. , 2010, , .		3
23	Control-theoretic design of iterative methods for symmetric linear systems of equations. , 2009, , .		6
24	Problem 10.1 Root-clustering for multivariate polynomials and robust stability analysis. , 2009, , 299-303.		0
25	Stability analysis and gain-scheduled state feedback control for continuous-time systems with bounded parameter variations. International Journal of Control, 2009, 82, 1045-1059.	1.2	40
26	Convergence Speed of Unsteady Distributed Consensus: Decay Estimate Along the Settling Spanning-Trees. SIAM Journal on Control and Optimization, 2009, 48, 1-32.	1.1	53
27	Convergence Speed in Distributed Consensus and Averaging. SIAM Journal on Control and Optimization, 2009, 48, 33-55.	1.1	385
28	Parameter-dependent and filter design for linear systems with arbitrarily time-varying parameters in polytopic domains. Signal Processing, 2008, 88, 1801-1816.	2.1	37
29	Application of semi-definite programming to robust stability of delay systems. Applied Mathematics and Computation, 2008, 200, 517-528.	1.4	4
30	Average consensus problems in networks of agents with delayed communications. Automatica, 2008, 44, 1985-1995.	3.0	368
31	Tight estimates for convergence of some non-stationary consensus algorithms. Systems and Control Letters, 2008, 57, 996-1004.	1.3	17
32	Robust LMIs with parameters in multi-simplex: Existence of solutions and applications. , 2008, , .		67
33	Rate of Convergence for Consensus with Delays. , 2008, , .		19
34	Tight estimates for non-stationary consensus with fixed underlying spanning tree. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 9021-9026.	0.4	9
35	Asymptotically exact H<inf>2</inf> guaranteed cost computation by means of a special parameter-dependent Lyapunov function. , 2007, , .		4
36	Linear matrix inequality characterisation for â„‹âˆž and â„‹2 guaranteed cost gain-scheduling quadratic stabilisation of linear time-varying polytopic systems. IET Control Theory and Applications, 2007, 1, 1726-1735.	1.2	20

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37	Convergence speed of distributed consensus and topology of the associated information spread. , 2007, , .		10
38	Existence of Homogeneous Polynomial Solutions for Parameter-Dependent Linear Matrix Inequalities with Parameters in the Simplex. , 2006, , .		48
39	Backstepping Design for Time-Delay Nonlinear Systems. IEEE Transactions on Automatic Control, 2006, 51, 149-154.	3.6	244
40	LMI Characterisation of Robust Stability for Time-Delay Systems: Singular Perturbation Approach. , 2006, , .		5
41	An Exact Stability Analysis Test for Single-Parameter Polynomially-Dependent Linear Systems. IEEE Transactions on Automatic Control, 2006, 51, 1161-1164.	3.6	11
42	Stability of leaderless discrete-time multi-agent systems. Mathematics of Control, Signals, and Systems, 2006, 18, 293-322.	1.4	82
43	An exact stability analysis test for single-parameter polynomially-dependent linear systems. , 2004, , .		1
44	An existence result for polynomial solutions of parameter-dependent LMIs. Systems and Control Letters, 2004, 51, 165-169.	1.3	121
45	A Convex Approach to Robust Stability for Linear Systems with Uncertain Scalar Parameters. SIAM Journal on Control and Optimization, 2004, 42, 2016-2042.	1.1	173
46	From Lyapunov-Krasovskii Functionals for Delay-Independent Stability to LMI Conditions for Âμ-Analysis. Lecture Notes in Computational Science and Engineering, 2004, , 75-85.	0.1	5
47	Controlled linear system with delayed relay output under impulse random disturbances. Automatica, 2003, 39, 1399-1405.	3.0	0
48	Stability Analysis of Discrete-Time Switched Systems Through Lyapunov Functions with Nonminimal State. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 325-329.	0.4	18
49	OPTIMAL CONTROL OF STOCHASTIC LINEAR SYSTEM WITH DELAYED RELAY OUTPUT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 407-411.	0.4	0
50	Stability of non-linear delay systems: Delay-independent small gain theorem and frequency domain interpretation of the Lyapunov-Krasovskii method. International Journal of Control, 2002, 75, 265-274.	1.2	10
51	Lyapunov equation for the stability of linear delay systems of retarded and neutral type. IEEE Transactions on Automatic Control, 2002, 47, 327-335.	3.6	88
52	Absolute stability criteria with prescribed decay rate for finite-dimensional and delay systems. Automatica, 2002, 38, 2015-2019.	3.0	16
53	Lyapunov Equation for the Stability of 2-D Systems. Multidimensional Systems and Signal Processing, 2002, 13, 201-222.	1.7	40
54	Robust absolute stability of delay systems. Lecture Notes in Control and Information Sciences, 2001, , 207-237.	0.6	5

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55	Delay-independent circle criterion and popov criterion. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 77-82.	0.4	1
56	Bounded-Real Lemma for 2-D Systems. Application to the Analysis of Delay-Independent H âˆž Performance of Delay Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 313-318.	0.4	0
57	A Lyapunov Equation Equivalent to Internal Stability of 2-D Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 549-553.	0.4	0
58	LMI characterization of the strong delay-independent stability of linear delay systems via quadratic Lyapunovâ€“Krasovskii functionals. Systems and Control Letters, 2001, 43, 263-274.	1.3	39
59	Lyapunov-Krasovskii functionals and frequency domain: delay-independent absolute stability criteria for delay systems. International Journal of Robust and Nonlinear Control, 2001, 11, 771-788.	2.1	58
60	Strong Resonances at Hopf Bifurcations in Control Systems. Automation and Remote Control, 2001, 62, 1783-1802.	0.4	0
61	Stability criteria for delay systems with sector-bounded nonlinearities. , 2001, , .		4
62	Delay-independent small gain theorem and frequency domain interpretation of the Lyapunov-Krasovskii method for stability of nonlinear delay systems. , 2001, , .		7
63	A note on frequency domain interpretation of Lyapunov-Krasovskii method in control of linear delay systems. , 2001, , .		3
64	Lyapunov-Krasovskii method and strong delay-independent stability of linear delay systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 33-37.	0.4	7
65	On Super-high Frequencies in Discontinuous 1st-Order Delayâ€“Differential Equations. Journal of Differential Equations, 2000, 162, 326-358.	1.1	11
66	Extension of Popov absolute stability criterion to non-autonomous systems with delays. International Journal of Control, 2000, 73, 1349-1361.	1.2	34
67	Extension of Popov criterion to time-varying nonlinearities: LMI, frequential and graphical conditions. Lecture Notes in Control and Information Sciences, 1999, , 95-114.	0.6	3
68	Periodic solutions of linear systems coupled with relay. Nonlinear Analysis: Theory, Methods & Applications, 1997, 30, 687-696.	0.6	12
69	Nonlinear resonance in systems with hysteresis. Nonlinear Analysis: Theory, Methods & Applications, 1996, 27, 561-577.	0.6	10
70	Factorization and smallest-norm roots of multivariable polynomials in robustness analysis. , 0, , .		1
71	Popov-like frequency criterion for existence of forced periodic oscillations. , 0, , .		1
72	LMIs for delay-independent properties of delay systems and input-output analysis of systems with complex parameter. , 0, , .		0

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73	Nonconservative LMI approach to robust stability for systems with uncertain scalar parameters. , 0, , .		18
74	Stabilization of LPV systems. , 0, , .		27
75	Backstepping design for time-delay nonlinear systems. , 0, , .		7
76	Average consensus problems in networks of agents with delayed communications. , 0, , .		40
77	Extension of a result by Moreau on stability of leaderless multi-agent systems.. , 0, , .		24
78	Multi-Parameter Dependent Lyapunov Functions for the Stability Analysis of Parameter-Dependent LTI Systems. , 0, , .		7