Antoine Chaillet

List of Publications by Year
in descending order

70	1,089	471371 17	454834 30
papers	citations	h-index	g-index

72	72	72	970
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Lyapunovâ€“Krasovskii Characterizations of Integral Input-to-State Stability of Delay Systems With Nonstrict Dissipation Rates. IEEE Transactions on Automatic Control, 2022, 67, 3259-3272.	3.6	16
2	Adaptive control of Lipschitz time-delay systems by sigma modification with application to neuronal population dynamics. Systems and Control Letters, 2022, 159, 105082.	1.3	6
3	Integral input-to-state stable time-delay systems in cascade. Automatica, 2022, 139, 110175.	3.0	2
4	On Extended Model Order Reduction for Linear Time Delay Systems. International Series of Numerical Mathematics, 2021, , 191-215.	1.0	1
5	Lyapunov conditions for uniform asymptotic output stability and a relaxation of BarbÄƒlatâ€™s lemma. Automatica, 2021, 132, 109792.	3.0	12
6	Rodent models used in preclinical studies of deep brain stimulation to rescue memory deficits. Neuroscience and Biobehavioral Reviews, 2021, 130, 410-432.	2.9	0
7	Model order reduction for linear time delay systems: A delay-dependent approach based on energy functionals. Automatica, 2020, 112, 108701.	3.0	11
8	Counterexample to a Lyapunov Condition for Uniform Asymptotic Partial Stability. , 2020, 4, 397-401.		9
9	Self-Tuning Deep Brain Stimulation Controller for Suppression of Beta Oscillations: Analytical Derivation and Numerical Validation. Frontiers in Neuroscience, 2020, 14, 639.	1.4	18
10	Analysis of Integral Input-to-State Stable time-delay systems in cascade. IFAC-PapersOnLine, 2020, 53, 6404-6409.	0.5	1
11	Adaptive stimulation strategy for selective brain oscillations disruption in a neuronal population model with delays. IFAC-PapersOnLine, 2019, 51, 250-251.	0.5	0
12	A relaxed Lyapunov-Krasovskii condition for global exponential stability of Lipschitz time-delay systems. , 2019, , .		8
13	ISS-Stabilization of Delayed Neural Fields by Small-Gain Arguments. Advances in Delays and Dynamics, 2019, , 65-81.	0.4	0
14	Fornical Closed-Loop Stimulation for Alzheimerâ€™s Disease. Trends in Neurosciences, 2018, 41, 418-428.	4.2	39
15	Integral Input-to-State Stability of Delay Systems Based on Lyapunov-Krasovskii Functionals with Point-Wise Dissipation Rate. , 2018, , .		7
16	Adaptive Scheme for Pathological Oscillations Disruption in a Delayed Neuronal Population Model. , 2018, , .		3
17	Experimental assessment of the safety and potential efficacy of high irradiance photostimulation of brain tissues. Scientific Reports, 2017, 7, 43997.	1.6	48
18	Global stabilization of classes of linear control systems with bounds on the feedback and its successive derivatives. Systems and Control Letters, 2017, 99, 17-24.	1.3	5

#	Article	IF	Citations
19	Global Stabilization of Linear Systems with Bounds on the Feedback and its Successive Derivatives. SIAM Journal on Control and Optimization, 2017, 55, 2783-2810.	1.1	2
20	Robust stabilization of delayed neural fields with partial measurement and actuation. Automatica, 2017, 83, 262-274.	3.0	22
21	Is a point-wise dissipation rate enough to show ISS for time-delay systems? * *This work is supported by a public grant overseen by the French National Research Agency (ANR) as part of the Investissement dAvenir program, through the iCODE Institute project funded by the IDEX Paris-Saclay, ANR-11-IDEX-0003-02, and by the ANR ICIC project SynchNeuro.. IFAC-PapersOnLine, 2017, 50, 14356-14361.	0.5	9
22	Incremental stability of spatiotemporal delayed dynamics and application to neural fields. , 2017, , .		4
23	Robustness of ISS systems to inputs with limited moving average: Application to spacecraft formations. International Journal of Robust and Nonlinear Control, 2016, 26, 816-833.	2.1	1
24	Strong iISS for a class of systems under saturated feedback. Automatica, 2016, 71, 272-280.	3.0	9
25	Closed-loop firing rate regulation of two interacting excitatory and inhibitory neural populations of the basal ganglia. Biological Cybernetics, 2016, 110, 55-71.	0.6	17
26	Incremental stability of delayed neural fields: a unifying framework for endogenous and exogenous sources of pathological oscillations. BMC Neuroscience, 2015, 16, P24.	0.8	0
27	Global stabilization of multiple integrators by a bounded feedback with constraints on its successive derivatives. , 2015, , .		4
28	Closed-loop stimulation of a delayed neural fields model of parkinsonian STN-GPe network: a theoretical and computational study. Frontiers in Neuroscience, 2015, 9, 237.	1.4	23
29	Stability of Neuronal Networks with Homeostatic Regulation. PLoS Computational Biology, 2015, 11, e1004357.	1.5	27
30	Flux and Position Observer of Permanent Magnet Synchronous Motors with Relaxed Persistency of Excitation Conditionsâˆ—â€”This article is supported by Government of Russian Federation (grant 074-U01,) Tj ETQq0 0 0 rgBT /Overloc (project 14.Z50.31.0031).. IFAC-PapersOnLine, 2015, 48, 301-306.	0.5	20
31	Robustness of Stochastic Discrete-Time Switched Linear Systems With Application to Control With Shared Resources. IEEE Transactions on Automatic Control, 2015, 60, 3168-3179.	3.6	11
32	Relaxed conditions for the stability of switched nonlinear triangular systems under arbitrary switching. Systems and Control Letters, 2015, 84, 52-56.	1.3	7
33	Strong iISS for neutrally stable systems by saturated linear state feedback. , 2015, , .		0
34	Robustness under saturated feedback: Strong iISS for a class of nonlinear systems. , 2014, , .		3
35	Analysis of delay-induced basal ganglia oscillations: the role of external excitatory nuclei. International Journal of Control, 2014, 87, 1936-1956.	1.2	3
36	Strong iISS is preserved under cascade interconnection. Automatica, 2014, 50, 2424-2427.	3.0	36

#	Article	IF	Citations
37	Combining iISS and ISS With Respect to Small Inputs: The Strong iISS Property. IEEE Transactions on Automatic Control, 2014, 59, 2518-2524.	3.6	70
38	Revisiting the <scp>IISS</scp> Smallâ€Gain Theorem through Transient Plus <scp>ISS</scp> Smallâ€Gain Regulation. Asian Journal of Control, 2013, 15, 11-19.	1.9	8
39	Closed-loop deep brain stimulation based on firing-rate regulation. , 2013, , .		9
40	A Razumikhin approach for the incremental stability of delayed nonlinear systems. , 2013, , .		9
41	Closing the loop of deep brain stimulation. Frontiers in Systems Neuroscience, 2013, 7, 112.	1.2	97
42	Strong iISS: Combination of iISS and ISS with respect to small inputs. , 2012, , .		7
43	Exploiting packet size in uncertain nonlinear networked control systems. Automatica, 2012, 48, 2801-2811.	3.0	31
44	Validity of the phase approximation for coupled nonlinear oscillators: A case study. , 2012, , .		2
45	Desynchronization and inhibition of Kuramoto oscillators by scalar mean-field feedback. Mathematics of Control, Signals, and Systems, 2012, 24, 169-217.	1.4	31
46	Desynchronization of coupled phase oscillators, with application to the Kuramoto system under mean-field feedback. , 2011, , .		5
47	A Packet-Switching Strategy for Uncertain Nonlinear Networked Control Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14404-14409.	0.4	0
48	Existence and robustness of phase-locking in coupled Kuramoto oscillators under mean-field feedback. Automatica, 2011, 47, 1193-1202.	3.0	28
49	An Input-Output approach to the robust synchronization of dynamical systems with an application to the Hindmarsh-Rose neuronal model. , 2011, , .		11
50	A sensitivity trade-off arising in small-gain design for nonlinear systems: An iISS framework. , 2011, , .		1
51	Optimal Controller Gain Tuning for Robust Stability of Spacecraft Formation. Lecture Notes in Electrical Engineering, 2011, , 335-347.	0.3	2
52	Interpreting the iISS small-gain theorem as transient plus ISS small-gain regulation. , 2010, , .		5
53	Cascades stability analysis applied to a control design for unmatched perturbation rejection based on HOSM. , 2010, , .		2
54	Phase-locking between Kuramoto oscillators: Robustness to time-varying natural frequencies. , 2010, , .		15

#	Article	IF	Citations
55	Quantised control of nonlinear systems: analysis of robustness to parameter uncertainty, measurement errors, and exogenous disturbances. International Journal of Control, 2010, 83, 2453-2462.	1.2	13
56	Spacecraft relative rotation tracking without angular velocity measurements. Automatica, 2009, 45, 750-756.	3.0	86
57	On the robustness analysis of triangular nonlinear systems: iISS and practical stability. , 2009, , .		1
58	Uniform stabilization for linear systems with persistency of excitation: the neutrally stable and the double integrator cases. Mathematics of Control, Signals, and Systems, 2008, 20, 135-156.	1.4	26
59	Integral Input to State Stable systems in cascade. Systems and Control Letters, 2008, 57, 519-527.	1.3	54
60	Uniform semiglobal practical asymptotic stability for non-autonomous cascaded systems and applications. Automatica, 2008, 44, 337-347.	3.0	78
61	Delay compensation in packet-switching networked controlled systems. , 2008, , .		33
62	Output control of spacecraft in leader follower formation. , 2008, , .		0
63	Uniform practical output-feedback stabilization of spacecraft relative rotation. , 2008, , .		1
64	The HYCON-EECI Graduate School on Control 2008 [Conference Report]. IEEE Control Systems, 2008, 28, 144-145.	1.0	1
65	Towards uniform linear time-invariant stabilization of systems with persistency of excitation. , 2007, , .		1
66	Robustness of PID-controlled Manipulators vis-Ã-vis Actuator Dynamics and External Disturbances. European Journal of Control, 2007, 13, 563-576.	1.6	13
67	Uniform Global Practical Asymptotic Stability for Time-varying Cascaded Systems*. European Journal of Control, 2006, 12, 595-605.	1.6	22
68	Necessary and sufficient conditions for uniform semiglobal practical asymptotic stability: Application to cascaded systems. Automatica, 2006, 42, 1899-1906.	3.0	23
69	Robustness of PID-controlled manipulators with respect to external disturbances. , 2006, , .		6
70	Adaptive Output Feedback Control of Spacecraft Relative Translation. , 2006, , .		13