Franck Plestan

List of Publications by Year
in descending order

60 papers	2,540 citations	331670 21 h-index	233421 45 g-index
60 all docs	60 docs citations	60 times ranked	1653 citing authors

#	Article	IF	Citations
1	A novel adaptive-gain supertwisting sliding mode controller: Methodology and application. Automatica, 2012, 48, 759-769.	5.0	628
2	Higher order sliding mode control based on integral sliding mode. Automatica, 2007, 43, 531-537.	5.0	373
3	Super-twisting adaptive sliding mode control: A Lyapunov design. , 2010, , .		160
4	Sliding mode control with gain adaptationâ€"Application to an electropneumatic actuator. Control Engineering Practice, 2013, 21, 679-688.	5.5	138
5	New predictive scheme for the control of LTI systems with input delay and unknown disturbances. Automatica, 2015, 52, 179-184.	5.0	108
6	Sensorless Induction Motor: High-Order Sliding-Mode Controller and Adaptive Interconnected Observer. IEEE Transactions on Industrial Electronics, 2008, 55, 3818-3827.	7.9	79
7	High-Order Sliding-Mode Controllers of an Electropneumatic Actuator: Application to an Aeronautic Benchmark. IEEE Transactions on Control Systems Technology, 2009, 17, 633-645.	5.2	79
8	Pneumatic actuator control: Solution based on adaptive twisting and experimentation. Control Engineering Practice, 2013, 21, 727-736.	5.5	68
9	Delay Estimation and Predictive Control of Uncertain Systems With Input Delay: Application to a DC Motor. IEEE Transactions on Industrial Electronics, 2016, 63, 5849-5857.	7.9	67
10	Continuous Differentiator Based on Adaptive Second-Order Sliding-Mode Control for a 3-DOF Helicopter. IEEE Transactions on Industrial Electronics, 2016, 63, 5786-5793.	7.9	60
11	Implicit discrete-time twisting controller without numerical chattering: Analysis and experimental results. Control Engineering Practice, 2016, 46, 129-141.	5.5	55
12	Robust output feedback sampling control based on second-order sliding mode. Automatica, 2010, 46, 1096-1100.	5.0	54
13	Robust Fixed-Time Stability: Application to Sliding-Mode Control. IEEE Transactions on Automatic Control, 2022, 67, 1061-1066.	5.7	53
14	Adaptive sliding mode control and observation. International Journal of Control, 2016, 89, 1743-1746.	1.9	43
15	Experimental Comparisons Between Implicit and Explicit Implementations of Discrete-Time Sliding Mode Controllers: Toward Input and Output Chattering Suppression. IEEE Transactions on Control Systems Technology, 2015, 23, 2071-2075.	5.2	41
16	Second order sliding mode output feedback control with switching gainsâ€"Application to the control of a pneumatic actuator. Journal of the Franklin Institute, 2014, 351, 2335-2355.	3.4	39
17	Fixed-time sliding mode control with mismatched disturbances. Automatica, 2022, 136, 110009.	5.0	38
18	Discrete predictor-based event-triggered control of networked control systems. Automatica, 2019, 107, 281-288.	5.0	35

#	Article	IF	Citations
19	Sliding mode predictive control of linear uncertain systems with delays. Automatica, 2018, 94, 409-415.	5.0	31
20	Synthesis and Application of Nonlinear Observers for the Estimation of Tire Effective Radius and Rolling Resistance of an Automotive Vehicle. IEEE Transactions on Control Systems Technology, 2013, 21, 2408-2416.	5.2	23
21	Individual/collective blade pitch control of floating wind turbine based on adaptive second order sliding mode. Ocean Engineering, 2021, 228, 108897.	4.3	23
22	Estimation of Absolute Orientation for a Bipedal Robot: Experimental Results. IEEE Transactions on Robotics, 2011, 27, 170-174.	10.3	21
23	Delay and state observation for SISO nonlinear systems with input delay. International Journal of Robust and Nonlinear Control, 2018, 28, 2356-2368.	3.7	18
24	Pulleys and Force Sensors Influence on Payload Estimation of Cable-Driven Parallel Robots. , 2018, , .		18
25	High-Order Sliding-Mode Control With Predefined Convergence Time for Electropneumatic Actuator. IEEE Transactions on Control Systems Technology, 2021, 29, 910-917.	5.2	18
26	A new experimental test bench for a high performance double electropneumatic actuator system. , 2009, , .		15
27	Adaptive Pulse Output Feedback Controller Based on Second-Order Sliding Mode: Methodology and Application. IEEE Transactions on Control Systems Technology, 2016, 24, 2233-2240.	5.2	15
28	ParEGO extensions for multi-objective optimization of expensive evaluation functions. Journal of Global Optimization, 2017, 67, 79-96.	1.8	14
29	Finite Time Stabilization of An Uncertain Chain of Integrators by Integral Sliding Mode Approach. IFAC-PapersOnLine, 2017, 50, 9613-9618.	0.9	14
30	A simplified version of adaptive superâ€twisting control. International Journal of Robust and Nonlinear Control, 2019, 29, 5704-5719.	3.7	14
31	Design and Optimization of Nonlinear Observers for Road Curvature and State Estimation in Automated Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 3315-3327.	8.0	12
32	Adaptive sliding mode control of floating offshore wind turbine equipped by permanent magnet synchronous generator. Wind Energy, 2021, 24, 754-769.	4.2	12
33	A new control scheme of cable-driven parallel robot balancing between sliding mode and linear feedback. IFAC-PapersOnLine, 2020, 53, 9936-9943.	0.9	12
34	A 3rd order sliding mode controller based on integral sliding mode for an electropneumatic system. , 2006, , .		11
35	A Controller Switching between Twisting and Linear Algorithms for an Electropneumatic Actuator. , 2018, , .		11
36	Super-Twisting Algorithm-Based Time-Varying Delay Estimation With External Signal. IEEE Transactions on Industrial Electronics, 2020, 67, 10663-10671.	7.9	11

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37	Predictor-based control of time-delay systems: a survey. International Journal of Systems Science, 2022, 53, 2496-2534.	5.5	11
38	Super-twisting sliding mode controller with self-tuning adaptive gains. European Journal of Control, 2022, 68, 100690.	2.6	11
39	A New Third-Order Sliding-Mode Controllerâ€"Application to an Electropneumatic Actuator. IEEE Transactions on Control Systems Technology, 2017, 25, 744-751.	5.2	10
40	State feedback control and delay estimation for LTI system with unknown input-delay. International Journal of Control, 2021, 94, 2369-2378.	1.9	10
41	Phase and Gain Stability Margins for a class of Nonlinear Systems. IFAC-PapersOnLine, 2018, 51, 263-268.	0.9	9
42	An Experimental Investigation of Discretized Homogeneous Differentiators: Pneumatic Actuator Case. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2021, 2, 227-236.	3.9	8
43	A simplified version of adaptive super twistingâ€"Application to the control of floating wind turbine. Control Engineering Practice, 2022, 125, 105208.	5.5	7
44	New Robust Control Schemes Based on Both Linear and Sliding Mode Approaches: Design and Application to an Electropneumatic Actuator. IEEE Transactions on Control Systems Technology, 2021, 29, 818-825.	5.2	6
45	Model-free control of the dynamic lift of a wind turbine blade section: experimental results. Journal of Physics: Conference Series, 2022, 2265, 032068.	0.4	6
46	A New Controller Switching between Linear and Twisting Algorithms. , 2018, , .		5
47	Prediction-based control with delay estimation of LTI systems with input-output delays. , 2019, , .		5
48	Gain Margins in a Class of Nonlinear Systems: Lyapunov approach. , 2020, , .		5
49	A noise less-sensing semi-implicit discretization of a homogeneous differentiator: principle and application. , 2021, , .		5
50	Super-Twisting Sliding Mode Control for the Stabilization of a Linear Hyperbolic System. , 2023, 7, 1-6.		5
51	Semi-Implicit Euler Discretization for Homogeneous Observer-based Control: one dimensional case. IFAC-PapersOnLine, 2020, 53, 5135-5140.	0.9	4
52	Semi-Implicit Homogeneous Euler Differentiator for a Second-Order System: Validation on Real Data. , 2021, , .		4
53	Predictive control of disturbed systems with input delay: experimental validation on a DC motorâˆ—âˆ—This work was supported by the bilateral project Mexico-Francia (PCP 2013) 209488 CONACYT between the Ecole Centrale de Nantes and the Universidad AutÃ³noma de Nuevo LeÃ³n.. IFAC-PapersOnLine, 2015, 48, 292-297.	0.9	3
54	Third order sliding mode control with a predefined convergence time: Application to an electropneumatic actuator. , 2017, , .		3

#	Article	IF	Citations
55	Predictor-Based Control of LTI Remote Systems With Estimated Time-Varying Delays. , 2021, 5, 289-294.		3
56	Phase Margins in a Class of Nonlinear Systems: Lyapunov, Circle Criterion and Describing Function Approaches. IFAC-PapersOnLine, 2020, 53, 6274-6280.	0.9	3
57	Definition and analysis of stability margins for a class of nonlinear systems. International Journal of Robust and Nonlinear Control, 2022, 32, 1055-1074.	3.7	2
58	Analysis of Stability Margins in a Class of Discrete Nonlinear Time â€“ Invariant Systems via Tsypkin Criterion and Describing Function technique. , 2020, , .		2
59	A practical online time-varying delay estimation of remote control system based on adaptive super-twisting algorithm. , 2020, , .		1
60	Generalization of the twisting convergence conditions to non-affine systems. Automatica, 2022, 137, 110019.	5.0	1