

# Alberto Cavallo

## List of Publications by Year in descending order

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104  
papers

1,078  
citations

430874

18  
h-index

526287

27  
g-index

106  
all docs

106  
docs citations

106  
times ranked

652  
citing authors

#	ARTICLE	IF	CITATIONS
1	Integral-Input-to-State Stability of Switched Nonlinear Systems Under Slow Switching. IEEE Transactions on Automatic Control, 2022, 67, 5841-5855.	5.7	5
2	Energy system management for aeronautic and aerospace applications: Demonstration and study cases. , 2022, , 373-418.		0
3	Higher-Order Sliding Mode design with Bounded Integral Control generation. Automatica, 2022, 143, 110430.	5.0	5
4	MIL-Standards Verification of Battery Control for More Electric Aircraft Application. Journal of Physics: Conference Series, 2021, 1828, 012057.	0.4	1
5	MPC based Sliding Mode Control for More Electric Aircraft application. , 2021, , .		0
6	ENIGMAâ€”A Centralised Supervisory Controller for Enhanced Onboard Electrical Energy Management with Model in the Loop Demonstration. Energies, 2021, 14, 5518.	3.1	14
7	Generalized Super-Twisting control of a Dual Active Bridge for More Electric Aircraft. , 2021, , .		8
8	Multi-objective adaptive sliding manifold control for More Electric Aircraft. ISA Transactions, 2020, 107, 316-328.	5.7	19
9	Modeling and slipping control of a planar slider. Automatica, 2020, 115, 108875.	5.0	12
10	Integrated supervised adaptive control for the more Electric Aircraft. Automatica, 2020, 117, 108956.	5.0	24
11	Supercapacitor stability and control for More Electric Aircraft application. , 2020, , .		19
12	Hierarchical control for generator and battery in the more electric aircraft. Science China Information Sciences, 2019, 62, 1.	4.3	12
13	Fuzzy scheduling of robust controllers for islanded DC microgrids applications. International Journal of Dynamics and Control, 2019, 7, 690-700.	2.5	9
14	Supervisory control of DCâ€”DC bidirectional converter for advanced aeronautic applications. International Journal of Robust and Nonlinear Control, 2018, 28, 1-15.	3.7	23
15	Supervised Energy Management in Advanced Aircraft Applications. , 2018, , .		13
16	Buck-Boost Converter Control for Constant Power Loads in Aeronautical Applications. , 2018, , .		12
17	Multi-Objective Supervisory Control for DC/DC Converters in Advanced Aeronautic Applications. Energies, 2018, 11, 3216.	3.1	10
18	Supervisory Control for Energy Storage System Onboard Aircraft. , 2018, , .		8

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19	Supervised control of buck-boost converters for aeronautical applications. Automatica, 2017, 83, 73-80.	5.0	18
20	Attitude and velocity high-gain control of a tilt-trirotor UAV. , 2017, , .		3
21	Decentralized Sliding Mode voltage control in DC microgrids. , 2017, , .		25
22	Selective modal control for vibration reduction in flexible structures. Automatica, 2017, 75, 282-287.	5.0	12
23	Robust Control of Aeronautical Electrical Generators for Energy Management Applications. International Journal of Aerospace Engineering, 2017, 2017, 1-12.	0.9	8
24	Control of Energy Storage Systems for Aeronautic Applications. Journal of Control Science and Engineering, 2017, 2017, 1-9.	1.0	14
25	Energy Storage System Control for Energy Management in Advanced Aeronautic Applications. Mathematical Problems in Engineering, 2017, 2017, 1-9.	1.1	10
26	Rate-limiter control comparison for energy storage systems in aerospace applications. , 2016, , .		2
27	Dynamic Control of Water Distribution System Based on Network Partitioning. Procedia Engineering, 2016, 154, 1275-1282.	1.2	19
28	A Hidden Markov Model-Based Approach to Grasping Hand Gestures Classification. Smart Innovation, Systems and Technologies, 2016, , 415-423.	0.6	2
29	3-D Hand Pose Estimation from Kinectâ€™s Point Cloud Using Appearance Matching. Smart Innovation, Systems and Technologies, 2016, , 37-45.	0.6	2
30	Intelligent power regulation using innovative modules for energy supervision. , 2015, , .		1
31	Smart Buck-Boost Converter Unit operations for aeronautical applications. , 2015, , .		10
32	&#x210B;<inf>&#x221E;</inf> strongly stabilizing bandpass controllers for selective natural modes damping in flexible structures. , 2015, , .		1
33	Power management of DC aeronautical electrical networks including supercapacitors. , 2015, , .		3
34	Experimental Modal Analysis based on a Gray-box Model of Flexible Structures. , 2015, , .		3
35	Boost Full Bridge Bidirectional DC/DC Converter for Supervised Aeronautical Applications. International Journal of Aerospace Engineering, 2014, 2014, 1-13.	0.9	6
36	Online Segmentation and Classification of Manipulation Actions From the Observation of Kinetostatic Data. IEEE Transactions on Human-Machine Systems, 2014, 44, 256-269.	3.5	11

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37	The DEXMART hand: Mechatronic design and experimental evaluation of synergy-based control for human-like grasping. International Journal of Robotics Research, 2014, 33, 799-824.	8.5	133
38	On the entropy of the predator-prey model. , 2014, , .		0
39	Slipping detection and avoidance based on Kalman filter. Mechatronics, 2014, 24, 489-499.	3.3	27
40	An Optoelectronic Artificial Skin for Contact Force Vector Estimation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7592-7597.	0.4	1
41	Automated fuzzy decision and control system for reservoir management. Journal of Water Supply: Research and Technology - AQUA, 2013, 62, 189-204.	1.4	6
42	A Petri net application for energy management in aeronautical networks. , 2013, , .		10
43	Probability Learning and Soft Quantization in Bayesian Factor Graphs. Smart Innovation, Systems and Technologies, 2013, , 3-10.	0.6	2
44	Classes of Strongly Stabilizing Bandpass Controllers for Flexible Structures. Advances in Acoustics and Vibration, 2012, 2012, 1-11.	0.5	0
45	Saber Model Automatic Translation Tool for Aeronautical Simulations. , 2012, , .		1
46	Validation of Automated MAST to MODELICA Translation Tool for Aeronautical Application. , 2012, , .		0
47	Supervised bidirectional DC/DC converter for intelligent fuel cell vehicles energy management. , 2012, , .		11
48	Sliding mode control for DC/DC converters. , 2012, , .		17
49	Supervised bidirectional DC/DC converter for intelligent Hybrid Electric Vehicles energy management. , 2012, , .		3
50	Average Models for Aeronautical Electrical Networks: An Application for Intelligent Load Power Management. , 2012, , .		3
51	Real-Time Recognizing Human Hand Gestures. Lecture Notes in Computer Science, 2012, , 205-215.	1.3	1
52	Primitive actions extraction for a human hand by using SVD. , 2011, , .		5
53	A Class of Strongly Stabilizing Bandpass Controllers for Flexible Structures. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14533-14538.	0.4	0
54	Using SVD for Segmentation and Classification of Human Hand Actions. , 2011, , .		2

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55	Implementation of control and protection logics for a bidirectional DC/DC converter. , 2010, , .		9
56	On the selection of optimal turns ratio for transformers in isolated DC/DC boost full bridge converter. , 2010, , .		1
57	Buck-boost DC/DC converter for aeronautical applications. , 2010, , .		26
58	Modal Feedback Control of Flexible Structures. Advances in Industrial Control, 2010, , 55-77.	0.5	0
59	Identification of Flexible Structures. Advances in Industrial Control, 2010, , 29-54.	0.5	0
60	Modelling of Flexible Structures. Advances in Industrial Control, 2010, , 7-27.	0.5	0
61	Optimal Feedback Control of Flexible Structures. Advances in Industrial Control, 2010, , 79-122.	0.5	0
62	Experimental Results. , 2010, , 97-112.		0
63	Evolution of the Probability of an MPM (Multiple Primary Malignancy) after a First Colon Tumor. , 2009, , .		0
64	Second order sliding output control of Permanent Magnet Synchronous Machines. , 2009, , .		2
65	Active vibration control by a smart auxiliary mass damper equipped with a fiber Bragg grating sensor. Sensors and Actuators A: Physical, 2009, 153, 180-186.	4.1	12
66	Optoelectronic joint angular sensor for robotic fingers. Sensors and Actuators A: Physical, 2009, 152, 203-210.	4.1	22
67	Robust control of flexible structures with stable bandpass controllers. Automatica, 2008, 44, 1251-1260.	5.0	29
68	Hysteresis compensation of smart actuators under variable stress conditions. Physica B: Condensed Matter, 2008, 403, 261-265.	2.7	33
69	An Advanced System for Vibration Control of Flexible Structures. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11841-11846.	0.4	0
70	Optimal Fuzzy Management of Reservoir based on Genetic Algorithm. Mathematical Modelling: Theory and Applications, 2008, , 139-159.	0.2	2
71	Implementation Issues. Profiles in Operations Research, 2008, , 327-344.	0.4	0
72	On scaling matrices optimal selection for H <sub>∞</sub> strongly stabilizing bandpass controllers. , 2007, , .		1

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73	Gray-Box Identification of Continuous-Time Models of Flexible Structures. IEEE Transactions on Control Systems Technology, 2007, 15, 967-981.	5.2	24
74	A fuzzy decision support system for an hydraulic application. , 2007, , .		0
75	H&lt;sub>g&t;&#x0221E;&lt;/sub> Strongly Stabilizing Bandpass Controllers for Flexible Systems. , 2006, , .		8
76	AN OPTIMAL FUZZY APPROACH TO AUTOMATED RESERVOIR MANAGEMENT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 127-132.	0.4	1
77	LIMIT CYCLES IN FEEDBACK CONTROL SYSTEMS WITH HYSTERESIS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 360-365.	0.4	1
78	High-order fuzzy sliding manifold control. Fuzzy Sets and Systems, 2005, 156, 249-266.	2.7	6
79	Limit Cycles in Control Systems Employing Smart Actuators With Hysteresis. IEEE/ASME Transactions on Mechatronics, 2005, 10, 172-180.	5.8	16
80	Feedback Control Systems for Micropositioning Tasks With Hysteresis Compensation. IEEE Transactions on Magnetics, 2004, 40, 876-879.	2.1	33
81	High-order sliding control of mechanical systems: theory and experiments. Control Engineering Practice, 2004, 12, 1139-1149.	5.5	34
82	Output feedback control based on a high-order sliding manifold approach. IEEE Transactions on Automatic Control, 2003, 48, 469-472.	5.7	26
83	Effects of hysteresis compensation in feedback control systems. IEEE Transactions on Magnetics, 2003, 39, 1389-1392.	2.1	50
84	A ROBUST OUTPUT FEEDBACK CONTROL LAW FOR MIMO PLANTS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 13-18.	0.4	3
85	A sliding manifold approach for vibration reduction of flexible systems. Automatica, 1999, 35, 1689-1696.	5.0	20
86	Robust control design with integral action and limited rate control. IEEE Transactions on Automatic Control, 1999, 44, 1569-1572.	5.7	22
87	Vibration Control of Flexible Systems via Sliding Manifold Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 389-394.	0.4	0
88	Sliding manifold approach to the control of rigid robots: Experimental results. Control Engineering Practice, 1997, 5, 619-625.	5.5	2
89	Atmospheric re-entry control for low lift/drag vehicles. Journal of Guidance, Control, and Dynamics, 1996, 19, 47-53.	2.8	38
90	A sliding manifold approach to the feedback control of rigid robots. International Journal of Robust and Nonlinear Control, 1996, 6, 501-516.	3.7	12

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91	Attitude control for low lift/drag re-entry vehicles. Journal of Guidance, Control, and Dynamics, 1996, 19, 816-822.	2.8	11
92	A trajectory and attitude control strategy for the CRV/CRT atmospheric reentry. , 1996, , .		2
93	Robust flight control systems - A parameter space design. Journal of Guidance, Control, and Dynamics, 1992, 15, 1207-1215.	2.8	23
94	Robust stability analysis of polynomials with linearly dependent coefficient perturbations. IEEE Transactions on Automatic Control, 1991, 36, 380-384.	5.7	14
95	Sensitivity minimization with pole assignment in SISO systems. , 1990, , .		0
96	Robust stability analysis of uncertain linear time invariant dynamical systems. , 0, , .		1
97	A polynomial approach to simultaneous stabilization of SISO plants. , 0, , .		0
98	A note on computing the minimum distance between Lyapunov functions. , 0, , .		0
99	DC motor control with sliding mode switching modulator. , 0, , .		6
100	Attitude control for large angle maneuvers. , 0, , .		7
101	A robust controller for active vibration control of flexible systems. , 0, , .		2
102	Experimental results on a second order sliding manifold approach for tracking problems. , 0, , .		0
103	Robust vibration control of a DC9 aircraft frame. , 0, , .		1
104	Second order sliding manifold approach for vibration reduction via output feedback: experimental results. , 0, , .		5