

Angelo Alessandri

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/899126/publications.pdf>

Version: 2024-02-01

132
papers

2,744
citations

186265
28
h-index

197818
49
g-index

132
all docs

132
docs citations

132
times ranked

1456
citing authors

#	ARTICLE	IF	CITATIONS
1	Black-Box Modeling and Optimal Control of a Two-Phase Flow Using Level Set Methods. IEEE Transactions on Control Systems Technology, 2022, 30, 520-534.	5.2	2
2	Hysteresis-based switching observers for linear systems using quadratic boundedness. Automatica, 2022, 136, 109982.	5.0	4
3	Stubborn and Dead-Zone Redesign for Nonlinear Observers and Filters. IEEE Transactions on Automatic Control, 2021, 66, 667-682.	5.7	16
4	Detection of Flow-Regime Transitions Using Dynamic Mode Decomposition and Moving Horizon Estimation. IEEE Transactions on Control Systems Technology, 2021, 29, 1324-1331.	5.2	3
5	Parameter estimation of fire propagation models using level set methods. Applied Mathematical Modelling, 2021, 92, 731-747.	4.2	21
6	Modeling and Estimation of Amnioserosa Cell Mechanical Behavior Using Moving Horizon Estimation. , 2021, , .		0
7	Control of Normal Flow PDEs with ISS Properties. , 2021, , .		0
8	Fast moving horizon state estimation for discrete-time systems with linear constraints. International Journal of Adaptive Control and Signal Processing, 2020, 34, 706-720.	4.1	9
9	State Observation for Lipschitz Nonlinear Dynamical Systems Based on Lyapunov Functions and Functionals. Mathematics, 2020, 8, 1424.	2.2	2
10	Moving horizon estimation: Open problems, theoretical progress, and new application perspectives. International Journal of Adaptive Control and Signal Processing, 2020, 34, 703-705.	4.1	5
11	Lyapunov Functions for State Observers of Dynamic Systems Using Hamiltonâ€“Jacobi Inequalities. Mathematics, 2020, 8, 202.	2.2	5
12	State Observers for Systems Subject to Bounded Disturbances Using Quadratic Boundedness. IEEE Transactions on Automatic Control, 2020, 65, 5352-5359.	5.7	13
13	Stabilization of diffusive systems using backstepping and the circle criterion. International Journal of Heat and Mass Transfer, 2020, 149, 119132.	4.8	1
14	Modeling and Estimation of Thermal Flows Based on Transport and Balance Equations. Advances in Mathematical Physics, 2020, 2020, 1-10.	0.8	0
15	State and observer-based feedback control of normal flow equations. Automatica, 2020, 117, 108980.	5.0	3
16	On Hamilton-Jacobi Approaches to State Reconstruction for Dynamic Systems. Advances in Mathematical Physics, 2020, 2020, 1-13.	0.8	2
17	Optimistic vs Pessimistic Moving-Horizon Estimation for Quasiâ€“LPV Discrete-Time Systems. IFAC-PapersOnLine, 2020, 53, 5004-5009.	0.9	2
18	State Observer Design Method for a Class of Nonlinear Systems. IFAC-PapersOnLine, 2020, 53, 4935-4940.	0.9	0

#	ARTICLE	IF	CITATIONS
19	State observer design method for a class of nonlinear systems. IET Control Theory and Applications, 2020, 14, 1648-1655.	2.1	2
20	Optimal Control of Propagating Fronts by Using Level Set Methods and Neural Approximations. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 902-912.	11.3	16
21	Motion Control for Autonomous Navigation in Blue and Narrow Water Using Switched Controllers. Journal of Marine Science and Engineering, 2019, 7, 196.	2.6	17
22	Synchronization in Networks of Identical Nonlinear Systems via Dynamic Dead Zones. , 2019, 3, 667-672.		16
23	Dynamic mode decomposition for the inspection of three-regime separated transitional boundary layers using a least squares method. Physics of Fluids, 2019, 31, 044103.	4.0	17
24	On-line Mode Decomposition of Fluid Flows Using Moving Horizon Estimation. , 2019, , .		1
25	Optimal Propagating Fronts Using Hamilton-Jacobi Equations. Mathematics, 2019, 7, 1122.	2.2	1
26	Synchronization of interconnected linear systems via dynamic saturation redesign. IFAC-PapersOnLine, 2019, 52, 622-627.	0.9	6
27	Stubborn state observers for linear time-invariant systems. Automatica, 2018, 88, 1-9.	5.0	79
28	Moving Horizon Trend Identification Based on Switching Models for Data Driven Decomposition of Fluid Flows. , 2018, , .		2
29	Model-Based Fault Detection and Estimation for Linear Time Invariant and Piecewise Affine Systems by Using Quadratic Boundedness. , 2018, , .		4
30	Black-box Modeling and Optimal Control of a Two-Phase Flow by Using Navier-Stokes Equations and Level Set Methods. , 2018, , .		3
31	Optimal Control of Level Sets Generated by the Normal Flow Equation. Springer Proceedings in Mathematics and Statistics, 2018, , 29-41.	0.2	1
32	Fast Moving Horizon State Estimation for Discrete-Time Systems Using Single and Multi Iteration Descent Methods. IEEE Transactions on Automatic Control, 2017, 62, 4499-4511.	5.7	47
33	Stubborn ISS Redesign for Nonlinear High-Gain Observers. IFAC-PapersOnLine, 2017, 50, 15422-15427.	0.9	13
34	Moving horizon state estimation for constrained discrete-time systems by using fast descent methods. , 2017, , .		1
35	Parameter identification of the normal flow equation by using adaptive estimation. , 2017, , .		0
36	Extended Kalman filtering to design optimal controllers of fronts generated by level set methods. , 2016, , .		5

#	ARTICLE	IF	CITATIONS
37	Optimal control of parallel buffers by using output feedback based on Practical Observers. , 2016, , .		0
38	On the enhancement of high-gain observers for state estimation of nonlinear systems. , 2016, , .		5
39	Moving-horizon estimation for discrete-time linear and nonlinear systems using the gradient and Newton methods. , 2016, , .		6
40	Further results on the optimal control of fronts generated by level set methods. , 2016, , .		8
41	Moving-horizon estimation with guaranteed robustness for discrete-time linear systems and measurements subject to outliers. Automatica, 2016, 67, 85-93.	5.0	78
42	Increasing-gain observers for nonlinear systems: Stability and design. Automatica, 2015, 57, 180-188.	5.0	59
43	Adaptive state estimation for nonlinear systems based on the increasing-gain observer. , 2015, , .		1
44	Results on stubborn Luenberger observers for linear time-invariant plants. , 2015, , .		10
45	Observer-based stabilisation of linear systems with parameter uncertainties by using enhanced LMI conditions. International Journal of Control, 2015, 88, 1189-1200.	1.9	23
46	Moving-horizon estimation for discrete-time linear systems with measurements subject to outliers. , 2014, , .		6
47	Output feedback control for a class of switching discrete-time linear systems. , 2014, , .		1
48	Optimal control of level sets dynamics. , 2014, , .		8
49	A new LMI condition for decentralized observer-based control of linear systems with nonlinear interconnections. , 2014, , .		14
50	Robust predictive control for the management of multi-echelon distribution chains. , 2014, , .		1
51	Time-varying increasing-gain observers for nonlinear systems. Automatica, 2013, 49, 2845-2852.	5.0	30
52	Convex optimization approach to observer-based stabilization of linear systems with parameter uncertainties. , 2013, , .		0
53	Design of time-varying state observers for nonlinear systems by using input-to-state stability. , 2013, , .		4
54	Output feedback control for discrete-time linear systems by using luenberger observers under unknown switching. , 2013, , .		3

#	ARTICLE	IF	CITATIONS
55	Optimal control of PDE-based systems by using a finite-dimensional approximation scheme. , 2013, , .		1
56	Predictive Control of Container Flows in Maritime Intermodal Terminals. IEEE Transactions on Control Systems Technology, 2013, 21, 1423-1431.	5.2	25
57	On increasing-gain observers for nonlinear continuous-time systems. , 2013, , .		1
58	Evaluation of Resilience of Interconnected Systems Based on Stability Analysis. Lecture Notes in Computer Science, 2013, , 180-190.	1.3	11
59	Optimal and Predictive Control of Distribution Chains by Using Integer Tree-Based Search and Mixed-Integer Programming. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 238-244.	0.4	0
60	Min-Max Moving-Horizon Estimation for Uncertain Discrete-Time Linear Systems. SIAM Journal on Control and Optimization, 2012, 50, 1439-1465.	2.1	31
61	Feedback Optimal Control of Distributed Parameter Systems by Using Finite-Dimensional Approximation Schemes. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 984-996.	11.3	32
62	Min-Max and Predictive Control for the Management of Distribution in Supply Chains. IEEE Transactions on Control Systems Technology, 2011, 19, 1075-1089.	5.2	61
63	Moving-Horizon State Estimation for Nonlinear Systems Using Neural Networks. IEEE Transactions on Neural Networks, 2011, 22, 768-780.	4.2	61
64	Rate-based Optimal Control of Priority Traffic Using a Deterministic Fluid Model. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 11477-11482.	0.4	1
65	Integer tree-based search and mixed-integer optimal control of distribution chains. , 2011, , .		1
66	Approximate Solution of Feedback Optimal Control Problems for Distributed Parameter Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 987-992.	0.4	1
67	Computationally Efficient, Approximate Moving Horizon State Estimation for Nonlinear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 759-764.	0.4	0
68	Minimizing Sequences for a Family of Functional Optimal Estimation Problems. Journal of Optimization Theory and Applications, 2010, 147, 243-262.	1.5	3
69	A maximum-likelihood Kalman filter for switching discrete-time linear systems. Automatica, 2010, 46, 1870-1876.	5.0	37
70	Advances in moving horizon estimation for nonlinear systems. , 2010, , .		46
71	State observers with first-/second-order sliding-mode for nonlinear systems with bounded noises. , 2010, , .		3
72	Optimization based on quasi-Monte Carlo sampling to design state estimators for non-linear systems. Optimization, 2010, 59, 963-984.	1.7	21

#	ARTICLE	IF	CITATIONS
73	Sliding-mode state observers for multi-output nonlinear systems with bounded noises on dynamics and measurements. , 2009, , .		0
74	Management of logistics operations in intermodal terminals by using dynamic modelling and nonlinear programming. Maritime Economics and Logistics, 2009, 11, 58-76.	4.0	24
75	Nonparametric nonlinear regression using polynomial and neural approximators: a numerical comparison. Computational Management Science, 2009, 6, 5-24.	1.3	1
76	Modeling and Identification of Nonlinear Dynamics for Freeway Traffic by Using Information From a Mobile Cellular Network. IEEE Transactions on Control Systems Technology, 2009, 17, 952-959.	5.2	11
77	Nonlinear Model Predictive Control for Resource Allocation in the Management of Intermodal Container Terminals. Lecture Notes in Control and Information Sciences, 2009, , 205-213.	1.0	5
78	Moving-horizon state estimation for nonlinear discrete-time systems: New stability results and approximation schemes. Automatica, 2008, 44, 1753-1765.	5.0	232
79	Modeling and Feedback Control for Resource Allocation and Performance Analysis in Container Terminals. IEEE Transactions on Intelligent Transportation Systems, 2008, 9, 601-614.	8.0	46
80	Moving-horizon state estimation for nonlinear systems using neural networks. , 2008, , .		3
81	Nonlinear predictive control for the management of container flows in maritime intermodal terminals. , 2008, , .		5
82	Maximum-likelihood Kalman filtering for switching discrete-time linear systems. , 2008, , .		4
83	Design of Observers with Commutation-Dependent Gains for Linear Switching Systems. Proceedings of the American Control Conference, 2007, , .	0.0	1
84	Identification of freeway traffic dynamics using fluid and black-box nonlinear models. , 2007, , .		1
85	Sliding-Mode State Observers for a Class of Nonlinear Continuous-Time Systems. Proceedings of the American Control Conference, 2007, , .	0.0	3
86	MODE ESTIMATION TECHNIQUES FOR SWITCHING DISCRETE-TIME LINEAR SYSTEMS.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 253-258.	0.4	0
87	Design of Asymptotic Estimators: An Approach Based on Neural Networks and Nonlinear Programming. IEEE Transactions on Neural Networks, 2007, 18, 86-96.	4.2	32
88	Luenberger observers for switching discrete-time linear systems. International Journal of Control, 2007, 80, 1931-1943.	1.9	44
89	Robust receding-horizon estimation for uncertain discrete-time linear systems via semidefinite programming. , 2007, , .		2
90	Sliding-mode state estimation for a class of multi-output nonlinear continuous-time systems. , 2007, , .		2

#	ARTICLE	IF	CITATIONS
91	Connections between stability and asymptotic stability of nonlinear switched systems. <i>Nonlinear Analysis: Hybrid Systems</i> , 2007, 1, 501-509.	3.5	2
92	Modelling and Optimal Receding-horizon Control of Maritime Container Terminals. <i>Mathematical Modelling and Algorithms</i> , 2007, 6, 109-133.	0.5	41
93	Functional Optimal Estimation Problems and Their Solution by Nonlinear Approximation Schemes. <i>Journal of Optimization Theory and Applications</i> , 2007, 134, 445-466.	1.5	8
94	A recursive algorithm for nonlinear least-squares problems. <i>Computational Optimization and Applications</i> , 2007, 38, 195-216.	1.6	23
95	Minimum-Distance Receding-Horizon State Estimation for Switching Discrete-Time Linear Systems. , 2007, , 347-358.		4
96	ANN Application For On-Line Power System Security Assessment. , 2006, , .		2
97	Design of state estimators for uncertain linear systems using quadratic boundedness. <i>Automatica</i> , 2006, 42, 497-502.	5.0	127
98	Design of Parameterized State Observers and Controllers for a Class of Nonlinear Continuous-Time Systems. , 2006, , .		0
99	Identification of freeway macroscopic models using information from mobile phones. , 2006, , .		2
100	Robust receding-horizon state estimation for uncertain discrete-time linear systems. <i>Systems and Control Letters</i> , 2005, 54, 627-643.	2.3	48
101	Optimization of approximating networks for optimal fault diagnosis. <i>Optimization Methods and Software</i> , 2005, 20, 241-266.	2.4	10
102	Receding-horizon estimation for switching discrete-time linear systems. <i>IEEE Transactions on Automatic Control</i> , 2005, 50, 1736-1748.	5.7	106
103	Receding-horizon estimation for switching discrete-time linear systems. , 2004, , .		3
104	New convergence conditions for receding-horizon state estimation of nonlinear discrete-time systems. , 2004, , .		4
105	On Estimation Error Bounds for Receding-Horizon Filters Using Quadratic Boundedness. <i>IEEE Transactions on Automatic Control</i> , 2004, 49, 1350-1355.	5.7	118
106	Design of observers for lipschitz nonlinear systems using LMI. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004, 37, 459-464.	0.4	43
107	Fault diagnosis for nonlinear systems using a bank of neural estimators. <i>Computers in Industry</i> , 2003, 52, 271-289.	9.9	51
108	Sliding-mode estimators for a class of non-linear systems affected by bounded disturbances. <i>International Journal of Control</i> , 2003, 76, 226-236.	1.9	28

#	ARTICLE	IF	CITATIONS
109	Receding-horizon estimation for discrete-time linear systems. IEEE Transactions on Automatic Control, 2003, 48, 473-478.	5.7	170
110	Freeway Incident Detection Using Traffic Information from Mobile Phones. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 933-938.	0.4	0
111	Sliding-Mode State Estimators for Lipschitz Nonlinear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 729-734.	0.4	0
112	DESIGN OF RECEDING-HORIZON FILTERS FOR DISCRETE-TIME LINEAR SYSTEMS USING QUADRATIC BOUNDEDNESS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 173-178.	0.4	0
113	Optimization-based learning with bounded error for feedforward neural networks. IEEE Transactions on Neural Networks, 2002, 13, 261-273.	4.2	22
114	Sliding-window neural state estimation in a power plant heater line. International Journal of Adaptive Control and Signal Processing, 2001, 15, 815-836.	4.1	4
115	Design of Luenberger Observers for a Class of Hybrid Linear Systems. Lecture Notes in Computer Science, 2001, , 7-18.	1.3	113
116	Fault Detection Through Dynamics Monitoring for Unmanned Underwater Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 951-956.	0.4	4
117	Sliding-Mode Estimators for a Class of Nonlinear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 155-160.	0.4	3
118	Fault detection of actuator faults in unmanned underwater vehicles. Control Engineering Practice, 1999, 7, 357-368.	5.5	108
119	Nonlinear optimization for freeway control using variable-speed signaling. IEEE Transactions on Vehicular Technology, 1999, 48, 2042-2052.	6.3	71
120	A neural state estimator with bounded errors for nonlinear systems. IEEE Transactions on Automatic Control, 1999, 44, 2028-2042.	5.7	72
121	Optimal control of freeways via speed signalling and ramp metering. Control Engineering Practice, 1998, 6, 771-780.	5.5	85
122	Neural state estimators for direct model-based fault diagnosis. , 1998, , .		7
123	Neural approximators for nonlinear finite-memory state estimation. International Journal of Control, 1997, 67, 275-302.	1.9	33
124	Nonlinear modeling of complex large-scale plants using neural networks and stochastic approximation. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 1997, 27, 750-757.	2.9	20
125	Design of sliding-mode observers and filters for nonlinear dynamic systems. , 0, , .		13
126	On the convergence of EDF-based parameters optimization for neural networks. , 0, , .		6

#	ARTICLE	IF	CITATIONS
127	Design of observers for switched discrete-time linear systems. , 0, , .		37
128	Receding-horizon estimation for noisy nonlinear discrete-time systems. , 0, , .		1
129	Application of neural control to economic growth problems. , 0, , .		0
130	Robust Receding-Horizon Estimation for Discrete-time Linear Systems in the Presence of Bounded Uncertainties. , 0, , .		6
131	Luenberger Observers For Switching Discrete-Time Linear Systems. , 0, , .		11
132	Input-output stability for optimal estimation problems. International Mathematical Forum, 0, 2, 593-617.	0.1	10