Ali Zemouche

List of Publications by Year
in descending order

133 papers	2,004 citations	304368 22 h-index	288905 40 g-index
133 all docs	133 docs citations	133 times ranked	1038 citing authors

#	Article	IF	Citations
1	Robust Packetized MPC for Networked Systems Subject to Packet Dropouts and Input Saturation With Quantized Feedback. IEEE Transactions on Cybernetics, 2023, 53, 6987-6997.	6.2	8
2	Output-Feedback Self-Synchronization of Directed Lurâ€™e Networks via Global Connectivity. IEEE Transactions on Cybernetics, 2022, 52, 6490-6503.	6.2	2
3	Fuzzy Adaptive Cooperative Consensus Tracking of High-Order Nonlinear Multiagent Networks With Guaranteed Performances. IEEE Transactions on Cybernetics, 2022, 52, 8838-8850.	6.2	24
4	Observer-Based Control Design for Nonlinear Systems With Unknown Delays. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 1327-1331.	2.2	3
5	Nonlinear observer for electromagnetic position estimation using active current control. Mechanical Systems and Signal Processing, 2022, 167, 108449.	4.4	2
6	Unknown input estimation algorithms for a class of LPV/nonlinear systems with application to wastewater treatment process. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2022, 236, 1372-1385.	0.7	2
7	LMI-Based Observer Design for Non-Globally Lipschitz Systems Using Kirszbraunâ€"Valentine Extension Theorem. , 2022, 6, 2617-2622.		6
8	Observer Design for Non-Globally Lipschitz Nonlinear Systems Using Hilbert Projection Theorem. , 2022, 6, 2581-2586.		3
9	An LMI-based discrete time nonlinear observer for Light-Emitting Diode optical communication. Automatica, 2022, 141, 110309.	3.0	3
10	On high-gain observer design for nonlinear systems with delayed output measurements. Automatica, 2022, 141, 110281.	3.0	11
11	Simultaneous Cyber-Attack Detection and Radar Sensor Health Monitoring in Connected ACC Vehicles. IEEE Sensors Journal, 2021, 21, 15741-15752.	2.4	19
12	On LMI conditions to design robust static output feedback controller for continuous-time linear systems subject to norm-bounded uncertainties. International Journal of Systems Science, 2021, 52, 12-46.	3.7	21
13	Interval Observer Design and Consensus of MultiAgent Systems with Time-Varying Interval Uncertainties. SIAM Journal on Control and Optimization, 2021, 59, 3392-3417.	1.1	19
14	Finite-time estimation algorithms for LPV discrete-time systems with application to output feedback stabilization. Automatica, 2021, 125, 109436.	3.0	5
15	Magnetic position estimation using optimal sensor placement and nonlinear observer for smart actuators. Control Engineering Practice, 2021, 112, 104817.	3.2	8
16	Simultaneous State Estimation and Tire Model Learning for Autonomous Vehicle Applications. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1941-1950.	3.7	7
17	Coupled Tanks State Estimation Using a High-Gain Like Observer. IFAC-PapersOnLine, 2021, 54, 96-101.	0.5	3
18	Hâˆž Switched-Gain Based Observer vs Nonlinear Transformation Based Observer for a Vehicle Tracking Model. IFAC-PapersOnLine, 2021, 54, 126-131.	0.5	0

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19	Prescribed-Time High-Gain Nonlinear Observer Design for Triangular Systems. , 2021, , .		1
20	LMI Feasibility Improvement to Design Observers for a Class of Lipschitz Nonlinear Systems. , 2021, , .		3
21	Performance analysis of stand-alone six-phase induction generator using heuristic algorithms. Mathematics and Computers in Simulation, 2020, 167, 231-249.	2.4	8
22	Vehicle Motion Estimation Using A Switched Gain Nonlinear Observer. , 2020, , .		0
23	On the need for switched-gain observers for non-monotonic nonlinear systems. Automatica, 2020, 114, 108814.	3.0	36
24	A Switched-Gain Nonlinear Observer for LED Optical Communication. IFAC-PapersOnLine, 2020, 53, 4941-4946.	0.5	2
25	Robust Static Output Feedback Stabilization of Continuous-Time Linear Systems via Enhanced LMI Conditions. IFAC-PapersOnLine, 2020, 53, 4540-4545.	0.5	3
26	High-Gain Observer Design for Nonlinear Systems with Delayed Outputs. IFAC-PapersOnLine, 2020, 53, 5057-5062.	0.5	8
27	Nonlinear Observer design for Systems with Sampled Measurements: An LPV Approach. IFAC-PapersOnLine, 2020, 53, 560-565.	0.5	0
28	Optimistic vs Pessimistic Moving-Horizon Estimation for Quasiâ€"LPV Discrete-Time Systems. IFAC-PapersOnLine, 2020, 53, 5004-5009.	0.5	2
29	State Observer Design Method for a Class of Nonlinear Systems. IFAC-PapersOnLine, 2020, 53, 4935-4940.	0.5	0
30	State observer design method for a class of nonâ€linear systems. IET Control Theory and Applications, 2020, 14, 1648-1655.	1.2	2
31	A nonlinear observer-based approach to fault detection, isolation and estimation for satellite formation flight application. Automatica, 2019, 107, 474-482.	3.0	62
32	Robust $$mathcal{H}_infty$$ Observer-based Stabilization of Linear Discrete-time Systems with Parameter Uncertainties. International Journal of Control, Automation and Systems, 2019, 17, 2261-2273.	1.6	2
33	Delay-dependent unknown input observer for nonlinear time-delay systems with both Hâˆž and W1,2 optimality criteria. , 2019, , 79-97.		1
34	Control of Anaerobic Digestion Process. , 2019, , 99-135.		2
35	Static Output Feedback Control of Discrete-Time Linear Systems: Background Results and New LMI Conditions. , 2019, , .		2
36	A Nonlinear observer-based trajectory tracking method applied to an anaerobic digestion process. Journal of Process Control, 2019, 75, 120-135.	1.7	12

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37	A Robust Decentralized Observer-Based Stabilization Method for Interconnected Nonlinear Systems: Improved LMI Conditions. , 2019, , 267-291.		0
38	Observer-Based Stabilization of Switched Discrete-Time Linear Systems With Parameter Uncertainties. , 2019, , 209-239.		2
39	A quadratic matrix inequality based PID controller design for LPV systems. Systems and Control Letters, 2019, 126, 67-76.	1.3	13
40	Observer design of descriptor nonlinear system with nonlinear outputs by using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi mathvariant="bold-script">W</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn><mml:mo>,</mml:mo><mml:mn>2</mml:mr criterion. Journal of the Franklin Institute, 2019, 356, 3531-3553.	1.9	1
41	Practical Absolute Stabilization of Lur'e Systems via Periodic Event-Triggered Feedback. , 2019, , .		3
42	State Estimation of LPV Discrete-Time Systems with Application to Output Feedback Stabilization. , 2019, , .		1
43	Robust Data-Driven Neuro-Adaptive Observers With Lipschitz Activation Functions. , 2019, , .		10
44	Linear Position Estimation on Smart Actuators Using a Nonlinear Observer. , 2019, , .		3
45	Absolute Stabilization of Lurâ€™e Systems by Periodically Intermittent Control. , 2019, , .		0
46	High-Gain Nonlinear Observer With Lower Tuning Parameter. IEEE Transactions on Automatic Control, 2019, 64, 3194-3209.	3.6	46
47	Tracking of Vehicle Motion on Highways and Urban Roads Using a Nonlinear Observer. IEEE/ASME Transactions on Mechatronics, 2019, 24, 644-655.	3.7	36
48	A discreteâ€time nonlinear state observer for the anaerobic digestion process. International Journal of Robust and Nonlinear Control, 2019, 29, 1279-1301.	2.1	13
49	Nonlinear observer-based control with application to an anaerobic digestion process. European Journal of Control, 2019, 45, 74-84.	1.6	4
50	Sequential LMI approach for the design of a BMIâ€based robust observer state feedback controller with nonlinear uncertainties. International Journal of Robust and Nonlinear Control, 2018, 28, 1246-1260.	2.1	30
51	Observer Design of Descriptor Nonlinear System with N onlinear Outputs by Using W12 -Optimality Criterion. , 2018, , .		0
52	Fault Sensor Detection and Estimation based on LPV Observer for Vehicle Lateral Dynamics. , 2018, , .		0
53	Advanced control and observer design for nonlinear systems via LMIs. European Journal of Control, 2018, 44, 1-2.	1.6	1
54	A sequential LMI approach to design a BMI-based multi-objective nonlinear observer. European Journal of Control, 2018, 44, 50-57.	1.6	5

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55	Actuator Fault Detection for Vehicle Lateral Dynamics. , 2018, , .		0
56	Multi-Objective Nonlinear Observer Design using BMIs. , 2018, , .		1
57	Nonlinear Observer for Vehicle Motion Tracking. , 2018, , .		7
58	LMI-Based Trajectory Tracking for a Class of Nonlinear Systems with Application to an Anaerobic Digestion Process. , 2018, , .		6
59	$mathcal{H}_{infty}$ Observer for Descriptor Nonlinear Systems with Nonlinear Output Equations. , 2018, , .		12
60	Robust $mathcal{H}_{infty}$ Observer-Based Stabilization of Linear Discrete-Time Systems with Parameter Uncertaintes. , 2018, , .		1
61	Observers with Dual Spatially Separated Sensors for Enhanced Estimation: Industrial, Automotive, and Biomedical Applications. IEEE Control Systems, 2017, 37, 42-58.	1.0	7
62	An LMI-Based H âˆž Discrete-Time Nonlinear State Observer Design for an Anaerobic Digestion Model. IFAC-PapersOnLine, 2017, 50, 11547-11552.	0.5	2
63	A New LMI-Based Output Feedback Controller Design Method for Discrete-Time LPV Systems with Uncertain Parameters. IFAC-PapersOnLine, 2017, 50, 11349-11354.	0.5	6
64	Circle criterion-based <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml22" display="inline" overflow="scroll" altimg="si22.gif"><mml:msub><mml:mrow><mml:mi>â„‹</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆž</mml:mi></mml:mrow></ observer design for Lipschitz and monotonic nonlinear systems â€“ Enhanced LMI conditions and constructive discussions. Automatica, 2017, 85, 412-425.	3.0	58
65	Real-time automotive slip angle estimation with extended H_{âˆž} circle criterion observer for nonlinear output system. , 2017, , .		1
66	Observer design for nonlinear systems by using high-gain and LPV/LMI-based technique. , 2017, , .		2
67	Output feedback stabilization of switching discrete-time linear systems with parameter uncertainties. Journal of the Franklin Institute, 2017, 354, 5895-5918.	1.9	27
68	LMI-based H<inf>âˆž</inf> nonlinear state observer design for anaerobic digestion model. , 2017, , .		3
69	LMI-based invariant like nonlinear state observer for anaerobic digestion model. , 2017, , .		1
70	â„‹<inf>âˆž</inf> observer-based stabilization of switched discrete-time linear systems. , 2017, , .		0
71	A modified two-step LMI method to design observer-based controller for linear discrete-time systems with parameter uncertainties. , 2017, , .		1
72	LMI-based discrete-time nonlinear state observer for an anaerobic digestion model. , 2017, , .		3

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73	Robust observerâ€based stabilization of Lipschitz nonlinear uncertain systems via LMIs â€•discussions and new design procedure. International Journal of Robust and Nonlinear Control, 2017, 27, 1915-1939.	2.1	54
74	Robust observer-based H<inf>âˆž</inf> stabilization of switched discrete-time linear systems with parameter uncertainties. , 2017, , .		1
75	Application of metaheuristic algorithms for steady state analysis of six-phase self-exited induction generator. , 2017, , .		0
76	Observer with small gains in the presence of a long delay in the measurements. , 2017, , .		3
77	A robust â„‹âˆž observer-based stabilization method for systems with uncertain parameters and Lipschitz nonlinearities. International Journal of Robust and Nonlinear Control, 2016, 26, 1962-1979.	2.1	30
78	Hâˆž circle criterion observer design for Lipschitz nonlinear systems with enhanced LMI conditions. , 2016, , .		19
79	New decentralized control design for interconnected nonlinear discrete-time systems with nonlinear interconnections. , 2016, , .		6
80	Observer-based control design via LMIs for a class of switched discrete-time linear systems with parameter uncertainties. , 2016, , .		4
81	On the enhancement of high-gain observers for state estimation of nonlinear systems. , 2016, , .		5
82	A new LMI based H<inf>âˆž</inf> observer design method for Lipschitz nonlinear systems. , 2016, , .		12
83	Convex optimization based dual gain observer design for Lipschitz nonlinear systems. , 2016, , .		6
84	A new LMI observer-based controller design method for discrete-time LPV systems with uncertain parameters. , 2016, , .		7
85	LPV unknown input observer for vehiclelateral dynamics. , 2016, , .		1
86	Observer-based stabilization via LMIs for linear uncertain systems. , 2015, , .		4
87	Observer-based control design for a class of nonlinear systems subject to unknown inputs: LMI approach. , 2015, , .		2
88	Observer-based stabilisation of linear systems with parameter uncertainties by using enhanced LMI conditions. International Journal of Control, 2015, 88, 1189-1200.	1.2	23
89	H<inf>∞</inf>-based fault diagnosis for diesel engines. , 2014, , .		1
90	Robust ℋ<inf>∞</inf> observer-based controller for lipschitz nonlinear discrete-time systems with parameter uncertainties. , 2014, , .		4

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91	Output feedback control for a class of switching discrete-time linear systems. , 2014, , .		1
92	Delay-dependent robust unknown input observer for nonlinear time-delay systems. , 2014, , .		0
93	A new observer-based controller design method for a class of time-varying delay systems with Lipschitz nonlinearities. , 2014, , .		11
94	Observer-based control design for diesel engines via LMI. , 2014, , .		0
95	A new LMI condition for decentralized observer-based control of linear systems with nonlinear interconnections. , 2014, , .		14
96	Real-Time Attitude-Independent Three-Axis Magnetometer Calibration for Spinning Projectiles: A Sliding Window Approach. IEEE Transactions on Control Systems Technology, 2014, 22, 255-264.	3.2	33
97	Robust Observer and Observerâ€Based Controller for Timeâ€Delay Singular Systems. Asian Journal of Control, 2014, 16, 80-94.	1.9	10
98	On LMI conditions to design observers for Lipschitz nonlinear systems. Automatica, 2013, 49, 585-591.	3.0	280
99	New LMI Condition for Observer-Based $mathcal{H}_{infty}$ Stabilization of a Class of Nonlinear Discrete-Time Systems. SIAM Journal on Control and Optimization, 2013, 51, 784-800.	1.1	33
100	On LMI conditions to design observer-based controllers for linear systems with parameter uncertainties. Automatica, 2013, 49, 3700-3704.	3.0	103
101	Robust Unknown Input Observers for Nonlinear Time-Delay Systems. SIAM Journal on Control and Optimization, 2013, 51, 2735-2752.	1.1	24
102	Convex optimization approach to observer-based stabilization of linear systems with parameter uncertainties. , 2013, , .		0
103	<i>â„‹</i>_{â^'}/<i>â„‹</i>_{â^ž}fault detection filter for a class of nonlinear descriptor systems. International Journal of Control, 2013, 86, 253-262.	1.2	35
104	Comments on â€œA Note on Observers for Discrete-Time Lipschitz Nonlinear Systemsâ€• IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 56-60.	2.2	15
105	Output feedback control for discrete-time linear systems by using luenberger observers under unknown switching. , 2013, , .		3
106	A multiplicative filter for GLMAV attitude estimation. , 2013, , .		0
107	A new observer-based stabilization method for linear systems with uncertain parameters. , 2013, , .		10
108	POD-based state estimation of simulated moving bed chromatographic processes. , 2013, , .		1

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109	Adaptive output tracking control design of a gun launched micro aerial vehicle based on approximate feedback linearization. , 2013, , .		2
110	Observers for continuous-time Lipschitz nonlinear systems. Analysis and comparisons. , 2012, , .		0
111	Observer based ℌ<inf>∞</inf> controllers for a class of nonlinear lipschitz discrete-time systems. , 2012, , .		0
112	Observers design for discrete-time Lipschitz nonlinear systems. State of the art and new results. , 2012, , .		2
113	â„‹_{âˆž}Observers design for a class of nonlinear time-delay systems in descriptor form. International Journal of Control, 2011, 84, 1653-1663.	1.2	25
114	Observers Design for a Class of Lipschitz Discrete-Time Systems with Time-Delay. , 2011, , .		0
115	Hâˆž Unknown Input Observers Design for a Class of Nonlinear Time-Delay Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3879-3884.	0.4	4
116	Observer synthesis method for Lipschitz nonlinear discrete-time systems with time-delay: An LMI approach. Applied Mathematics and Computation, 2011, 218, 419-429.	1.4	36
117	A sliding window filter for real-time attitude independent TAM calibration. , 2010, , .		4
118	Robust fault diagnosis for a class of nonlinear descriptor systems. , 2010, , .		1
119	Nonlinear-Observer-Based ${cal H}_{infty}$ Synchronization and Unknown Input Recovery. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 1720-1731.	3.5	28
120	A unified adaptive observer synthesis method for a class of systems with both Lipschitz and monotone nonlinearities. Systems and Control Letters, 2009, 58, 282-288.	1.3	79
121	Sobolev Norms-Based State Estimation and Input Recovery for a Class of Nonlinear Systems. Design and Experimental Results. IEEE Transactions on Signal Processing, 2009, 57, 1021-1029.	3.2	14
122	Observer Based Synchronization for a Class of Chaotic Time-Delay Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 262-266.	0.4	0
123	Observers for a class of Lipschitz systems with extension to performance analysis. Systems and Control Letters, 2008, 57, 18-27.	1.3	243
124	A software based approach for autonomous projectile attitude and position estimation. , 2008, , .		3
125	Observers Synthesis Method for a Class of Nonlinear Discrete-Time Systems with Extension to Observer-Based Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 9865-9870.	0.4	0
126	Unknown Input Observer Synthesis Method with Modified Hâˆž Criteria for Nonlinear Systems Using Sobolev Norms. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8588-8593.	0.4	4

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127	Observer design for a class of Lipschitz time-delay systems. International Journal of Modelling, Identification and Control, 2008, 4, 28.	0.2	7
128	Observer Design for a Class of Nonlinear Time-Delay Systems. Proceedings of the American Control Conference, 2007, , .	0.0	3
129	On observers design for nonlinear time-delay systems. , 2006, , .		14
130	Observer Design for a Certain Class of Nonlinear Systems. , 2006, , .		3
131	Observer Design for Lipschitz Nonlinear Systems: The Discrete-Time Case. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2006, 53, 777-781.	2.3	100
132	Observer synthesis for Lipschitz discrete-time systems. , 0, , .		17
133	Observer Design for Nonlinear Systems: An Approach Based on the Differential Mean Value Theorem.. , 0, , .		62