Mohamed Darouach

List of Publications by Year in descending order

119 papers	5,320 citations	94433 37 h-index	91884 69 g-index
119 all docs	119 docs citations	119 times ranked	2498 citing authors

#	Article	IF	Citations
1	Optimal discrete-time unbiased filtering for systems with unknown inputs. Systems and Control Letters, 2022, 166, 105305.	2.3	1
2	${\mathcal H}_{\infty}$ Functional Filtering for Linear Systems With Unknown Inputs. IEEE Transactions on Automatic Control, 2021, 66, 4858-4865.	5.7	5
3	Robust observer‐based‐controller design for uncertain fractional‐order time‐varying‐delay systems. International Journal of Robust and Nonlinear Control, 2021, 31, 6314-6333.	3.7	5
4	On the Existence and Design of Functional Observers. IEEE Transactions on Automatic Control, 2020, 65, 2751-2759.	5.7	19
5	Adaptive observer design for LPV systems. IFAC-PapersOnLine, 2019, 52, 140-145.	0.9	4
6	Generalised dynamic observer design for Lipschitz non‐linear descriptor systems. IET Control Theory and Applications, 2019, 13, 2270-2280.	2.1	14
7	Attack-tolerant control and observer-based trajectory tracking for Cyber-Physical Systems. European Journal of Control, 2019, 47, 30-36.	2.6	24
8	Nonlinear Model Predictive Control for Ecological Driver Assistance Systems in Electric Vehicles. Robotics and Autonomous Systems, 2019, 112, 291-303.	5.1	21
9	A discrete‐time nonlinear state observer for the anaerobic digestion process. International Journal of Robust and Nonlinear Control, 2019, 29, 1279-1301.	3.7	13
10	Generalized dynamic observer design for quasi-LPV systems. Automatisierungstechnik, 2018, 66, 225-233.	0.8	4
11	Deadzone-Quadratic Penalty Function for Predictive Extended Cruise Control with Experimental Validation. Advances in Intelligent Systems and Computing, 2018, , 446-459.	0.6	1
12	A new polytopic approach for the unknown input functional observer design. International Journal of Control, 2018, 91, 658-677.	1.9	20
13	Stochastic Optimum Energy Management for Advanced Transportation Network. IFAC-PapersOnLine, 2018, 51, 317-322.	0.9	1
14	Hˆž generalized dynamic unknown inputs observer design for discrete LPV systems. Application to wind turbine. European Journal of Control, 2018, 44, 40-49.	2.6	12
15	Unknown inputs observer design for descriptor systems with monotone nonlinearities. International Journal of Robust and Nonlinear Control, 2018, 28, 5481-5494.	3.7	15
16	Fault estimation for descriptor linear systems based on the generalised dynamic observer. International Journal of Systems Science, 2018, 49, 2398-2409.	5.5	7
17	Generalized dynamic observers for quasi‐LPV systems with unmeasurable scheduling functions. International Journal of Robust and Nonlinear Control, 2018, 28, 5262-5278.	3.7	9
18	Adaptive oberver design for linear descriptor systems. , 2018, , .		2

#	Article	IF	Citations
19	Fractional Order Time-Varying-Delay Systems. , 2018, , 133-158.		9
20	Adaptive observer for nonlinear fractionalâ€order systems. International Journal of Adaptive Control and Signal Processing, 2017, 31, 314-331.	4.1	37
21	Finite-Time Stabilizability, Detectability, and Dynamic Output Feedback Finite-Time Stabilization of Linear Systems. IEEE Transactions on Automatic Control, 2017, 62, 6521-6528.	5.7	25
22	Robust H_{infty} Observer-Based Control of Fractional-Order Systems With Gain Parametrization. IEEE Transactions on Automatic Control, 2017, 62, 5710-5723.	5.7	52
23	Risk-averse Stochastic Nonlinear Model Predictive Control for Real-time Safety-critical Systems. IFAC-PapersOnLine, 2017, 50, 5991-5997.	0.9	5
24	An LMI-Based H âˆž Discrete-Time Nonlinear State Observer Design for an Anaerobic Digestion Model. IFAC-PapersOnLine, 2017, 50, 11547-11552.	0.9	2
25	Functional observers design for descriptor systems via LMI: Continuous and discrete-time cases. Automatica, 2017, 86, 216-219.	5.0	30
26	Fast stochastic non-linear model predictive control for electric vehicle advanced driver assistance systems. , 2017, , .		4
27	LMI-based invariant like nonlinear state observer for anaerobic digestion model. , 2017, , .		1
28	LMI-based discrete-time nonlinear state observer for an anaerobic digestion model. , 2017, , .		3
29	H âˆž Dynamic Output Feedback Controller Design For Disturbed Fractional-Order Systems. IFAC-PapersOnLine, 2017, 50, 9724-9729.	0.9	3
30	A Polytopic Observer Design Approach for Landing Control of a Quadrotor UAV. IFAC-PapersOnLine, 2017, 50, 9753-9759.	0.9	2
31	H âˆž dynamic observer design for linear discrete-time systems * *This work is supported by the Fundamental Research Funds for the Central Universities (under Grant 310822171005), in Changâ€™an University, China.. IFAC-PapersOnLine, 2017, 50, 2756-2761.	0.9	4
32	A Fast Modelâ€Predictive Speed Controller for Minimised Charge Consumption of Electric Vehicles. Asian Journal of Control, 2016, 18, 133-149.	3.0	25
33	New dynamical observers design for linear descriptor systems. IET Control Theory and Applications, 2016, 10, 2223-2232.	2.1	13
34	Nonlinear model predictive extended eco-cruise control for battery electric vehicles. , 2016, , .		15
35	Stability and stabilizability analysis of fractional-order time-varying delay systems via diffusive representation. , 2016, , .		6
36	Robust functional observer design for uncertain fractional-order time-varying delay systems. , 2016, , .		10

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37	Approximate discretization of regular descriptor (singular) systems with impulsive mode. Automatica, 2016, 73, 231-236.	5.0	9
38	Event-based state estimation of linear dynamic systems with unknown exogenous inputs. Automatica, 2016, 69, 275-288.	5.0	81
39	New unified <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mi>âˇž</mml:mi></mml:mrow><mml:mrow> dynamic observer design for linear systems with unknown inputs. Automatica, 2016, 65, 43-52.	5.0	50
40	Robust state estimation and unknown inputs reconstruction for a class of nonlinear systems: Multiobjective approach. Automatica, 2016, 64, 1-7.	5.0	50
41	Robust $$H_{infty }$$ Observer-Based Stabilization of Disturbed Uncertain Fractional-Order Systems Using a Two-Step Procedure. Lecture Notes in Electrical Engineering, 2016, , 167-180.	0.4	4
42	A Formal Modeling Framework for Anaerobic Digestion Systems. , 2015, , .		5
43	Static output feedback â„‹ âˇž control for a fractional-order glucose-insulin system. International Journal of Control, Automation and Systems, 2015, 13, 798-807.	2.7	23
44	Generalized dynamic observers for LPV singular systems. IFAC-PapersOnLine, 2015, 48, 152-157.	0.9	5
45	An H<inf>&#x221E;</inf> adaptive observer design for linear descriptor systems. , 2015, , .		4
46	Hâˇž dynamical observers design for linear descriptor systems. Application to state and unknown input estimation. European Journal of Control, 2015, 26, 35-43.	2.6	23
47	H<inf>∞</inf> filters design for fractional-order time-varying delay systems. , 2015, , .		5
48	Design and simulation of a real-time implementable energy-efficient model-predictive cruise controller for electric vehicles. Journal of the Franklin Institute, 2015, 352, 603-625.	3.4	45
49	Unknown Input Observer Design for Linear Fractional-Order Time-Delay Systems. Journal of Applied Nonlinear Dynamics, 2015, 4, 117-130.	0.3	6
50	H<inf>&#x221E;</inf> dynamic observer design for linear time invariant systems. , 2014, , .		3
51	Optimal unbiased functional filtering in the frequency domain. Systems Science and Control Engineering, 2014, 2, 308-315.	3.1	14
52	Design of functional fractional-order observers for linear time-delay fractional-order systems in the time domain. , 2014, , .		11
53	H<inf>∞</inf> dynamical observer-based control for descriptor systems. , 2014, , .		3
54	H<inf>&#x221E;</inf> dynamical observer design for linear descriptor systems. , 2014, , .		5

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55	Adaptive observers design for a class of linear descriptor systems. Automatica, 2014, 50, 578-583.	5.0	49
56	H<inf>&#x221E;</inf> observer design for linear fractional-order systems in time and frequency domains. , 2014, , .		11
57	H âˆž filtering for singular bilinear systems with application to a single-link flexible-joint robot. International Journal of Control, Automation and Systems, 2014, 12, 590-598.	2.7	14
58	<i>H</i>_{âˆž}filter design for a class of nonlinear discrete-time singular systems. International Journal of Control, 2013, 86, 1597-1606.	1.9	5
59	Generalized H<inf>&#x221E;</inf> observers design for systems with unknown inputs. , 2013, , .		4
60	An efficient nonlinear model-predictive eco-cruise control for electric vehicles. , 2013, , .		14
61	Design of unknown input fractional-order observers for fractional-order systems. International Journal of Applied Mathematics and Computer Science, 2013, 23, 491-500.	1.5	59
62	Design of full and reduced orders observers for linear fractional-order systems in the time and frequency domains. , 2013, , .		9
63	Unknown inputs functional observers designs for delay descriptor systems. International Journal of Control, 2013, 86, 1850-1858.	1.9	17
64	Observer-Based Approach for Fractional-Order Chaotic Synchronization and Secure Communication. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2013, 3, 442-450.	3.6	80
65	Robust stabilization of uncertain descriptor fractional-order systems. Automatica, 2013, 49, 1907-1913.	5.0	139
66	A controller design based on a functional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si6.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆž</mml:mi></mml:mrow></m filter for descriptor systems: The time and frequency domain cases. Automatica, 2012, 48, 542-549.	5.0	17
67	Novel bounded real lemma for discrete-time descriptor systems: Application to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆž</mml:mi></mml:mrow>< control design. Automatica, 2012, 48, 449-453.	5.0	106
68	On the functional observers for linear descriptor systems. Systems and Control Letters, 2012, 61, 427-434.	2.3	62
69	Robust admissibility of uncertain switched singular systems. International Journal of Control, 2011, 84, 1587-1600.	1.9	55
70	Unknown Inputs Functional Observers Designs For Descriptor Systems with Constant Time Delay. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1162-1167.	0.4	20
71	Exponential stabilization of a class of nonlinear systems: A generalized Gronwallâ€"Bellman lemma approach. Nonlinear Analysis: Theory, Methods & Applications, 2011, 74, 7333-7341.	1.1	21
72	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si15.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆž</mml:mi></mml:mrow></m observers design for a class of nonlinear singular systems. Automatica, 2011, 47, 2517-2525.	5.0	89

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73	Moving horizon state estimation for linear discrete-time singular systems. IET Control Theory and Applications, 2010, 4, 339-350.	2.1	23
74	${cal H}\_{infty }$ Filter for Bilinear Systems Using LPV Approach. IEEE Transactions on Automatic Control, 2010, 55, 1668-1674.	5.7	26
75	Optimal unbiased reduced order filtering for discrete-time descriptor systems via LMI. Systems and Control Letters, 2009, 58, 436-444.	2.3	15
76	A nonlinear observer design for an activated sludge wastewater treatment process. Journal of Process Control, 2009, 19, 1558-1565.	3.3	40
77	Complements to full order observer design for linear systems with unknown inputs. Applied Mathematics Letters, 2009, 22, 1107-1111.	2.7	50
78	H_{infty} Unbiased Filtering for Linear Descriptor Systems via LMI. IEEE Transactions on Automatic Control, 2009, 54, 1966-1972.	5.7	72
79	State estimation in the presence of bounded disturbances. Automatica, 2008, 44, 1867-1873.	5.0	48
80	Observers for a Class of Nonlinear Singular Systems. IEEE Transactions on Automatic Control, 2008, 53, 2627-2633.	5.7	81
81	UNKNOWN INPUTS OBSERVERS DESIGN FOR DELAY SYSTEMS. Asian Journal of Control, 2007, 9, 426-434.	3.0	32
82	Robust <mml:math altimg="si10.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	5.0	31
83	Solution to Sylvester equation associated to linear descriptor systems. Systems and Control Letters, 2006, 55, 835-838.	2.3	46
84	Robust reduced order unbiased filtering for uncertain systems. International Journal of Control, 2006, 79, 93-106.	1.9	6
85	Discussion on: A Comparison of Sliding Mode and Unknown Input Observer for Fault Reconstruction. European Journal of Control, 2006, 12, 261-277.	2.6	3
86	Reduced-order observers for linear neutral delay systems. IEEE Transactions on Automatic Control, 2005, 50, 1407-1413.	5.7	39
87	Linear functional observers for systems with delays in State variables: the discrete-time case. IEEE Transactions on Automatic Control, 2005, 50, 228-233.	5.7	44
88	Extension of minimum variance estimation for systems with unknown inputs. Automatica, 2003, 39, 867-876.	5.0	140
89	Generalized state-space observers for chaotic synchronization and secure communication. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2002, 49, 345-349.	0.1	248
90	Linear functional observers for systems with delays in state variables. IEEE Transactions on Automatic Control, 2001, 46, 491-496.	5.7	158

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91	Observers for discrete-time systems with multiple delays. IEEE Transactions on Automatic Control, 2001, 46, 746-750.	5.7	16
92	A reduced-order observer for non-linear discrete-time systems. Systems and Control Letters, 2000, 39, 141-151.	2.3	39
93	On the optimal unbiased functional filtering. IEEE Transactions on Automatic Control, 2000, 45, 1374-1379.	5.7	15
94	Existence and design of functional observers for linear systems. IEEE Transactions on Automatic Control, 2000, 45, 940-943.	5.7	207
95	Two-stage Kalman estimator with unknown exogenous inputs. Automatica, 1999, 35, 339-342.	5.0	71
96	Design of reduced-order observers without internal delays. IEEE Transactions on Automatic Control, 1999, 44, 1711-1713.	5.7	32
97	On the robustness of linear systems with nonlinear uncertain parameters. Automatica, 1998, 34, 1005-1008.	5.0	17
98	Reduced-Order Kalman Filter with Unknown Inputs. Automatica, 1998, 34, 1463-1468.	5.0	15
99	Robustness analysis of interval matrices based on Kharitonov's theorem. IEEE Transactions on Automatic Control, 1998, 43, 273-278.	5.7	20
100	Kalman filter with unknown inputs and robust two-stage filter. International Journal of Systems Science, 1998, 29, 41-47.	5.5	26
101	Kalman filtering for continuous descriptor systems. , 1997, , .		12
102	Convergence analysis of the extended Kalman filter used as an observer for nonlinear deterministic discrete-time systems. IEEE Transactions on Automatic Control, 1997, 42, 581-586.	5.7	239
103	Unbiased minimum variance estimation for systems with unknown exogenous inputs. Automatica, 1997, 33, 717-719.	5.0	235
104	Optimal two-stage Kalman filter in the presence of random bias. Automatica, 1997, 33, 1745-1748.	5.0	107
105	Reduced-order observer design for descriptor systems with unknown inputs. IEEE Transactions on Automatic Control, 1996, 41, 1068-1072.	5.7	178
106	Generalized likelihood ratio approach for fault detection in linear dynamic stochastic systems with unknown inputs. International Journal of Systems Science, 1996, 27, 1231-1241.	5.5	13
107	Reduced-order observer-based point-to-point and trajectory controllers for robot manipulators. Control Engineering Practice, 1996, 4, 991-1000.	5.5	16
108	Design of observers for descriptor systems. IEEE Transactions on Automatic Control, 1995, 40, 1323-1327.	5.7	207

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109	Kalman filtering with unknown inputs via optimal state estimation of singular systems. International Journal of Systems Science, 1995, 26, 2015-2028.	5.5	114
110	Simultaneous observation of linear systems. IEEE Transactions on Automatic Control, 1995, 40, 696-699.	5.7	17
111	Recursive identification method for MISO Wiener-Hammerstein model. IEEE Transactions on Automatic Control, 1995, 40, 287-291.	5.7	106
112	On the novel approach to the design of unknown input observers. IEEE Transactions on Automatic Control, 1994, 39, 698-699.	5.7	50
113	Fault detection of multiple biases or process leaks in linear steady state systems. Computers and Chemical Engineering, 1994, 18, 1001-1004.	3.8	21
114	Full-order observers for linear systems with unknown inputs. IEEE Transactions on Automatic Control, 1994, 39, 606-609.	5.7	653
115	Expansion of det(A+B) and robustness analysis of uncertain state space systems. IEEE Transactions on Automatic Control, 1993, 38, 1671-1675.	5.7	28
116	State estimation of stochastic singular linear systems. International Journal of Systems Science, 1993, 24, 345-354.	5.5	89
117	State estimation for a class of singular systems. International Journal of Systems Science, 1992, 23, 517-530.	5.5	18
118	Analytical estimator of measurement error variances in data reconciliation. Computers and Chemical Engineering, 1992, 16, 185-188.	3.8	34
119	Data reconciliation in generalized linear dynamic systems. AICHE Journal, 1991, 37, 193-201.	3.6	83