Marcelo D Fragoso

List of Publications by Year
in descending order

125 papers	2,681 citations	218677 26 h-index	197818 49 g-index
126 all docs	126 docs citations	126 times ranked	870 citing authors

#	Article	IF	Citations
1	Stability Results for Discrete-Time Linear Systems with Markovian Jumping Parameters. Journal of Mathematical Analysis and Applications, 1993, 179, 154-178.	1.0	501
2	Continuous-Time Markov Jump Linear Systems. Probability and Its Applications, 2013, , .	0.8	257
3	Discrete-time LQ-optimal control problems for infinite Markov jump parameter systems. IEEE Transactions on Automatic Control, 1995, 40, 2076-2088.	5.7	194
4	A Detector-Based Approach for the <inline-formula> <tex-math notation="TeX">$H_{2} $</tex-math></inline-formula> Control of Markov Jump Linear Systems With Partial Information. IEEE Transactions on Automatic Control, 2015, 60, 1219-1234.	5.7	193
5	A Unified Approach for Stochastic and Mean Square Stability of Continuous-Time Linear Systems with Markovian Jumping Parameters and Additive Disturbances. SIAM Journal on Control and Optimization, 2005, 44, 1165-1191.	2.1	150
6	A New Approach to Linearly Perturbed Riccati Equations Arising in Stochastic Control. Applied Mathematics and Optimization, 1998, 37, 99-126.	1.6	83
7	H âˆž filtering for Markovian jump linear systems. International Journal of Systems Science, 2002, 33, 909-915.	5.5	72
8	Optimal Control for Continuous-Time Linear Quadratic Problems with Infinite Markov Jump Parameters. SIAM Journal on Control and Optimization, 2001, 40, 270-297.	2.1	71
9	Hâˆž filtering for linear periodic systems with parameter uncertainty. Systems and Control Letters, 1991, 17, 343-350.	2.3	70
10	On a partially observable LQG problem for systems with Markovian jumping parameters. Systems and Control Letters, 1988, 10, 349-356.	2.3	63
11	?? filtering for discrete-time linear systems with Markovian jumping parameters?. International Journal of Robust and Nonlinear Control, 2003, 13, 1299-1316.	3.7	59
12	Detector-based <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml17" display="inline" overflow="scroll" altimg="si4.gif"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆž</mml:mo></mml:mrow></mm results for discrete-time Markov jump linear systems with partial observations. Automatica, 2018, 91, 159-172.	5.0	53
13	Robust ?? filtering for uncertain Markovian jump linear systems. International Journal of Robust and Nonlinear Control, 2002, 12, 435-446.	3.7	46
14	A Separation Principle for the Continuous-Time LQ-Problem With Markovian Jump Parameters. IEEE Transactions on Automatic Control, 2010, 55, 2692-2707.	5.7	41
15	Optimal linear mean square filter for continuous-time jump linear systems. IEEE Transactions on Automatic Control, 2005, 50, 1364-1369.	5.7	39
16	On the existence of maximal solution for generalized algebraic Riccati equations arising in stochastic control. Systems and Control Letters, 1990, 14, 233-239.	2.3	38
17	Stationary Filter For Continuous-Time Markovian Jump Linear Systems. SIAM Journal on Control and Optimization, 2005, 44, 801-815.	2.1	37
18	Discrete-time jump LQG problem. International Journal of Systems Science, 1989, 20, 2539-2545.	5.5	36

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19	Lyapunov coupled equations for continuous-time infinite Markov jump linear systems. Journal of Mathematical Analysis and Applications, 2002, 274, 319-335.	1.0	36
20	Output Feedback H_infty Control of Continuous-Time Infinite Markovian Jump Linear Systems via LMI Methods. SIAM Journal on Control and Optimization, 2008, 47, 950-974.	2.1	36
21	Mean Square Stabilizability of Continuous-Time Linear Systems with Partial Information on the Markovian Jumping Parameters. Stochastic Analysis and Applications, 2004, 22, 99-111.	1.5	35
22	Optimal control for a class of noisy linear systems with markovian jumping parameters and quadratic cost. International Journal of Systems Science, 1991, 22, 2553-2561.	5.5	31
23	A New Approach to Detectability of Discrete-Time Infinite Markov Jump Linear Systems. SIAM Journal on Control and Optimization, 2005, 43, 2132-2156.	2.1	30
24	A separation principle for the <mml:math altimg="si1.gif" 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.	1.0	30
25	<i>H</i>_{â^ž} control of continuous-time Markov jump linear systems with detector-based mode information. International Journal of Control, 2017, 90, 2178-2196.	1.9	29
26	Stochastic versus mean square stability in continuous time linear infinite Markov jump parameter systems. Stochastic Analysis and Applications, 2002, 20, 347-356.	1.5	27
27	New methods for mode-independent robust control of Markov jump linear systems. Systems and Control Letters, 2016, 90, 38-44.	2.3	27
28	Infinite Markov jump-bounded real lemma. Systems and Control Letters, 2008, 57, 64-70.	2.3	24
29	A Small Random Perturbation Analysis of a Partially Observable LQG Problem for Systems with Markovian Jumping Parameters. IMA Journal of Mathematical Control and Information, 1990, 7, 293-305.	1.7	23
30	Comments on â€œStochastic Stability of Jump Linear Systemsâ€• IEEE Transactions on Automatic Control, 2004, 49, 1414-1416.	5.7	22
31	A new perspective on the robustness of Markov jump linear systems. Automatica, 2013, 49, 735-747.	5.0	19
32	On the Robust Stability, Stabilization, and Stability Radii of Continuous-Time Infinite Markov Jump Linear Systems. SIAM Journal on Control and Optimization, 2011, 49, 1171-1196.	2.1	17
33	A stochastic approach to the flood control problem. Applied Mathematical Modelling, 2001, 25, 499-511.	4.2	15
34	On an infinite dimensional perturbed Riccati differential equation arising in stochastic control. Linear Algebra and Its Applications, 2005, 406, 165-176.	0.9	14
35	On the stability radii of continuous-time infinite Markov jump linear systems. Mathematics of Control, Signals, and Systems, 2010, 22, 23-38.	2.3	14
36	Dynamic output feedback control for continuous-time Markov jump linear systems with hidden Markov models. International Journal of Control, 2022, 95, 716-728.	1.9	13

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37	A new look at the robust control of discrete-time Markov jump linear systems. International Journal of Control, 2016, 89, 518-534.	1.9	11
38	The interplay between population genetics and diffusion with stochastic resetting. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 505002.	2.1	11
39	Diffusion with stochastic resetting of interacting particles emerging from a model of population genetics. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 014003.	2.1	11
40	Maximal solution of a certain class of periodic Riccati differential equations. Linear Algebra and Its Applications, 1992, 169, 61-73.	0.9	10
41	Approximate dynamic programming via direct search in the space of value function approximations. European Journal of Operational Research, 2011, 211, 343-351.	5.7	10
42	Maximal versus strong solution to algebraic Riccati equations arising in infinite Markov jump linear systems. Systems and Control Letters, 2008, 57, 246-254.	2.3	9
43	On the Filtering Problem for Continuous-Time Markov Jump Linear Systems with no Observation of the Markov Chain. European Journal of Control, 2011, 17, 339-354.	2.6	9
44	A new approach for the H<inf>â^ž</inf> control of Markov jump linear systems with partial information. , 2015, , .		9
45	On a discrete-time linear jump stochastic dynamic game. International Journal of Systems Science, 2001, 32, 979-988.	5.5	8
46	Detectorâ€based approach for H filtering of Markov jump linear systems with partial mode information. IET Control Theory and Applications, 2019, 13, 1298-1308.	2.1	8
47	A note on jump-type Flemingâ€“Viot processes. Statistics and Probability Letters, 2006, 76, 821-830.	0.7	6
48	Heavy traffic analysis of state-dependent parallel queues with triggers and an application to web search systems. Performance Evaluation, 2010, 67, 913-928.	1.2	6
49	Time aggregated Markov decision processes via standard dynamic programming. Operations Research Letters, 2011, 39, 193-197.	0.7	6
50	Output feedback robust stabilization of continuous-time infinite Markov jump linear systems. , 2007, , .		5
51	On the stability radii of continuous-time Markov jump linear systems. , 2008, , .		5
52	Diffusion Approximation of State-Dependent G-Networks Under Heavy Traffic. Journal of Applied Probability, 2008, 45, 347-362.	0.7	5
53	On the state-feedback robust control of continuous-time infinite Markov jump linear systems. , 2010, , .		5
54	Output-feedback robust control of continuous-time infinite Markov jump linear systems. , 2010, , .		5

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55	Decoherence in quantum Markov chains. Quantum Information Processing, 2014, 13, 559-572.	2.2	5
56	Solving average cost Markov decision processes by means of a two-phase time aggregation algorithm. European Journal of Operational Research, 2015, 240, 697-705.	5.7	5
57	Optimal linear mean square filter for the operation mode of continuous-time Markovian jump linear systems. , 2017, , .		5
58	Sample paths of jump-type Flemingâ€"Viot processes with bounded mutation operators. Statistics and Probability Letters, 2008, 78, 1784-1791.	0.7	4
59	On diffusions with stochastic resettings: noisy restarts, optimal rates and interaction modelling. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 495001.	2.1	4
60	The minimum linear mean square filter for a class of hybrid systems. , 2001, , .		4
61	Optimal linear mean square filter for the operation mode of continuousâ€time Markovian jump linear systems. IET Control Theory and Applications, 2019, 13, 1309-1319.	2.1	4
62	Characterizations of Radon spaces. Statistics and Probability Letters, 1999, 42, 409-413.	0.7	3
63	Invariant measures for jump-type Flemingâ€"Viot processes. Statistics and Probability Letters, 2006, 76, 796-802.	0.7	3
64	Diffusion approximation of state dependent G-networks under heavy traffic. , 2008, , .		3
65	On the analysis of G-queues under heavy traffic. , 2008, , .		3
66	Diffusion Approximation of State-Dependent G-Networks Under Heavy Traffic. Journal of Applied Probability, 2008, 45, 347-362.	0.7	3
67	On the robust stability, stabilization, and stability radii of continuous-time Markov jump linear systems. , 2009, , .		3
68	Standard dynamic programming applied to time aggregated Markov decision processes. , 2009, , .		3
69	Computing the Stationary Distribution of a Finite Markov Chain Through Stochastic Factorization. SIAM Journal on Matrix Analysis and Applications, 2011, 32, 1513-1523.	1.4	3
70	Lumping the States of a Finite Markov Chain Through Stochastic Factorization. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 4206-4211.	0.4	3
71	New results on the robustness of discrete-time Markov jump linear systems. , 2012, , .		3
72	New methods for mode-independent robust control of Markov jump linear systems. , 2014, , .		3

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73	Fast Switching Detector-Based H_2 Control of Markov Jump Linear Systems with Multiplicative Noises. SIAM Journal on Control and Optimization, 2021, 59, 4243-4267.	2.1	3
74	ON A DETECTABILITY CONCEPT OF DISCRETE-TIME INFINITE MARKOV JUMP LINEAR SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 437-442.	0.4	2
75	Infinite Markov Jump Bounded Real Lemma. , 2007, , .		2
76	Maximal solution to algebraic Riccati equations linked to infinite Markov jump linear systems. Mathematics of Control, Signals, and Systems, 2008, 20, 157-172.	2.3	2
77	On the robust control of continuous-time Markov jump linear systems subject to block-diagonal uncertainty. , 2010, , .		2
78	Absolutely continuous measure for a jump-type Flemingâ€“Viot process. Statistics and Probability Letters, 2012, 82, 557-564.	0.7	2
79	H<inf>âˆž</inf> filtering for markovian jump linear systems with mode partial information. , 2016, , .		2
80	Robust stability and stabilization of continuous-time infinite Markov jump linear systems. , 2009, , .		2
81	Will the PLS criterion for order estimation work with AML and a posteriori prediction error?. Systems and Control Letters, 1990, 14, 79-92.	2.3	1
82	Separable Hausdorff measurable Radon spaces. Statistics and Probability Letters, 2005, 71, 347-359.	0.7	1
83	Output feedback h_∞ control of continuous-time infinite markovian jump linear systems via lmi methods. , 2008, , .		1
84	An application of convex optimization concepts to approximate dynamic programming. , 2008, , .		1
85	Diffusion approximation for signaling stochastic networks. Stochastic Processes and Their Applications, 2013, 123, 2957-2982.	0.9	1
86	New LMI methods to the robust control of discrete-time Markov jump linear systems. , 2013, , .		1
87	A Bounded Real Lemma for continuous-time linear systems with partial information on the Markovian jumping parameters. , 2015, , .		1
88	Multi-partition time aggregation for Markov Chains. , 2017, , .		1
89	Optimal control for linear quadratic problems with Markov jump parameters and fractional brownian perturbation. , 2017, , .		1
90	Mean Square Stability and <tex>H_{2}</tex>-Control for Markov Jump Linear Systems with Multiplicative Noises and Partial Mode Information. , 2018, , .		1

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91	A multi-cluster time aggregation approach for Markov chains. Automatica, 2019, 99, 382-389.	5.0	1
92	Mean Stability of a Class of Two-Time-Scale Markov Jump Linear Systems. , 2019, , .		1
93	Switching diffusion approximations for optimal power management in parallel processing systems. Stochastic Models, 2021, 37, 367-414.	0.5	1
94	Robust stability and stabilization of discrete-time infinite Markov jump linear systems. , 2009, , .		1
95	Results on Generalised Riccati Equations Arising in Stochastic Control. , 1990, , 95-102.		1
96	Monotonicity and Maximal Solution of Generalized Algebraic Riccati Equations. , 1990, , .		1
97	Strongly consistent estimation of the order of stochastic control systems (CARMA model). Journal of Mathematical Analysis and Applications, 1992, 166, 404-427.	1.0	0
98	Some aspects of stability in continuous time linear infinite Markov jump parameter systems. , 2001, , .		0
99	Discussion on: â€œOn the Continuous Time-Varying JLQ Problemâ€• European Journal of Control, 2004, 10, 272-274.	2.6	0
100	A Note on Convergence in Maximal Solution Problems for Infinite Markov Jump Linear Systems. , 0, , .		0
101	Maximal Solution to Perturbed Algebraic Riccati Equations Arising in Markovian Jump Control Revisited. , 0, , .		0
102	A separation principle for the H<inf>2</inf>-control of continuous-time infinite markov jump linear systems with partial observations. , 2007, , .		0
103	Robust linear filtering for continuous-time hybrid Markov linear systems. , 2008, , .		0
104	Imbalance Control in Fork-Join Systems under Heavy Trafficâ‹†. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 8235-8240.	0.4	0
105	A two-phase time aggregation algorithm for average cost Markov decision processes. , 2012, , .		0
106	H âˆž Control. Probability and Its Applications, 2013, , 151-181.	0.8	0
107	Reducing Response Time in Fork-Join Systems under Heavy Traffic Via Imbalance Control. Advances in Applied Probability, 2013, 45, 1137-1156.	0.7	0
108	Reducing Response Time in Fork-Join Systems under Heavy Traffic Via Imbalance Control. Advances in Applied Probability, 2013, 45, 1137-1156.	0.7	0

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109	On the control of power consumption in server farms via heavy traffic approximation. , 2014, , .		0
110	Discounted Markov decision processes via time aggregation. , 2016, , .		0
111	Differential Games for Markov Jump Linear Systems with Fractional Brownian Perturbation. , 2019, , .		0
112	Robustness Margins for Continuous-time Markov Jump Linear Systems with Uncertain Transition Rates. , 2019, , .		0
113	On an infinite dimensional perturbed Riccati differential equation arising in stochastic control. , 2001, , .		0
114	On uniform convergence in Markov jump linear systems problems and the Kolmogorov forward equation. , 2004, , .		0
115	An unified approach to signaling stochastic networks and their heavy traffic approximations. , 2009, , .		0
116	Quadratic Optimal Control with Complete Observations. Probability and Its Applications, 2013, , 71-82.	0.8	0
117	Best Linear Filter with Unknown (x(t),Î¸(t)). Probability and Its Applications, 2013, , 127-150.	0.8	0
118	H 2 Optimal Control with Complete Observations. Probability and Its Applications, 2013, , 83-96.	0.8	0
119	Mean-Square Stability. Probability and Its Applications, 2013, , 33-69.	0.8	0
120	Quadratic and H 2 Optimal Control with Partial Observations. Probability and Its Applications, 2013, , 97-126.	0.8	0
121	Design Techniques. Probability and Its Applications, 2013, , 183-212.	0.8	0
122	Some Numerical Examples. Probability and Its Applications, 2013, , 213-230.	0.8	0
123	On the PLS Criterion for Order Estimation of ARMA Processes with AML and a Posteriori Prediction Error. , 1991, , 363-370.		0
124	Best Linear Mean Square Filter for a New Class of Markovian Jump Linear Systems with Hidden Markov Parameter.. , 2021, , .		0
125	On a Non-detectable Riccati Differential Equations Arising from a Filtering Problems of Markov Jump Linear Systems. , 2021, , .		0