

Mireille E Broucke

List of Publications by Year in descending order

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60
papers

1,378
citations

623734

14
h-index

434195

31
g-index

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all docs

60
docs citations

60
times ranked

753
citing authors

#	ARTICLE	IF	CITATIONS
1	Stability of Discrete-Time Switched Systems With Multiple Equilibria Using a Common Quadratic Lyapunov Function. , 2022, 6, 2497-2502.		2
2	On the Use of Regulator Theory in Neuroscience with Implications for Robotics. , 2021, , .		0
3	Adaptive Internal Model Theory of the Oculomotor System and the Cerebellum. IEEE Transactions on Automatic Control, 2021, 66, 5444-5450.	5.7	8
4	On the Use of Regulator Theory in Neuroscience with Implications for Robotics. , 2021, , .		2
5	Adaptive Internal Models in the Optokinetic System. , 2021, , .		3
6	Discrete-time Output Regulation and Visuomotor Adaptation. , 2021, , .		4
7	Visuomotor Adaptation is a Disturbance Rejection Problem. , 2020, , .		5
8	Gait Control of a Fully Actuated Walking Robot. IFAC-PapersOnLine, 2020, 53, 9577-9583.	0.9	0
9	Model of the oculomotor system based on adaptive internal models. IFAC-PapersOnLine, 2020, 53, 16430-16437.	0.9	3
10	A Modular Framework for Motion Planning Using Safe-by-Design Motion Primitives. IEEE Transactions on Robotics, 2019, 35, 1233-1252.	10.3	7
11	Chattering in the Reach Control Problem. Automatica, 2018, 89, 201-211.	5.0	8
12	Control of a class of patterned systems. International Journal of Control, 2018, 91, 1489-1507.	1.9	1
13	Adaptive Cruise Control Design Using Reach Control. , 2018, , .		1
14	Characterization of a topological obstruction to reach control by continuous state feedback. Mathematics of Control, Signals, and Systems, 2017, 29, 1.	2.3	3
15	A topological obstruction in a control problem. Systems and Control Letters, 2017, 108, 71-79.	2.3	3
16	An Automated Parallel Parking Strategy Using Reach Control Theory * *This research is supported by The Natural Sciences and Engineering Research Council of Canada.. IFAC-PapersOnLine, 2017, 50, 9089-9094.	0.9	8
17	Stabilizing Patterned Distributed Systems by State and Measurement Feedback * *This work is supported by the Natural Sciences and Engineering Research Council of Canada (NSERC). IFAC-PapersOnLine, 2017, 50, 14278-14283.	0.9	0
18	A framework for multi-vehicle navigation using feedback-based motion primitives. , 2017, , .		5

#	ARTICLE	IF	CITATIONS
19	A viability approach to the Output Reach Control Problem. , 2016, , .		3
20	Safe and robust robot maneuvers based on reach control. , 2016, , .		9
21	Pattern identification in distributed systems. , 2016, , .		1
22	On the necessity of the invariance conditions for reach control on polytopes. Systems and Control Letters, 2016, 90, 16-19.	2.3	5
23	An obstruction to solvability of the reach control problem using affine feedback. Automatica, 2016, 71, 229-236.	5.0	6
24	Pattern preserving pole placement and stabilization for linear systems. , 2016, , .		3
25	Controllability is not sufficient for pole placement in patterned systems. , 2015, , .		3
26	Flow functions, control flow functions, and the reach control problem. Automatica, 2015, 55, 108-115.	5.0	10
27	Reach control problem with disturbance rejection. , 2014, , .		1
28	Reach Control on Simplices by Piecewise Affine Feedback. SIAM Journal on Control and Optimization, 2014, 52, 3261-3286.	2.1	27
29	Control of a gantry crane: A reach control approach. , 2014, , .		8
30	Monotonic Reach Control on Polytopes. IEEE Transactions on Automatic Control, 2013, 58, 2704-2709.	5.7	25
31	Time-varying affine feedback for reach control on simplices. Automatica, 2013, 49, 1365-1369.	5.0	17
32	Design of reach controllers on simplices. , 2013, , .		8
33	Generalized flow conditions for reach control on polytopes. , 2012, , .		6
34	Patterned linear systems. Automatica, 2012, 48, 263-272.	5.0	14
35	Reach control on simplices by piecewise affine feedback. , 2011, , .		7
36	On a reachability problem for affine hypersurface systems on polytopes. Automatica, 2011, 47, 769-775.	5.0	14

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37	Monotonic reach control on polytopes. , 2011, , .		6
38	Geometric control of patterned linear systems. , 2010, , .		9
39	Patterned linear systems: Rings, chains, and trees. , 2010, , .		8
40	Viability Kernels for Nonlinear Control Systems Using Bang Controls. IEEE Transactions on Automatic Control, 2010, 55, 1280-1284.	5.7	7
41	Reach control on simplices by continuous state feedback. , 2009, , .		0
42	A method to construct viability kernels for nonlinear control systems. , 2009, , .		1
43	Stabilisation of infinitesimally rigid formations of multi-robot networks. International Journal of Control, 2009, 82, 423-439.	1.9	473
44	Time Optimal Swing-Up of the Planar Pendulum. IEEE Transactions on Automatic Control, 2008, 53, 1876-1886.	5.7	44
45	Stabilization of infinitesimally rigid formations of multi-robot networks. , 2008, , .		59
46	Symmetry Invariance of Multiagent Formations in Self-Pursuit. IEEE Transactions on Automatic Control, 2008, 53, 2022-2032.	5.7	8
47	Time optimal swing-up of the planar pendulum. , 2007, , .		3
48	Stability and controllability of planar, conewise linear systems. , 2007, , .		3
49	Curve Shortening and the Rendezvous Problem for Mobile Autonomous Robots. IEEE Transactions on Automatic Control, 2007, 52, 1154-1159.	5.7	46
50	Reachability of a Set of Facets for Linear Affine Systems With n-1 Inputs. IEEE Transactions on Automatic Control, 2007, 52, 359-364.	5.7	12
51	Stability and controllability of planar, conewise linear systems. Systems and Control Letters, 2007, 56, 150-158.	2.3	23
52	On the least restrictive control for collision avoidance of two unicycles. International Journal of Robust and Nonlinear Control, 2006, 16, 553-574.	3.7	13
53	Pursuit formations of unicycles. Automatica, 2006, 42, 3-12.	5.0	177
54	Necessary and sufficient conditions for reachability on a simplex. Automatica, 2006, 42, 1913-1918.	5.0	63

#	ARTICLE	IF	CITATIONS
55	Experiments in multirobot coordination. <i>Robotics and Autonomous Systems</i> , 2006, 54, 265-275.	5.1	42
56	A Viability Problem for Control Affine Systems with Application to Collision Avoidance. , 2006, , .		4
57	A hierarchical cyclic pursuit scheme for vehicle networks. <i>Automatica</i> , 2005, 41, 1045-1053.	5.0	99
58	Efficient Solution of Optimal Control Problems Using Hybrid Systems. <i>SIAM Journal on Control and Optimization</i> , 2005, 43, 1923-1952.	2.1	14
59	Continuous selections of trajectories of hybrid systems. <i>Systems and Control Letters</i> , 2002, 47, 149-157.	2.3	29
60	Continuous Interpolation of Solutions of Lipschitz Inclusions. <i>Journal of Mathematical Analysis and Applications</i> , 2001, 258, 565-572.	1.0	5