Ryan Loxton

List of Publications by Year
in descending order

77 papers	1,866 citations	236925 25 h-index	265206 42 g-index
77 all docs	77 docs citations	77 times ranked	795 citing authors

#	Article	IF	Citations
1	Optimal control of nonlinear Markov jump systems by control parametrisation technique. IET Control Theory and Applications, 2023, 17, 241-249.	2.1	3
2	Optimal state-delay control in nonlinear dynamic systems. Automatica, 2022, 135, 109981.	5.0	19
3	Optimal train control via switched system dynamic optimization. Optimization Methods and Software, 2021, 36, 602-626.	2.4	13
4	A decision support system for grain harvesting, storage, and distribution logistics. Knowledge-Based Systems, 2021, 223, 107037.	7.1	12
5	Factors and scenarios affecting a farmer's grain harvest logistics. Australian Journal of Agricultural and Resource Economics, 2020, 64, 244-265.	2.6	2
6	Optimal Operation for Medium-speed Maglev Trains. , 2020, , .		1
7	Minimizing control volatility for nonlinear systems with smooth piecewise-quadratic input signals. Systems and Control Letters, 2020, 145, 104797.	2.3	3
8	Geometric Control and Disturbance Decoupling for Fractional Systems. SIAM Journal on Control and Optimization, 2020, 58, 1403-1428.	2.1	3
9	A fractional model of the friction-temperature behavior in robot joints. , 2019, , .		0
10	Bi-objective dynamic optimization of a nonlinear time-delay system in microbial batch process. Optimization Letters, 2018, 12, 1249-1264.	1.6	18
11	Dynamic optimization of dual-mode hybrid systems with state-dependent switching conditions. Optimization Methods and Software, 2018, 33, 297-310.	2.4	6
12	Insulin injections and exercise scheduling for individuals with diabetes: An optimal control model. Optimal Control Applications and Methods, 2018, 39, 663-681.	2.1	2
13	Dynamic Optimization for Switched Time-Delay Systems with State-Dependent Switching Conditions. SIAM Journal on Control and Optimization, 2018, 56, 3499-3523.	2.1	44
14	Chance-constrained optimization for pension fund portfolios in the presence of default risk. European Journal of Operational Research, 2017, 256, 205-214.	5.7	24
15	Cargo scheduling decision support for offshore oil and gas production: a case study. Optimization and Engineering, 2017, 18, 991-1008.	2.4	4
16	A mixed-integer linear programming model for optimal vessel scheduling in offshore oil and gas operations. Journal of Industrial and Management Optimization, 2017, 13, 1601-1623.	1.3	0
17	Stabilization of a coupled second order ODE-wave system. , 2016, , .		4
18	Fast model order reduction via nonlinear optimization. , 2016, , .		0

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19	A Hybrid Time-Scaling Transformation for Time-Delay Optimal Control Problems. Journal of Optimization Theory and Applications, 2016, 169, 876-901.	1.5	36
20	Dynamic optimization for robust path planning of horizontal oil wells. Applied Mathematics and Computation, 2016, 274, 711-725.	2.2	3
21	Dynamic optimization of open-loop input signals for ramp-up current profiles in tokamak plasmas. Communications in Nonlinear Science and Numerical Simulation, 2016, 32, 31-48.	3.3	14
22	A heuristic algorithm for optimal fleet composition with vehicle routing considerations. Optimization Methods and Software, 2016, 31, 272-289.	2.4	7
23	Output stabilization of boundary-controlled parabolic PDEs via gradient-based dynamic optimization. , 2015, , .		1
24	Optimal 1,3-propanediol production: Exploring the trade-off between process yield and feeding rate variation. Journal of Process Control, 2015, 32, 1-9.	3.3	20
25	Dynamic optimization of tokamak plasmas via control parameterization and the time-scaling transformation. , 2015, , .		0
26	On combining neighbouring extremals with control parameterization. , 2015, , .		0
27	Bi-objective optimization for robust RGB-D visual odometry. , 2015, , .		2
28	Robust Optimal Control of a Microbial Batch Culture Process. Journal of Optimization Theory and Applications, 2015, 167, 342-362.	1.5	26
29	Optimal boundary control for water hammer suppression in fluid transmission pipelines. Computers and Mathematics With Applications, 2015, 69, 275-290.	2.7	41
30	Parameter estimation for nonlinear time-delay systems with noisy output measurements. Automatica, 2015, 60, 48-56.	5.0	53
31	Optimal control problems with stopping constraints. Journal of Global Optimization, 2015, 63, 835-861.	1.8	8
32	Water hammer mitigation via PDE-constrained optimization. Control Engineering Practice, 2015, 45, 54-63.	5.5	25
33	Numerical solution of a pursuit-evasion differential game involving two spacecraft in low earth orbit. Journal of Industrial and Management Optimization, 2015, 11, 1127-1147.	1.3	29
34	Modelling and optimal control of blood glucose levels in the human body. Journal of Industrial and Management Optimization, 2015, 11, 1149-1164.	1.3	4
35	VISUAL MISER: An efficient user-friendly visual program for solving optimal control problems. Journal of Industrial and Management Optimization, 2015, 12, 781-810.	1.3	15
36	Dynamics, Control, and Optimization with Applications 2014. Abstract and Applied Analysis, 2014, 2014, 1-1.	0.7	0

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37	Guaranteed-cost controls of minimal variation: A numerical algorithm based on control parameterization. , 2014, , .		1
38	State-delay estimation for nonlinear systems using inexact output data. , 2014, , .		2
39	Optimal feedback control for dynamic systems with state constraints: An exact penalty approach. Optimization Letters, 2014, 8, 1535-1551.	1.6	13
40	Optimal parameter selection for nonlinear multistage systems with time-delays. Computational Optimization and Applications, 2014, 59, 285-306.	1.6	21
41	Optimal control of impulsive switched systems with minimum subsystem durations. Journal of Global Optimization, 2014, 60, 737-750.	1.8	3
42	A new exact penalty method for semi-infinite programming problems. Journal of Computational and Applied Mathematics, 2014, 261, 271-286.	2.0	44
43	A gradient-based parameter identification method for time-delay chaotic systems. , 2014, , .		2
44	A computational method for solving time-delay optimal control problems with free terminal time. Systems and Control Letters, 2014, 72, 53-60.	2.3	35
45	Switching Time and Parameter Optimization in Nonlinear Switched Systems with Multiple Time-Delays. Journal of Optimization Theory and Applications, 2014, 163, 957-988.	1.5	24
46	An optimal machine maintenance problem with probabilistic state constraints. Information Sciences, 2014, 281, 386-398.	6.9	9
47	Finite Element Approximation and Input Parameterization for the Optimal Control of Current Profiles in Tokamak Plasmas. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7892-7897.	0.4	1
48	The control parameterization method for nonlinear optimal control: A survey. Journal of Industrial and Management Optimization, 2014, 10, 275-309.	1.3	215
49	Optimal discrete-valued control computation. Journal of Global Optimization, 2013, 56, 503-518.	1.8	44
50	A class of optimal state-delay control problems. Nonlinear Analysis: Real World Applications, 2013, 14, 1536-1550.	1.7	32
51	Optimal Investment and Proportional Reinsurance with Risk Constraint. Journal of Mathematical Finance, 2013, 03, 437-447.	0.3	3
52	Optimal Control of Nonlinear Switched Systems: Computational Methods and Applications. Journal of the Operations Research Society of China, 2013, 1, 275-311.	1.4	35
53	Minimizing control variation in nonlinear optimal control. Automatica, 2013, 49, 2652-2664.	5.0	36
54	Path planning for underactuated Dubins micro-robots using switching control. , 2013, , .		2

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55	Time-delay estimation for nonlinear systems with piecewise-constant input. Applied Mathematics and Computation, 2013, 219, 9543-9560.	2.2	21
56	A computational algorithm for a class of non-smooth optimal control problems arising in aquaculture operations. Applied Mathematics and Computation, 2013, 219, 8738-8746.	2.2	14
57	Dynamics, Control, and Optimization with Applications. Abstract and Applied Analysis, 2013, 2013, 1-1.	0.7	0
58	A unified parameter identification method for nonlinear time-delay systems. Journal of Industrial and Management Optimization, 2013, 9, 471-486.	1.3	43
59	Optimal control problems arising in the zinc sulphate electrolyte purification process. Journal of Global Optimization, 2012, 54, 307-323.	1.8	18
60	Optimal control computation for nonlinear systems with state-dependent stopping criteria. Automatica, 2012, 48, 2116-2129.	5.0	53
61	A Max–Min Control Problem Arising in Gradient Elution Chromatography. Industrial & Engineering Chemistry Research, 2012, 51, 6137-6144.	3.7	9
62	A stochastic fleet composition problem. Computers and Operations Research, 2012, 39, 3177-3184.	4.0	25
63	Towards global solutions of optimal discrete‐valued control‰problems. Optimal Control Applications and Methods, 2012, 33, 576-594.	2.1	17
64	A neighboring extremal solution for an optimal switched impulsive control problem. Journal of Industrial and Management Optimization, 2012, 8, 591-609.	1.3	25
65	Control parameterization for optimal control problems with continuous inequality constraints: New convergence results. Numerical Algebra, Control and Optimization, 2012, 2, 571-599.	1.6	55
66	Robust suboptimal control of nonlinear systems. Applied Mathematics and Computation, 2011, 217, 6566-6576.	2.2	35
67	Optimal fleet composition via dynamic programming and golden section search. Journal of Industrial and Management Optimization, 2011, 7, 875-890.	1.3	9
68	</title> </titles> <publication_date> <month>09</month> <year>2010</year> </publication_date> <pages> <first_page>1985</first_page> <last_page>1986</last_page> </pages> <publisher_item> <item_number item_number_type='arNumber'>5565453</item_number> </publisher_item> <doi_data> <doi>10.1109/TAC.2010.2069451</doi> <resource>http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arn. IEEE Transactions on Autom	5.7	56
69	A generalized expansion method for nonlinear wave equations. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 045207.	2.1	7
70	On the Cauchy problem for a generalized Boussinesq equation. Journal of Mathematical Analysis and Applications, 2009, 353, 186-195.	1.0	32
71	A computational method for a class of non-standard time optimal control problems involving multiple time horizons. Mathematical and Computer Modelling, 2009, 49, 1682-1691.	2.0	9
72	Linear B-spline finite element method for the improved Boussinesq equation. Journal of Computational and Applied Mathematics, 2009, 224, 658-667.	2.0	37

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73	Optimal switching instants for a switched-capacitor DC/DC power converter. Automatica, 2009, 45, 973-980.	5.0	99
74	Optimal control problems with a continuous inequality constraint on the state and the control. Automatica, 2009, 45, 2250-2257.	5.0	131
75	Computational Method for a Class of Switched System Optimal Control Problems. IEEE Transactions on Automatic Control, 2009, 54, 2455-2460.	5.7	61
76	Time delayed optimal control problems with multiple characteristic time points: Computation and industrial applications. Journal of Industrial and Management Optimization, 2009, 5, 705-718.	1.3	42
77	Optimal control problems with multiple characteristic time points in the objective and constraints. Automatica, 2008, 44, 2923-2929.	5.0	104