

Qi Gong

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11605214/publications.pdf>

Version: 2024-02-01

65
papers

1,707
citations

394421

19
h-index

330143

37
g-index

65
all docs

65
docs citations

65
times ranked

885
citing authors

#	ARTICLE	IF	CITATIONS
1	A Pseudospectral Method for the Optimal Control of Constrained Feedback Linearizable Systems. IEEE Transactions on Automatic Control, 2006, 51, 1115-1129.	5.7	219
2	Global practical tracking of a class of nonlinear systems by output feedback. Automatica, 2007, 43, 184-189.	5.0	154
3	Spectral Algorithm for Pseudospectral Methods in Optimal Control. Journal of Guidance, Control, and Dynamics, 2008, 31, 460-471.	2.8	143
4	Connections between the covector mapping theorem and convergence of pseudospectral methods for optimal control. Computational Optimization and Applications, 2008, 41, 307-335.	1.6	141
5	Optimal Feedback Control: Foundations, Examples, and Experimental Results for a New Approach. Journal of Guidance, Control, and Dynamics, 2008, 31, 307-321.	2.8	78
6	Low-Thrust, High-Accuracy Trajectory Optimization. Journal of Guidance, Control, and Dynamics, 2007, 30, 921-933.	2.8	66
7	A remark on partial-state feedback stabilization of cascade systems using small gain theorem. IEEE Transactions on Automatic Control, 2003, 48, 497-500.	5.7	53
8	Pseudospectral Motion Planning for Autonomous Vehicles. Journal of Guidance, Control, and Dynamics, 2009, 32, 1039-1045.	2.8	48
9	Thermal-Aware Energy Management of an HPC Data Center via Two-Time-Scale Control. IEEE Transactions on Industrial Informatics, 2017, 13, 2260-2269.	11.3	44
10	Pseudospectral Optimal Control for Military and Industrial Applications. , 2007, , .		43
11	Automatic Mass Balancing of a Spacecraft Three-Axis Simulator: Analysis and Experimentation. Journal of Guidance, Control, and Dynamics, 2014, 37, 197-206.	2.8	39
12	Adaptive Deep Learning for High-Dimensional Hamilton–Jacobi–Bellman Equations. SIAM Journal of Scientific Computing, 2021, 43, A1221-A1247.	2.8	39
13	Optimal Control of Uncertain Systems Using Sample Average Approximations. SIAM Journal on Control and Optimization, 2016, 54, 1-29.	2.1	38
14	QoS-Driven Power Management of Data Centers via Model Predictive Control. IEEE Transactions on Automation Science and Engineering, 2016, 13, 1557-1566.	5.2	33
15	Riemann–Stieltjes Optimal Control Problems for Uncertain Dynamic Systems. Journal of Guidance, Control, and Dynamics, 2015, 38, 1251-1263.	2.8	30
16	Consistent approximation of a nonlinear optimal control problem with uncertain parameters. Automatica, 2014, 50, 2987-2997.	5.0	29
17	On the Pseudospectral Covector Mapping Theorem for Nonlinear Optimal Control. , 2006, , .		28
18	Pseudospectral Optimal Control and Its Convergence Theorems. , 2008, , 109-124.		27

#	ARTICLE	IF	CITATIONS
19	Practical stabilization through real-time optimal control. , 2006, , .		25
20	Pseudospectral Feedback Control: Foundations, Examples and Experimental Results. , 2006, , .		24
21	Costate Computation by a Chebyshev Pseudospectral Method. Journal of Guidance, Control, and Dynamics, 2010, 33, 623-628.	2.8	24
22	Aerodynamic Three-Axis Attitude Stabilization of a Spacecraft by Center-of-Mass Shifting. Journal of Guidance, Control, and Dynamics, 2017, 40, 1613-1626.	2.8	24
23	A note on global output regulation of nonlinear systems in the output feedback form. IEEE Transactions on Automatic Control, 2003, 48, 1049-1054.	5.7	23
24	Pseudospectral motion planning techniques for autonomous obstacle avoidance. , 2007, , .		23
25	A Chebyshev pseudospectral method for nonlinear constrained optimal control problems. , 2009, , .		23
26	Autonomous Observability of Networked Multisatellite Systems. Journal of Guidance, Control, and Dynamics, 2009, 32, 869-877.	2.8	19
27	High-Accuracy Trajectory Optimization for a Trans-Earth Lunar Mission. Journal of Guidance, Control, and Dynamics, 2011, 34, 1219-1227.	2.8	17
28	Spectral and Pseudospectral Optimal Control Over Arbitrary Grids. Journal of Optimization Theory and Applications, 2016, 169, 759-783.	1.5	16
29	Guess-Free Trajectory Optimization. , 2008, , .		15
30	Optimal Motion Planning for Searching for Uncertain Targets. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 8977-8982.	0.4	13
31	Automatic Contour-Based Road Network Design for Optimized Wind Farm Micrositing. IEEE Transactions on Sustainable Energy, 2015, 6, 281-289.	8.8	13
32	Relationships Between Maneuver Time and Energy for Reaction Wheel Attitude Control. Journal of Guidance, Control, and Dynamics, 2018, 41, 335-348.	2.8	13
33	A Causality-Free Neural Network Method for High-Dimensional Hamilton-Jacobi-Bellman Equations. , 2020, , .		13
34	Bellman Pseudospectral Method. , 2008, , .		12
35	Fuel-Optimal Design of Moon-Earth Trajectories Using Legendre Pseudospectral Method. , 2008, , .		12
36	A new scalable algorithm for computational optimal control under uncertainty. Journal of Computational Physics, 2020, 420, 109710.	3.8	12

#	ARTICLE	IF	CITATIONS
37	A Numerical Algorithm for Optimal Control of Systems with Parameter Uncertainty. IFAC-PapersOnLine, 2016, 49, 468-475.	0.9	10
38	Consistent approximation of an optimal search problem. , 2012, , .		8
39	Sample average approximations in optimal control of uncertain systems. , 2013, , .		8
40	Algorithms of data generation for deep learning and feedback design: A survey. Physica D: Nonlinear Phenomena, 2021, 425, 132955.	2.8	8
41	Convergence of Pseudospectral Methods for a Class of Discontinuous Optimal Control. , 0, , .		7
42	Necessary conditions for singular arcs for general restricted multi-body problem. , 2010, , .		7
43	Feedback Control for Formation Flying Maintenance Using State Transition Matrix. Journal of the Astronautical Sciences, 2012, 59, 177-192.	1.5	7
44	Optimization based resource and cooling management for a high performance computing data center. ISA Transactions, 2019, 90, 202-212.	5.7	7
45	Partial Observability Analysis of an Adversarial Swarm Model. Journal of Guidance, Control, and Dynamics, 2020, 43, 250-261.	2.8	7
46	Feedforward Neural Networks and Compositional Functions with Applications to Dynamical Systems. SIAM Journal on Control and Optimization, 2022, 60, 786-813.	2.1	7
47	Galerkin Optimal Control. Journal of Optimization Theory and Applications, 2016, 169, 825-847.	1.5	6
48	Optimal motion planning in rapid-fire combat situations with attacker uncertainty. Naval Research Logistics, 2018, 65, 101-119.	2.2	6
49	A pseudospectral observer for nonlinear systems. Discrete and Continuous Dynamical Systems - Series B, 2007, 8, 589-611.	0.9	6
50	Defense against Adversarial Swarms with Parameter Uncertainty. Sensors, 2022, 22, 4773.	3.8	6
51	A Unified Pseudospectral Framework for Nonlinear Controller and Observer Design. Proceedings of the American Control Conference, 2007, , .	0.0	5
52	Triangle Formation Design in Eccentric Orbits Using Pseudospectral Optimal Control. , 2008, , .		5
53	A pseudospectral method for the optimal control of constrained feedback linearizable systems. , 0, , .		4
54	Discontinuous Galerkin optimal control for constrained nonlinear problems. , 2014, , .		3

#	ARTICLE	IF	CITATIONS
55	Galerkin optimal control for constrained nonlinear problems. , 2014, , .		3
56	Unscented guidance for waypoint navigation of a fixed-wing UAV. , 2016, , .		3
57	Global Practical Output Regulation of a Class of Nonlinear Systems by Output Feedback. , 0, , .		2
58	Feasibility of the Galerkin optimal control method. , 2014, , .		2
59	Energy Constrained Shortest-Time Maneuvers For Reaction Wheel Satellites. , 2016, , .		2
60	Consistent numerical methods for state and control constrained trajectory optimisation with parameter dependency. International Journal of Control, 2020, , 1-11.	1.9	2
61	High-Accuracy Moon to Earth Escape Trajectory Optimization. , 2010, , .		1
62	Robust Control of a Flexible Double Gimbal Mechanism. , 2018, , .		1
63	Observability Analysis of an Adversarial Swarm's Cooperation Strategy. , 2018, , .		1
64	Global output regulation of cascade systems by time-varying partial state feedback. , 0, , .		0
65	Authors' reply [to comments on 'A remark on partial-state feedback stabilization of cascade systems using small gain theorem'. IEEE Transactions on Automatic Control, 2005, 50, 928-929.	5.7	0