

Kathrin FlaÅkamp

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

185
citations

1307594

7
h-index

1281871

11
g-index

40
all docs

40
docs citations

40
times ranked

83
citing authors

#	ARTICLE	IF	CITATIONS
1	Solving Optimal Control Problems by Exploiting Inherent Dynamical Systems Structures. Journal of Nonlinear Science, 2012, 22, 599-629.	2.1	28
2	Switching time optimization in discretized hybrid dynamical systems. , 2012, , .		14
3	Symmetry and motion primitives in model predictive control. Mathematics of Control, Signals, and Systems, 2019, 31, 455-485.	2.3	13
4	Control strategies on stable manifolds for energy-efficient swing-ups of double pendula. International Journal of Control, 2014, 87, 1886-1905.	1.9	12
5	Development of an Intelligent Cruise Control Using Optimal Control Methods. Procedia Technology, 2014, 15, 285-294.	1.1	11
6	Parameter Identification for Dynamical Systems Using Optimal Control Techniques. , 2018, , .		9
7	Towards Velocity Turnpikes in Optimal Control of Mechanical Systems. IFAC-PapersOnLine, 2019, 52, 490-495.	0.9	9
8	Structure-preserving local optimal control of mechanical systems. Optimal Control Applications and Methods, 2019, 40, 310-329.	2.1	9
9	Towards optimal control of concentric tube robots in stereotactic neurosurgery. Mathematical and Computer Modelling of Dynamical Systems, 2019, 25, 560-574.	2.2	7
10	A Dissipativity Characterization of Velocity Turnpikes in Optimal Control Problems for Mechanical Systems. IFAC-PapersOnLine, 2021, 54, 624-629.	0.9	7
11	Autonomous navigation of ships by combining optimal trajectory planning with informed graph search. Mathematical and Computer Modelling of Dynamical Systems, 2022, 28, 1-27.	2.2	7
12	Sequential Action Control for Tracking of Free Invariant Manifolds**This material is based upon work supported by the National Science Foundation under Grant CMMI 1200321. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.. IFAC-PapersOnLine, 2015, 48, 335-342.	0.9	6
13	Manifold turnpikes, trims, and symmetries. Mathematics of Control, Signals, and Systems, 2022, 34, 759-788.	2.3	5
14	Solving optimal control problems by using inherent dynamical properties. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 577-578.	0.2	4
15	Symplectic integration for optimal ergodic control. , 2015, , .		4
16	Variational Integrators for Structure-Preserving Filtering. Journal of Computational and Nonlinear Dynamics, 2017, 12, .	1.2	4
17	On the Computation of Convergence Regions for Sequential Nonlinear Programming Problems. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000281.	0.2	4
18	Multiobjective Optimal Control Methods for the Development of an Intelligent Cruise Control. Mathematics in Industry, 2016, , 633-641.	0.3	4

#	ARTICLE	IF	CITATIONS
19	Learning Hamiltonian Systems considering System Symmetries in Neural Networks. IFAC-PapersOnLine, 2021, 54, 210-216.	0.9	4
20	Learning Motion Primitives Automata for Autonomous Driving Applications. Mathematical and Computational Applications, 2022, 27, 54.	1.3	4
21	Optimal control of a switched reluctance drive by a direct method using a discrete variational principle. , 2013, , .		3
22	Symmetry in Optimal Control: A Multiobjective Model Predictive Control Approach. Studies in Systems, Decision and Control, 2020, , 209-237.	1.0	3
23	Variational integrators in linear optimal filtering. , 2015, , .		2
24	Hybrid control for tracking of invariant manifolds. Nonlinear Analysis: Hybrid Systems, 2017, 25, 298-311.	3.5	2
25	Variational integrators for open-loop and closed-loop optimal control of mechanical systems. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 791-792.	0.2	2
26	Neurosurgery planning based on automated image recognition and optimal path design. Automatisierungstechnik, 2021, 69, 708-721.	0.8	2
27	Optimization Strategies for Real-Time Control of an Autonomous Melting Probe. , 2018, , .		1
28	Sequential solution of parameter identification and optimal control problems for robotic systems. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800099.	0.2	1
29	A Combined Homotopyâ€Optimization Approach to Parameter Identification for Dynamical Systems. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900266.	0.2	1
30	Reformulating Bilevel Problems by SQP Embedding. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000302.	0.2	1
31	An Optimal Control Problem for Stereotactic Neurosurgery. , 0, , .		1
32	Approximate LQ Optimal Control Using High-Order Symplectic Partitioned Runge-Kutta Methods. , 2021, , .		1
33	Optimal Control on Stable Manifolds for a Double Pendulum. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 723-724.	0.2	0
34	Optimization for discretized switched systems. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 401-402.	0.2	0
35	Variational Integrators for Parameter Identification of Mechanical Systems. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800284.	0.2	0
36	A Numerical Study of the Robustness of Transcription Methods for Parameter Identification Problems. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800101.	0.2	0

#	ARTICLE	IF	CITATIONS
37	Real-time parameter estimation for sensitivity-based LQ regulator adaptation. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000292.	0.2	0
38	Model Predictive Control with Online Nonlinear Parameter Identification for a Robotic System. , 2020, , .		0
39	Learning Mechanical Systems by Hamiltonian Neural Networks. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.2	0
40	Symplectic Partitioned Runge-Kutta Methods for High-Order Approximation in Linear-Quadratic Optimal Control of Hamiltonian Systems. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.2	0