Kathrin Flaßkamp

List of Publications by Year
in descending order

40	185	1307594	1281871
papers	citations	7	11
		h-index	g-index
40	40	40	83
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Manifold turnpikes, trims, and symmetries. Mathematics of Control, Signals, and Systems, 2022, 34, 759-788.	2.3	5
3	Learning Motion Primitives Automata for Autonomous Driving Applications. Mathematical and Computational Applications, 2022, 27, 54.	1.3	4
4	Reformulating Bilevel Problems by SQP Embedding. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000302.	0.2	1
5	Real‐time parameter estimation for sensitivity‐based LQ regulator adaptation. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000292.	0.2	0
6	Neurosurgery planning based on automated image recognition and optimal path design. Automatisierungstechnik, 2021, 69, 708-721.	0.8	2
7	A Dissipativity Characterization of Velocity Turnpikes in Optimal Control Problems for Mechanical Systems. IFAC-PapersOnLine, 2021, 54, 624-629.	0.9	7
8	On the Computation of Convergence Regions for Sequential Nonlinear Programming Problems. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000281.	0.2	4
9	Learning Hamiltonian Systems considering System Symmetries in Neural Networks. IFAC-PapersOnLine, 2021, 54, 210-216.	0.9	4
10	Approximate LQ Optimal Control Using High-Order Symplectic Partitioned Runge-Kutta Methods. , 2021, , .		1
11	Learning Mechanical Systems by Hamiltonian Neural Networks. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.2	0
12	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
13	Model Predictive Control with Online Nonlinear Parameter Identification for a Robotic System. , 2020, , .		0
14	Symmetry in Optimal Control: A Multiobjective Model Predictive Control Approach. Studies in Systems, Decision and Control, 2020, , 209-237.	1.0	3
15	Symmetry and motion primitives in model predictive control. Mathematics of Control, Signals, and Systems, 2019, 31, 455-485.	2.3	13
16	A Combined Homotopy‐Optimization Approach to Parameter Identification for Dynamical Systems. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900266.	0.2	1
17	Towards Velocity Turnpikes in Optimal Control of Mechanical Systems. IFAC-PapersOnLine, 2019, 52, 490-495.	0.9	9
18	Towards optimal control of concentric tube robots in stereotactic neurosurgery. Mathematical and Computer Modelling of Dynamical Systems, 2019, 25, 560-574.	2.2	7

#	Article	IF	Citations
19	Structureâ€preserving local optimal control of mechanical systems. Optimal Control Applications and Methods, 2019, 40, 310-329.	2.1	9
20	Optimization Strategies for Real-Time Control of an Autonomous Melting Probe. , 2018, , .		1
21	Variational Integrators for Parameter Identification of Mechanical Systems. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800284.	0.2	0
22	Parameter Identification for Dynamical Systems Using Optimal Control Techniques. , 2018, , .		9
23	Sequential solution of parameter identification and optimal control problems for robotic systems. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800099.	0.2	1
24	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
25	Variational Integrators for Structure-Preserving Filtering. Journal of Computational and Nonlinear Dynamics, 2017, 12, .	1.2	4
26	Hybrid control for tracking of invariant manifolds. Nonlinear Analysis: Hybrid Systems, 2017, 25, 298-311.	3.5	2
27	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
28	Multiobjective Optimal Control Methods for the Development of an Intelligent Cruise Control. Mathematics in Industry, 2016, , 633-641.	0.3	4
29	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, _ndings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reect the views of the National Science Foundation.. IFAC-PapersOnLine, 2015, 48, 335-342.	0.9	6
30	Symplectic integration for optimal ergodic control. , 2015, , .		4
31	Variational integrators in linear optimal filtering. , 2015, , .		2
32	Development of an Intelligent Cruise Control Using Optimal Control Methods. Procedia Technology, 2014, 15, 285-294.	1.1	11
33	Control strategies on stable manifolds for energy-efficient swing-ups of double pendula. International Journal of Control, 2014, 87, 1886-1905.	1.9	12
34	Optimal control of a switched reluctance drive by a direct method using a discrete variational principle. , 2013, , .		3
35	Optimization for discretized switched systems. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 401-402.	0.2	0
36	Optimal Control on Stable Manifolds for a Double Pendulum. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 723-724.	0.2	0

#	Article	IF	Citations
37	Solving Optimal Control Problems by Exploiting Inherent Dynamical Systems Structures. Journal of Nonlinear Science, 2012, 22, 599-629.	2.1	28
38	Switching time optimization in discretized hybrid dynamical systems. , 2012, , .		14
39	Solving optimal control problems by using inherent dynamical properties. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 577-578.	0.2	4
40	An Optimal Control Problem for Stereotactic Neurosurgery. , 0, , .		1