Kaveh Akbari Hamed

List of Publications by Year
in descending order

31	628	933447 10	940533 16
papers	citations	h-index	g-index

31	31	31	388
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cooperative Locomotion Via Supervisory Predictive Control and Distributed Nonlinear Controllers. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2022, 144, .	1.6	6
2	Robust Stabilization of Periodic Gaits for Quadrupedal Locomotion via QP-Based Virtual Constraint Controllers. , 2022, 6, 1736-1741.		9
3	Distributed Quadratic Programming-Based Nonlinear Controllers for Periodic Gaits on Legged Robots. , 2022, , 1-1.		5
4	Robust Predictive Control for Quadrupedal Locomotion: Learning to Close the Gap Between Reduced- and Full-Order Models. IEEE Robotics and Automation Letters, 2022, 7, 6622-6629.	5.1	8
5	Toward a Data-Driven Template Model for Quadrupedal Locomotion. IEEE Robotics and Automation Letters, 2022, 7, 7636-7643.	5.1	11
6	Real-Time Planning and Nonlinear Control for Quadrupedal Locomotion With Articulated Tails. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2021, 143, .	1.6	5
7	Coupled Control Lyapunov Functions for Interconnected Systems, With Application to Quadrupedal Locomotion. IEEE Robotics and Automation Letters, 2021, 6, 3761-3768.	5.1	7
8	Distributed Controllers for Human-Robot Locomotion: A Scalable Approach Based on Decomposition and Hybrid Zero Dynamics. , 2021, 5, 1976-1981.		4
9	Hierarchical and Safe Motion Control for Cooperative Locomotion of Robotic Guide Dogs and Humans: A Hybrid Systems Approach. IEEE Robotics and Automation Letters, 2020, 5, 56-63.	5.1	12
10	Nonholonomic Hybrid Zero Dynamics for the Stabilization of Periodic Orbits: Application to Underactuated Robotic Walking. IEEE Transactions on Control Systems Technology, 2020, 28, 2689-2696.	5.2	11
11	Distributed Feedback Controllers for Stable Cooperative Locomotion of Quadrupedal Robots: A Virtual Constraint Approach. , 2020, , .		3
12	Quadrupedal Locomotion via Event-Based Predictive Control and QP-Based Virtual Constraints. IEEE Robotics and Automation Letters, 2020, 5, 4463-4470.	5.1	28
13	Nonholonomic Virtual Constraint Design for Variable-Incline Bipedal Robotic Walking. IEEE Robotics and Automation Letters, 2020, 5, 3691-3698.	5.1	11
14	Exponentially Stabilizing and Time-Varying Virtual Constraint Controllers for Dynamic Quadrupedal Bounding. , 2020, , .		1
15	Decentralized Control Schemes for Stable Quadrupedal Locomotion: A Decomposition Approach from Centralized Controllers. , 2020, , .		4
16	Decentralized Event-Based Controllers for Robust Stabilization of Hybrid Periodic Orbits: Application to Underactuated 3-D Bipedal Walking. IEEE Transactions on Automatic Control, 2019, 64, 2266-2281.	5.7	13
17	Dynamically Stable 3D Quadrupedal Walking with Multi-Domain Hybrid System Models and Virtual Constraint Controllers. , 2019, , .		5
18	First Steps Towards Full Model Based Motion Planning and Control of Quadrupeds: A Hybrid Zero Dynamics Approach. , 2019, , .		12

#	Article	IF	Citations
19	Hybrid Zero Dynamics of Bipedal Robots Under Nonholonomic Virtual Constraints. , 2019, 3, 386-391.		12
20	Dynamic Output Controllers for Exponential Stabilization of Periodic Orbits for Multidomain Hybrid Models of Robotic Locomotion. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, .	1.6	3
21	Exponentially Stabilizing Controllers for Multi-Contact 3D Bipedal Locomotion. , 2018, , .		1
22	Observer-Based Feedback Controllers for Exponential Stabilization of Hybrid Periodic Orbits: Application to Underactuated Bipedal Walking. , 2018, , .		5
23	Decentralized Feedback Controllers for Robust Stabilization of Periodic Orbits of Hybrid Systems: Application to Bipedal Walking. IEEE Transactions on Control Systems Technology, 2017, 25, 1153-1167.	5.2	34
24	Reduced-order framework for exponential stabilization of periodic orbits on parameterized hybrid zero dynamics manifolds: Application to bipedal locomotion. Nonlinear Analysis: Hybrid Systems, 2017, 25, 227-245.	3.5	15
25	Experimental results for 3D bipedal robot walking based on systematic optimization of virtual constraints. , 2016, , .		23
26	Decentralized feedback controllers for exponential stabilization of hybrid periodic orbits: Application to robotic walking. , 2016, 2016, 4793-4800.		10
27	Exponentially stabilizing continuous-time controllers for periodic orbits of hybrid systems: Application to bipedal locomotion with ground height variations. International Journal of Robotics Research, 2016, 35, 977-999.	8.5	58
28	Continuous-time controllers for stabilizing periodic orbits of hybrid systems: Application to an underactuated 3D bipedal robot. , 2014, , .		19
29	Preliminary walking experiments with underactuated 3D bipedal robot MARLO. , 2014, , .		60
30	Event-Based Stabilization of Periodic Orbits for Underactuated 3-D Bipedal Robots With Left-Right Symmetry. IEEE Transactions on Robotics, 2014, 30, 365-381.	10.3	99
31	Performance Analysis and Feedback Control of ATRIAS, A Three-Dimensional Bipedal Robot. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2014, 136, .	1.6	134