Ioannis Poulakakis

List of Publications by Year
in descending order

45	1,369	840776 11	1199594 12
papers	citations	h-index	g-index

46	46	46	907
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Interactive Dynamic Walking: Learning Gait Switching Policies With Generalization Guarantees. IEEE Robotics and Automation Letters, 2022, 7, 4149-4156.	5.1	1
2	Switched Systems With Multiple Equilibria Under Disturbances: Boundedness and Practical Stability. IEEE Transactions on Automatic Control, 2020, 65, 2371-2386.	5.7	26
3	An Adaptive Supervisory Control Approach to Dynamic Locomotion Under Parametric Uncertainty. , 2020, , .		2
4	Safe Adaptive Switching among Dynamical Movement Primitives: Application to 3D Limit-Cycle Walkers. , 2019, , .		10
5	Practical Stability of Switched Systems With Multiple Equilibria Under Disturbances. , 2019, , .		4
6	Robustness of Periodic Orbits of Impulsive Systems Ã la PoincarÃ©. , 2019, , .		0
7	Input-to-State Stability of Periodic Orbits of Systems With Impulse Effects via PoincarÃ© Analysis. IEEE Transactions on Automatic Control, 2019, 64, 4583-4598.	5.7	24
8	A Switchable Parallel Elastic Actuator and its Application to Leg Design for Running Robots. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2681-2692.	5.8	37
9	A Navigation and Control Strategy for Miniature Legged Robots. IEEE Transactions on Robotics, 2017, 33, 214-219.	10.3	11
10	Almost driftless navigation of 3D limit-cycle walking bipeds. , 2017, , .		12
11	Steering a 3D limit-cycle walker for collaboration with a leader. , 2017, , .		7
12	Adaptation of limit-cycle walkers for collaborative tasks: A supervisory switching control approach. , 2017, , .		10
13	Generation of and switching among limit-cycle bipedal walking gaits. , 2017, , .		17
14	On the stability of symmetric quadrupedal bounding gaits via factored PoincarÃ© maps. , 2016, , .		0
15	Composing limit cycles for motion planning of 3D bipedal walkers. , 2016, , .		34
16	Quadrupedal running with a flexible torso: control and speed transitions with sums-of-squares verification. Artificial Life and Robotics, 2016, 21, 384-392.	1.2	21
17	Information Centrality and Ordering of Nodes for Accuracy in Noisy Decision-Making Networks. IEEE Transactions on Automatic Control, 2016, 61, 1040-1045.	5.7	25
18	Local input-to-state stability of dynamic walking under persistent external excitation using hybrid zero dynamics. , 2016, , .		10

#	Article	IF	Citations
19	Integrating dynamic walking and arm impedance control for cooperative transportation. , 2015, , .		12
20	On the energetics of a switchable parallel elastic actuator design for monopedal running. , 2015, , .		2
21	Active compliance hybrid zero dynamics control of bounding on HyQ. , 2015, , .		3
22	On the effects of design parameters on quadruped robot gaits. , 2015, , .		0
23	On the control of gait transitions in quadrupedal running. , 2015, , .		16
24	SPEAR: A monopedal robot with Switchable Parallel Elastic actuation. , 2015, , .		5
25	Navigation of miniature legged robots using a new template. , 2015, , .		4
26	On the adaptation of dynamic walking to persistent external forcing using hybrid zero dynamics control. , 2015, , .		18
27	Active sensor networks for nuclear detection. , 2015, , .		5
28	Planning with the STAR(s). , 2014, , .		21
29	On the energetics of quadrupedal bounding with and without torso compliance. , 2014, , .		10
30	Networked Decision Making for Poisson Processes With Applications to Nuclear Detection. IEEE Transactions on Automatic Control, 2014, 59, 193-198.	5.7	23
31	Probabilistic validation of a stochastic kinematic model for an eight-legged robot. , 2013, , .		7
32	Passive stability and control of quadrupedal bounding with a flexible torso. , 2013, , .		6
33	Error probabilities and threshold selection in networked nuclear detection. , 2013, , .		4
34	Decision making in sensor networks observing poisson processes. , 2013, , .		7
35	Embedding active force control within the compliant hybrid zero dynamics to achieve stable, fast running on MABEL. International Journal of Robotics Research, 2013, 32, 324-345.	8.5	123
36	Passive quadrupedal bounding with a segmented flexible torso. , 2012, , .		19

#	Article	IF	Citations
37	Node certainty in collective decision making. , 2012, , .		2
38	A switching kinematic model for an octapedal robot. , 2012, , .		11
39	A Compliant Hybrid Zero Dynamics Controller for Stable, Efficient and Fast Bipedal Walking on MABEL. International Journal of Robotics Research, 2011, 30, 1170-1193.	8.5	317
40	Design and experimental implementation of a compliant hybrid zero dynamics controller for walking on MABEL. , 2010, , .		3
41	Spring Loaded Inverted Pendulum embedding: Extensions toward the control of compliant running robots. , 2010, , .		10
42	Coupled stochastic differential equations and collective decision making in the Two-Alternative Forced-Choice task. , 2010, , .		9
43	Modeling and control of the monopedal robot Thumper. , 2009, , .		22
44	The Spring Loaded Inverted Pendulum as the Hybrid Zero Dynamics of an Asymmetric Hopper. IEEE Transactions on Automatic Control, 2009, 54, 1779-1793.	5.7	213
45	Monopedal running control: SLIP embedding and virtual constraint controllers. , 2007, , .		14