

Chengxu Zhou

List of Publications by Year in descending order

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papers

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42
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42
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42
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337
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamic and Reactive Walking for Humanoid Robots Based on Foot Placement Control. International Journal of Humanoid Robotics, 2016, 13, 1550041.	1.1	43
2	Overview of Gait Synthesis for the Humanoid COMAN. Journal of Bionic Engineering, 2017, 14, 15-25.	5.0	38
3	Stabilization of bipedal walking based on compliance control. Autonomous Robots, 2016, 40, 1041-1057.	4.8	34
4	Compliance control for stabilizing the humanoid on the changing slope based on terrain inclination estimation. Autonomous Robots, 2016, 40, 955-971.	4.8	19
5	Humanoid Balancing Behavior Featured by Underactuated Foot Motion. IEEE Transactions on Robotics, 2017, 33, 298-312.	10.3	19
6	Footstep Planning in Rough Terrain for Bipedal Robots Using Curved Contact Patches. , 2018, , .		19
7	Vision-based foothold contact reasoning using curved surface patches. , 2017, , .		18
8	Fall Prediction of legged robots based on energy state and its implication of balance augmentation: A study on the humanoid. , 2015, , .		16
9	HERI II: A Robust and Flexible Robotic Hand based on Modular Finger design and Under Actuation Principles. , 2018, , .		16
10	Damage localization in plate-like structure using built-in PZT sensor network. Smart Structures and Systems, 2012, 9, 21-33.	1.9	16
11	HERI hand: A quasi dexterous and powerful hand with asymmetrical finger dimensions and under actuation. , 2017, , .		15
12	A passivity based compliance stabilizer for humanoid robots. , 2014, , .		13
13	A generic optimization-based framework for reactive collision avoidance in bipedal locomotion. , 2016, , .		13
14	Robust Model Predictive Control for humanoids standing balancing. , 2016, , .		12
15	On the Comprehensive Kinematics Analysis of a Humanoid Parallel Ankle Mechanism. Journal of Mechanisms and Robotics, 2018, 10, .	2.2	11
16	A2ML: A general human-inspired motion language for anthropomorphic arms based on movement primitives. Robotics and Autonomous Systems, 2019, 111, 145-161.	5.1	10
17	Exploiting the redundancy for humanoid robots to dynamically step over a large obstacle. , 2015, , .		9
18	Straight leg walking strategy for torque-controlled humanoid robots. , 2016, , .		9

#	ARTICLE	IF	CITATIONS
19	Comparison study of two inverted pendulum models for balance recovery. , 2014, , .		8
20	Versatile Reactive Bipedal Locomotion Planning Through Hierarchical Optimization. , 2019, , .		8
21	Design a Fall Recovery Strategy for a Wheel-Legged Quadruped Robot Using Stability Feature Space. , 2019, , .		8
22	Energy-Efficient Bipedal Gait Pattern Generation via CoM Acceleration Optimization. , 2018, , .		7
23	A torque-controlled humanoid robot riding on a two-wheeled mobile platform. , 2017, , .		6
24	Neural-Network-Controlled Spring Mass Template for Humanoid Running. , 2018, , .		6
25	Nonlinear model predictive control for robust bipedal locomotion: exploring angular momentum and CoM height changes. Advanced Robotics, 2021, 35, 1079-1097.	1.8	6
26	Active control of under-actuated foot tilting for humanoid push recovery. , 2015, , .		5
27	Development of a Teleoperative Quadrupedal Manipulator. , 2021, , .		5
28	A Study on Low-Drift State Estimation for Humanoid Locomotion, Using LiDAR and Kinematic-Inertial Data Fusion. , 2018, , .		4
29	Normalized Neural Network for Energy Efficient Bipedal Walking Using Nonlinear Inverted Pendulum Model. , 2019, , .		4
30	Implementation of Robust EPSAC on dynamic walking of COMAN Humanoid. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 8384-8390.	0.4	3
31	MPC strategy for dynamic stabilization of preplanned walking gaits. , 2017, , .		3
32	A new foot sole design for humanoids robots based on viscous air damping mechanism. , 2015, , .		2
33	A study of nonlinear forward models for dynamic walking. , 2017, , .		2
34	RRT-based motion planning with sampling in Redundancy space for robots with anthropomorphic arms. , 2017, , .		2
35	Humanoid running based on centroidal dynamics and heuristic foot placement. , 2017, , .		2
36	Human inspired fall arrest strategy for humanoid robots based on stiffness ellipsoid optimisation. Bioinspiration and Biomimetics, 2021, 16, 056014.	2.9	2

#	ARTICLE	IF	CITATIONS
37	Neural Network Based On-Line Stabilization for Humanoid Robots. , 2016, , .		1
38	New Cross-Step Enabled Configurations for Humanoid Robot. , 2018, , .		1
39	From Non-Reactive to Reactive Walking in Humanoid Robots. , 2018, , .		1
40	Improving Quadrupedal Locomotion on Granular Material Using Genetic Algorithm. , 2020, , .		1
41	Ctrl-MORE: A Framework to Integrate Controllers of Multi-DoF Robot for Developers and Users. , 2018, , .		0