Zhangguo Yu

List of Publications by Citations

92 papers	518 citations	11 h-index	17 g-index
126 ext. papers	709 ext. citations	2.8 avg, IF	3.82 L-index

#	Paper	IF	Citations
92	Decentralised adaptive control of cooperating Robotic manipulators with disturbance observers. *IET Control Theory and Applications*, **2014**, 8, 515-521	2.5	33
91	Bioinspired Control of Walking With Toe-Off, Heel-Strike, and Disturbance Rejection for a Biped Robot. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 7962-7971	8.9	32
90	Gait Planning of Omnidirectional Walk on Inclined Ground for Biped Robots. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2016**, 46, 888-897	7.3	26
89	Design and similarity evaluation on humanoid motion based on human motion capture. *Robotica*, **2010**, 28, 737-745	2.1	23
88	Design and Development of the Humanoid Robot BHR-5. *Advances in Mechanical Engineering*, **2014**, 6, 852937	1.2	22
87	Disturbance Rejection for Biped Walking Using Zero-Moment Point Variation Based on Body Acceleration. *IEEE Transactions on Industrial Informatics*, **2019**, 15, 2265-2276	11.9	22
86	Dynamic model based ball trajectory prediction for a robot ping-pong player **2010**,		19
85	Contact Force/Torque Control Based on Viscoelastic Model for Stable Bipedal Walking on Indefinite Uneven Terrain. *IEEE Transactions on Automation Science and Engineering*, **2019**, 16, 1627-1639	4.9	14
84	Hand-eye servo and impedance control for manipulator arm to capture target satellite safely. *Robotica*, **2015**, 33, 848-864	2.1	13
83	Modeling and design of a humanoid robotic face based on an active drive points model. *Advanced Robotics*, **2014**, 28, 379-388	1.7	13
82	The Mechanism of Yaw Torque Compensation in the Human and Motion Design for Humanoid Robots. *International Journal of Advanced Robotic Systems*, **2013**, 10, 57	1.4	11
81	Ball Tracking and Trajectory Prediction for Table-Tennis Robots. *Sensors*, **2020**, 20,	3.8	10
80	Master-Slave Control of an Intention-Actuated Exoskeletal Robot for Locomotion and Lower Extremity Rehabilitation. *International Journal of Precision Engineering and Manufacturing*, **2018**, 19, 983-991	1.7	10
79	Robust push recovery by whole-body dynamics control with extremal accelerations. *Robotica*, **2014**, 32, 467-476	2.1	10
78	Integral Acceleration Generation for Slip Avoidance in a Planar Humanoid Robot. *IEEE/ASME Transactions on Mechatronics*, **2015**, 20, 2924-2934	5.5	10
77	Distributed Control System for a Humanoid Robot **2007**,		10
76	Bio-inspired falling motion control for a biped humanoid robot **2014**,		9

75	Computer control system and walking pattern control for a humanoid robot **2008**,		9
74	. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 3442-3451	8.9	9
73	Structural Design and Crawling Pattern Generator of a Planar Quadruped Robot for High-Payload Locomotion. *Sensors*, **2020**, 20,	3.8	8
72	A walking control strategy combining global sensory reflex and leg synchronization. *Robotica*, **2016**, 34, 973-994	2.1	8
71	Motion Planning for Bipedal Robot to Perform Jump Maneuver. *Applied Sciences (Switzerland)*, **2018**, 8, 139	2.6	7
70	Design of a humanoid ping-pong player robot with redundant joints **2013**,		7
69	An experimental characterization of human falling down. *Mechanical Sciences*, **2017**, 8, 79-89	1.3	7
68	A model to predict ground reaction force for elastically-suspended backpacks. *Gait and Posture*, **2020**, 82, 118-125	2.6	7
67	Design of a Redundant Manipulator for Playing Table Tennis towards Human-Like Stroke Patterns. *Advances in Mechanical Engineering*, **2014**, 6, 807458	1.2	6
66	A torque limiter for safe joint applied to humanoid robots against falling damage **2015**,		6
65	A falling motion control of humanoid robots based on biomechanical evaluation of falling down of humans **2015**,		6
64	Generation of humanoid walking pattern based on human walking measurement **2008**,		6
63	Trot pattern generation for quadruped robot based on the ZMP stability margin **2013**,		5
62	A Robust Vision Module for Humanoid Robotic Ping-Pong Game. *International Journal of Advanced Robotic Systems*, **2015**, 12, 35	1.4	5
61	Stepping to recover: A 3D-LIPM based push recovery and fall management scheme for biped robots **2012**,		4
60	Flexible foot design for a humanoid robot **2008**,		4
59	Dynamic Torso Compliance Control for Standing and Walking Balance of Position-Controlled Humanoid Robots. *IEEE/ASME Transactions on Mechatronics*, **2021**, 26, 679-688	5.5	4
58	Historical Development of BHR Humanoid Robots. *History of Mechanism and Machine Science*, **2019**, 310-323		4

57	Turning Gait Planning Method for Humanoid Robots. *Applied Sciences (Switzerland)*, **2018**, 8, 1257	2.6	4
56	Design and control of robot legs with bi-articular muscle-tendon complex **2017**,		3
55	Bipedal walking with toe-off, heel-strike and compliance with external disturbances **2014**,		3
54	Human-like walking patterns with pelvic rotation for a humanoid robot **2014**,		3
53	Inverse dynamics control with acceleration optimization on a force-controlled bipedal robot **2012**,		3
52	System design of an Anthropomorphic arm robot for dynamic interaction task **2011**,		3
51	Mechanical design of a light weight and high stiffness arm for humanoids **2009**,		3
50	Resistant Compliance Control for Biped Robot Inspired by Humanlike Behavior. *IEEE/ASME Transactions on Mechatronics*, **2022**, 1-11	5.5	3
49	A novel hierarchical control strategy for biped robot walking on uneven terrain **2019**,		3
48	Walking Control of Biped Robots on Uneven Terrains Based on SLIP Model **2019**,		3
47	Controllable Height Hopping of a Parallel Legged Robot. *Applied Sciences (Switzerland)*, **2021**, 11, 1421	2.6	3
46	Development of a Bipedal Robot with Bi-articular Muscle-tendon Complex between Hip and Knee Joint **2018**,		3
45	A novel under-actuated bionic hand and its grasping stability analysis. *Advances in Mechanical Engineering*, **2017**, 9, 168781401668885	1.2	2
44	A minimized falling damage method for humanoid robots. *International Journal of Advanced Robotic Systems*, **2017**, 14, 172988141772801	1.4	2
43	Omnidirectional Disturbance Rejection for a Biped Robot by Acceleration Optimization. *Intelligent Automation and Soft Computing*, **2014**, 20, 471-485	2.6	2
42	Control of one-legged robot hopping in place **2013**,		2
41	Trajectory optimization of humanoid robots swinging leg **2017**,		2
40	Biomimetic upper limb mechanism of humanoid robot for shock resistance based on viscoelasticity **2017**,		2

39	System design of a 9-DOF robot capable of fast and flexible rally task **2014**,		2
38	Humanoid walking pattern generation based on the ground reaction force features of human walking **2012**,		2
37	Mechanical design and balance control of a Humanoid Waist Joint **2010**,		2
36	An improved ZMP trajectory design for the biped robot BHR **2011**,		2
35	Ping-pong trajectory perception and prediction by a PC based High speed four-camera vision system **2011**,		2
34	On-line trajectory generation for a humanoid robot based on combination of off-line patterns **2009**,		2
33	Measurement of human walking and generation of humanoid walking pattern **2007**,		2
32	Dynamic Torso Posture Compliance Control for Standing Balance of Position-Controlled Humanoid Robots **2020**,		2
31	Development of robotic polishing/fettling system on ceramic pots. *International Journal of Advanced Robotic Systems*, **2021**, 18, 172988142110128	1.4	2
30	**2021**,		2
29	Disturbance Rejection Controller for Biped Walking Using Real-Time ZMP Regulation. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2016**, 179-188	0.6	2
28	Passive buffering arm for a humanoid robot against falling damage **2016**,		2
27	A Falling Motion Strategy for Humanoids Based on Motion Primitives of Human Falling. *Mechanisms and Machine Science*, **2018**, 264-272	0.3	2
26	Adaptability Control Towards Complex Ground Based on Fuzzy Logic for Humanoid Robots. *IEEE Transactions on Fuzzy Systems*, **2022**, 1-1	8.3	2
25	Rolling motion generation of multi-points contact for a humanoid robot **2016**,		1
24	Impact motion control of humanoid robot BHR-5 based on the energy integral method. *Advances in Mechanical Engineering*, **2016**, 8, 168781401562602	1.2	1
23	Development of a Socially Interactive System with Whole-Body Movements for BHR-4. *International Journal of Social Robotics*, **2016**, 8, 183-192	4	1
22	Gait Transition Between Standing and Falling Down for a Humanoid Robot. *Mechanisms and Machine Science*, **2019**, 2501-2509	0.3	1

21	Slip prevention of a humanoid robot by coordinating acceleration vector **2014**,		1
20	Designation and Control of Landing Points for Competitive Robotic Table Tennis. *International Journal of Advanced Robotic Systems*, **2015**, 12, 92	1.4	1
19	A universal pattern generator for biped walking on 3D slopes **2014**,		1
18	Stability control for biped walking based on phase modification during double support period **2014**,		1
17	A dual-motor joint model for humanoid robots **2013**,		1
16	Control design of a biped humanoid robot capable of facial expression **2010**,		1
15	Design and workspace analysis of a light weight and high stiffness arm **2011**,		1
14	Falling Prediction based on Machine Learning for Biped Robots. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2021**, 103, 1	2.9	1
13	Bio-Inspired Take-Off Maneuver and Control in Vertical Jumping for Quadruped Robot with Manipulator. *Micromachines*, **2021**, 12,	3.3	1
12	Design and Implementation of Symmetric Legged Robot for Highly Dynamic Jumping and Impact Mitigation. *Sensors*, **2021**, 21,	3.8	1
11	Experiments of a Human-Robot Social Interactive System with Whole-Body Movements. *Mechanisms and Machine Science*, **2014**, 501-508	0.3	1
10	Design of the Facial Expression Mechanism for Humanoid Robots. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2010**, 433-440	0.6	1
9	A guide-weight criterion-based topology optimization method for maximizing the fundamental eigenfrequency of the continuum structure. *Structural and Multidisciplinary Optimization*, **2021**, 64, 2135	3.6	1
8	Exploiting human walking speed transitions using a dynamic bipedal walking robot with controllable stiffness and limb coordination **2016**,		1
7	Simultaneous Prevention of Rotational and Translational Slip for a Humanoid Robot. *Applied Sciences (Switzerland)*, **2018**, 8, 1554	2.6	1
6	Introduction of Toe Mechanism with Bi-articular Tendon into Legged Robot **2018**,		1
5	Stride Length and Stepping Duration Adjustments Based on Center of Mass Stabilization Control. *IEEE/ASME Transactions on Mechatronics*, **2022**, 1-11	5.5	1
4	Combination of Hardware and Control to Reduce Humanoids Fall Damage. *International Journal of Humanoid Robotics*, **2020**, 17, 2050002	1.2	0

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3	A Falling Forwards Protection Strategy for Humanoid Robots. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2019**, 314-322	0.6
2	Continuous Jumping Control Based on Virtual Model Control for a One-Leg Robot Platform. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2021**, 24-33	0.6
1	Realization of foot rotation by breaking the kinematic contact constraint. *Robotica*, **2016**, 34, 1059-1070	2.1