Jaesung Oh

List of Publications by Year in Descending Order

101 papers	1,284 citations	16 h-index	32 g-index
111 ext. papers	1,657 ext. citations	2.9 avg, IF	4.85 L-index

#	Paper	IF	Citations
101	Dynamic Humanoid Locomotion Over Rough Terrain With Streamlined Perception-Control Pipeline **2021**,		1
100	Design of a Compact Embedded Hydraulic Power Unit for Bipedal Robots. *IEEE Robotics and Automation Letters*, **2021**, 6, 3631-3638	4.2	2
99	Force Control of a Hydraulic Actuator With a Neural Network Inverse Model. *IEEE Robotics and Automation Letters*, **2021**, 6, 2814-2821	4.2	7
98	Dynamic Nonprehensile Manipulation of a Moving Object Using a Batting Primitive. *Applied Sciences (Switzerland)*, **2021**, 11, 3920	2.6	1
97	Energy Efficient Control of Onboard Hydraulic Power Unit for Hydraulic Bipedal Robots. *The Journal of Korea Robotics Society*, **2021**, 16, 86-93	0.3	
96	Legged Robot State Estimation With Dynamic Contact Event Information. *IEEE Robotics and Automation Letters*, **2021**, 6, 6733-6740	4.2	6
95	Design and control of the rapid legged platform GAZELLE. *Mechatronics*, **2020**, 66, 102319	3	3
94	Development of a Lightweight and High-efficiency Compact Cycloidal Reducer for Legged Robots. *International Journal of Precision Engineering and Manufacturing*, **2020**, 21, 415-425	1.7	9
93	Online Delayed Reference Generation for a Humanoid Imitating Human Walking Motion. *IEEE/ASME Transactions on Mechatronics*, **2020**, 1-1	5.5	2
92	A Robust Walking Controller Based on Online Optimization of Ankle, Hip, and Stepping Strategies. *IEEE Transactions on Robotics*, **2019**, 35, 1367-1386	6.5	20
91	Hysteresis Modeling for Torque Control of an Elastomer Series Elastic Actuator. *IEEE/ASME Transactions on Mechatronics*, **2019**, 24, 1316-1324	5.5	9
90	Real-time humanoid whole-body remote control framework for imitating human motion based on kinematic mapping and motion constraints. *Advanced Robotics*, **2019**, 33, 293-305	1.7	5
89	Humanoid whole-body remote-control framework with delayed reference generator for imitating human motion. *Mechatronics*, **2019**, 62, 102253	3	2
88	A Robust Balance-Control Framework for the Terrain-Blind Bipedal Walking of a Humanoid Robot on Unknown and Uneven Terrain. *Sensors*, **2019**, 19,	3.8	16
87	Motion Generation Interface of ROS to PODO Software Framework for Wheeled Humanoid Robot **2019**,		3
86	Avoiding Obstacles during Push Recovery Using Real-Time Vision Feedback **2019**,		2
85	Real-time continuous ZMP pattern generation of a humanoid robot using an analytic method based on capture point. *Advanced Robotics*, **2019**, 33, 33-48	1.7	6

84	A robust walking controller optimizing step position and step time that exploit advantages of footed robot. *Robotics and Autonomous Systems*, **2019**, 113, 10-22	3.5	8
83	History of HUBO: Korean Humanoid Robot **2019**, 117-129		
82	Mechanism Design Outline of Hubo **2019**, 615-635		2
81	Development of the Humanoid Disaster Response Platform DRC-HUBO+. *IEEE Transactions on Robotics*, **2018**, 34, 1-17	6.5	60
80	Robots for the PyeongChang 2018 Winter Olympic Games. *Science Robotics*, **2018**, 3,	18.6	2
79	Balance recovery through model predictive control based on capture point dynamics for biped walking robot. *Robotics and Autonomous Systems*, **2018**, 105, 1-10	3.5	29
78	Collision Detection and Safe Reaction Algorithm for Non-backdrivable Manipulator with Single Force/Torque Sensor. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2018**, 91, 403-412	2.9	14
77	Biped robot state estimation using compliant inverted pendulum model. *Robotics and Autonomous Systems*, **2018**, 108, 38-50	3.5	9
76	Constrained Whole Body Motion Planning in Task Configuration and Time. *International Journal of Precision Engineering and Manufacturing*, **2018**, 19, 1651-1658	1.7	3
75	Implementing Full-body Torque Control in Humanoid Robot with High Gear Ratio Using Pulse Width Modulation Voltage **2018**,		3
74	Humanoid Robot COM Kinematics Estimation based on Compliant Inverted Pendulum Model and Robust State Estimator **2018**,		1
73	Position/torque hybrid control of a rigid, high-gear ratio quadruped robot. *Advanced Robotics*, **2018**, 32, 969-983	1.7	5
72	Development of a Tele-Operated Rescue Robot for a Disaster Response. *International Journal of Humanoid Robotics*, **2018**, 15, 1850008	1.2	6
71	Analytic Inverse Kinematics Considering the Joint Constraints and Self-Collision for Redundant 7DOF Manipulator **2017**,		5
70	Humanoid state estimation using a moving horizon estimator. *Advanced Robotics*, **2017**, 31, 695-705	1.7	5
69	Novel state estimation framework for humanoid robot. *Robotics and Autonomous Systems*, **2017**, 98, 258-275	3.5	11
68	History of HUBO, Korean Humanoid Robot **2017**, 1-13		
67	Mechanism Design Outline of Hubo **2017**, 1-21		

66	Inverse kinematics with strict nonholonomic constraints on mobile manipulator **2017**,		1
65	Camera-laser fusion sensor system and environmental recognition for humanoids in disaster scenarios. *Journal of Mechanical Science and Technology*, **2017**, 31, 2997-3003	1.6	5
64	Robot System of DRC-HUBO+ and Control Strategy of Team KAIST in DARPA Robotics Challenge Finals. *Journal of Field Robotics*, **2017**, 34, 802-829	6.7	58
63	Biped walking stabilization based on foot placement control using capture point feedback **2017**,		7
62	BLDC motor current control using filtered single DC link current based on adaptive extended Kalman filter **2017**,		2
61	A New State Estimation Framework for Humanoids based on a Moving Horizon Estimator. *IFAC-PapersOnLine*, **2017**, 50, 3793-3799	0.7	
60	Humanoid Posture Selection for Reaching Motion and a Cooperative Balancing Controller. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2016**, 81, 301-316	2.9	12
59	Study on optimal velocity selection using velocity obstacle (OVVO) in dynamic and crowded environment. *Autonomous Robots*, **2016**, 40, 1459-1470	3	14
58	Backward Ladder Climbing Locomotion of Humanoid Robot with Gain Overriding Method on Position Control. *Journal of Field Robotics*, **2016**, 33, 687-705	6.7	13
57	Low-cost indoor positioning system using BLE (bluetooth low energy) based sensor fusion with constrained extended Kalman Filter **2016**,		5
56	Walking-wheeling dual mode strategy for humanoid robot, DRC-HUBO+ **2016**,		5
55	Bipedal walking pattern generation based on an extrapolated center of mass **2016**,		1
54	Development of an optimal velocity selection method with velocity obstacle. *Journal of Mechanical Science and Technology*, **2015**, 29, 3475-3487	1.6	1
53	Biped Walking Pattern Generation Using an Analytic Method for a Unit Step With a Stationary Time Interval Between Steps. *IEEE Transactions on Industrial Electronics*, **2015**, 62, 1091-1100	8.9	17
52	Active Suspension for a Rapid Mobile Robot Using Cartesian Computed Torque Control. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2015**, 79, 221-235	2.9	6
51	Robotic software system for the disaster circumstances: System of team KAIST in the DARPA Robotics Challenge Finals **2015**,		10
50	A modified perturbation/correlation method for force-guided assembly. *Journal of Mechanical Science and Technology*, **2015**, 29, 5437-5446	1.6	6
49	Collision detection system for the practical use of the humanoid robot **2015**,		5

48	Hopping system control with an approximated dynamics model and upper-body motion. *Journal of Mechanical Science and Technology*, **2015**, 29, 4891-4900	1.6	2
47	Control strategies for a humanoid robot to drive and then egress a utility vehicle for remote approach **2015**,		5
46	Dynamics based motion optimization and operational space control with an experimental rescue robot, HUBO T-100 **2015**,		2
45	Motion planning for a rapid mobile manipulator using model-based ZMP stabilization. *Robotica*, **2014**, 32,	2.1	2
44	Improvement Trend of a Humanoid Robot Platform HUBO2+. *Journal of Institute of Control, Robotics and Systems*, **2014**, 20, 356-363	1	9
43	Development of the Cartesian arm exoskeleton system (CAES) using a 3-axis force/torque sensor. *International Journal of Control, Automation and Systems*, **2013**, 11, 976-983	2.9	10
42	Posture Stabilization Strategy for a Trotting Point-foot Quadruped Robot. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2013**, 72, 325-341	2.9	10
41	Inverse Kinematic Control of Humanoids under Joint Constraints. *International Journal of Advanced Robotic Systems*, **2013**, 10, 74	1.4	20
40	Humanoid throwing: Design of collision-free trajectories with sparse reachable maps **2012**,		11
39	DYNAMIC BALANCE OF A HOPPING HUMANOID ROBOT USING A LINEARIZATION METHOD. *International Journal of Humanoid Robotics*, **2012**, 09, 1250020	1.2	3
38	Development of a Rapid Mobile Robot with a Multi-Degree-of-Freedom Inverted Pendulum Using the Model-Based Zero-Moment Point Stabilization Method. *Advanced Robotics*, **2012**, 26, 515-535	1.7	12
37	Development of Humanoid Robots in HUBO Laboratory, KAIST. *Journal of the Robotics Society of Japan*, **2012**, 30, 367-371	0.1	3
36	Online Balance Controllers for a Hopping and Running Humanoid Robot. *Advanced Robotics*, **2011**, 25, 1209-1225	1.7	29
35	Adaptive walking pattern generation and balance control of the passenger-carrying biped robot, HUBO FX-1, for variable passenger weights. *Autonomous Robots*, **2011**, 30, 427-443	3	13
34	On the Design and Development of a Quadruped Robot Platform. *Advanced Robotics*, **2010**, 24, 277-298	1.7	9
33	Stabilization of a rapid four-wheeled mobile platform using the ZMP stabilization method **2010**,		6
32	EXPERIMENTAL REALIZATION OF DYNAMIC STAIR CLIMBING AND DESCENDING OF BIPED HUMANOID ROBOT, HUBO. *International Journal of Humanoid Robotics*, **2009**, 06, 205-240	1.2	4
31	Realization of Dynamic Stair Climbing for Biped Humanoid Robot Using Force/Torque Sensors. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2009**, 56, 389-423	2.9	14

30	Online Walking Pattern Generation and Its Application to a Biped Humanoid Robot KHR-3 (HUBO). *Advanced Robotics*, **2008**, 22, 159-190	1.7	38
29	Adjustment of Home Posture of Biped Humanoid Robot Using Sensory Feedback Control. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2008**, 51, 421-438	2.9	7
28	Control hardware integration of a biped humanoid robot with an android head. *Robotics and Autonomous Systems*, **2008**, 56, 95-103	3.5	19
27	Walking Control Algorithm of Biped Humanoid Robot on Uneven and Inclined Floor. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2007**, 48, 457-484	2.9	140
26	Stretch-legged walking in sagittal plane **2007**,		1
25	Mechanical design of the humanoid robot platform, HUBO. *Advanced Robotics*, **2007**, 21, 1305-1322	1.7	108
24	Experimental realization of dynamic walking of the biped humanoid robot KHR-2 using zero moment point feedback and inertial measurement. *Advanced Robotics*, **2006**, 20, 707-736	1.7	82
23	Design of Android type Humanoid Robot Albert HUBO **2006**,		96
22	Online Biped Walking Pattern Generation for Humanoid Robot KHR-3(KAIST Humanoid Robot - 3: HUBO) **2006**,		15
21	DEVELOPMENT OF HUMANOID ROBOT PLATFORM KHR-2 (KAIST HUMANOID ROBOT 2). *International Journal of Humanoid Robotics*, **2005**, 02, 519-536	1.2	30
20	Realization of dynamic walking for the humanoid robot platform KHR-1. *Advanced Robotics*, **2004**, 18, 749-768	1.7	36
19	Walking control of the humanoid platform KHR-1 based on torque feedback control **2004**,		5
18	Design of a stable gain scheduling controller for optical disc players. *IEEE Transactions on Consumer Electronics*, **2004**, 50, 188-191	4.8	1
17	Globally asymptotically stable tracking control for a trailer system. *Journal of Field Robotics*, **2002**, 19, 199-205		8
16	Design and Analysis of Rotary MR Damper Using Permanent Magnet. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2002**, 35, 823-827		3
15	Walking and Control of Autonomous Biped Robot. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2001**, 34, 173-177		
14	Nonlinear tracking control of trailer systems using the Lyapunov direct method. *Journal of Field Robotics*, **1999**, 16, 1-8		8
13	Discrete-time quasi-sliding mode tracking control of uncertain systems with long sampling interval. *International Journal of Systems Science*, **1998**, 29, 899-906	2.3	5

12	Hybrid Learning of Mapping and its Jacobian in Multilayer Neural Networks. *Neural Computation*, **1997**, 9, 937-958	2.9	12
11	An aperiodic Z type spinning gait planning method for a quadruped walking robot. *Autonomous Robots*, **1995**, 2, 163-173	3	1
10	An aperiodic straight motion planning method for a quadruped walking robot. *Autonomous Robots*, **1995**, 2, 29-41	3	1
9	Development of a multi-agent system for robot soccer game		3
8	Globally asymptotically stable tracking control of mobile robots		3
7	System Design and Dynamic Walking of Humanoid Robot KHR-2		7
6	Mechanical design of humanoid robot platform KHR-3 (KAIST humanoid robot - 3: HUBO)		52
5	Development of humanoid robot platform KHR-2 (KAIST humanoid robot-2)		3
4	Experiments of vision guided walking of humanoid robot, KHR-2		1
3	Development of an above knee prosthesis using MR damper and leg simulator		6
2	Disturbance estimation using sliding mode for discrete Kalman filter		1
1	Experiments of backward tracking control for trailer system		3