

# Shuuji Kajita

## List of Publications by Year in descending order

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Version: 2024-02-01

101  
papers

5,884  
citations

361413

20  
h-index

377865

34  
g-index

105  
all docs

105  
docs citations

105  
times ranked

1922  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biped walking pattern generation by using preview control of zero-moment point. , 0, , .		1,325
2	Humanoid robot HRP-2. , 2004, , .		553
3	Dynamic walking control of a biped robot along a potential energy conserving orbit. IEEE Transactions on Automation Science and Engineering, 1992, 8, 431-438.	2.3	312
4	Biped walking stabilization based on linear inverted pendulum tracking. , 2010, , .		301
5	Cybernetic human HRP-4C. , 2009, , .		160
6	Biped walking pattern generation by a simple three-dimensional inverted pendulum model. Advanced Robotics, 2003, 17, 131-147.	1.8	147
7	Biped Walking Pattern Generator allowing Auxiliary ZMP Control. , 2006, , .		128
8	Humanoid robotics platforms developed in HRP. Robotics and Autonomous Systems, 2004, 48, 165-175.	5.1	120
9	AN ANALYTICAL METHOD FOR REAL-TIME GAIT PLANNING FOR HUMANOID ROBOTS. International Journal of Humanoid Robotics, 2006, 03, 1-19.	1.1	113
10	Experimental study of biped dynamic walking. IEEE Control Systems, 1996, 16, 13-19.	0.8	111
11	OpenHRP: Open Architecture Humanoid Robotics Platform. , 0, , 99-112.		107
12	ZMP-Based Biped Running Control. IEEE Robotics and Automation Magazine, 2007, 14, 63-72.	2.0	100
13	Humanoid Robot HRP-5P: An Electrically Actuated Humanoid Robot With High-Power and Wide-Range Joints. IEEE Robotics and Automation Letters, 2019, 4, 1431-1438.	5.1	100
14	Dynamics and balance of a humanoid robot during manipulation tasks. , 2006, 22, 568-575.		88
15	Multi-contact vertical ladder climbing with an HRP-2 humanoid. Autonomous Robots, 2016, 40, 561-580.	4.8	79
16	Pushing manipulation by humanoid considering two-kinds of ZMPs. , 0, , .		75
17	Balance control based on Capture Point error compensation for biped walking on uneven terrain. , 2012, , .		70
18	Constraint-based dynamics simulator for humanoid robots with shock absorbing mechanisms. , 2007, , .		66

#	ARTICLE	IF	CITATIONS
19	Real-Time Planning of Humanoid Robot's Gait for Force-Controlled Manipulation. IEEE/ASME Transactions on Mechatronics, 2007, 12, 53-62.	5.8	66
20	A hop towards running humanoid biped. , 2004, , .		64
21	ZMP-based Biped Running Enhanced by Toe Springs. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	62
22	Faster and Smoother Walking of Humanoid HRP-2 with Passive Toe Joints. , 2006, , .		59
23	A Pattern Generator of Humanoid Robots Walking on a Rough Terrain. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	59
24	Legged Robots. , 2008, , 361-389.		59
25	Humanoid robot HRP-2Kai "Improvement of HRP-2 towards disaster response tasks. , 2015, , .		59
26	Real-time planning of humanoid robot's gait for force controlled manipulation. , 2004, , .		57
27	Towards an Optimal Falling Motion for a Humanoid Robot. , 2006, , .		53
28	Robot motion remix based on motion capture data towards human-like locomotion of humanoid robots. , 2009, , .		53
29	Whole-Body Motion Generation Integrating Operator's Intention and Robot's Autonomy in Controlling Humanoid Robots. , 2007, 23, 763-775.		51
30	Experimentation of Humanoid Walking Allowing Immediate Modification of Foot Place Based on Analytical Solution. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	44
31	Locomotion planning of humanoid robots to pass through narrow spaces. , 2004, , .		43
32	An optimal planning of falling motions of a humanoid robot. , 2007, , .		42
33	A Biped Pattern Generation Allowing Immediate Modification of Foot Placement in Real-time. , 2006, , .		41
34	The first humanoid robot that has the same size as a human and that can lie down and get up. , 0, , .		39
35	A Switching Command-Based Whole-Body Operation Method for Humanoid Robots. IEEE/ASME Transactions on Mechatronics, 2005, 10, 546-559.	5.8	34
36	Reactive stepping to prevent falling for humanoids. , 2009, , .		34

#	ARTICLE	IF	CITATIONS
37	Falling motion control of a humanoid robot trained by virtual supplementary tests. , 2004, , .		33
38	Toward human-like walking pattern generator. , 2009, , .		33
39	Emergency stop algorithm for walking humanoid robots. , 2005, , .		32
40	Intuitive and flexible user interface for creating whole body motions of biped humanoid robots. , 2010, , .		32
41	Hardware improvement of Cybernetic Human HRP-4C for entertainment use. , 2011, , .		32
42	Adaptive Gait Control of a Biped Robot Based on Realtime Sensing of the Ground Profile. Autonomous Robots, 1997, 4, 297-305.	4.8	29
43	Reactive biped walking control for a collision of a swinging foot on uneven terrain. , 2011, , .		29
44	Biped walking pattern generation based on spatially quantized dynamics. , 2017, , .		27
45	Two-Stage Time-Parametrized Gait Planning for Humanoid Robots. IEEE/ASME Transactions on Mechatronics, 2010, 15, 694-703.	5.8	25
46	Impact acceleration of falling humanoid robot with an airbag. , 2016, , .		24
47	Cybernetic Human HRP-4C: A Humanoid Robot with Human-Like Proportions. Springer Tracts in Advanced Robotics, 2011, , 301-314.	0.4	22
48	A pattern generator of humanoid robots walking on a rough terrain using a handrail. , 2008, , .		21
49	Slip-Turn for Biped Robots. IEEE Transactions on Robotics, 2013, 29, 875-887.	10.3	21
50	Biped locomotion control for uneven terrain with narrow support region. , 2014, , .		21
51	Creating facial motions of Cybernetic Human HRP-4C. , 2009, , .		20
52	Whole body teleoperation of a humanoid robot - a method of integrating operator's intention and robot's autonomy. , 0, , .		17
53	Motion Planning of Emergency Stop for Humanoid Robot by State Space Approach. , 2006, , .		16
54	Kinodynamic Planning for Humanoid Robots Walking on Uneven Terrain. Journal of Robotics and Mechatronics, 2009, 21, 311-316.	1.0	16

#	ARTICLE	IF	CITATIONS
55	Analysis on a friction based &#x201C;twirl&#x201D; for biped robots. , 2010, , .		15
56	Analytical Approach on Real-time Gait Planning for a Humanoid Robot. Journal of the Robotics Society of Japan, 2005, 23, 752-760.	0.1	15
57	Experimental evaluation of the dynamic simulation of biped walking of humanoid robots. , 0, , .		14
58	Task sequencer integrated into a teleoperation interface for biped humanoid robots. , 2015, , .		14
59	Motion planning for walking pattern generation of humanoid. , 2007, , .		12
60	Field and service applications - Dinosaur robotics for entertainment applications - Design, Configurations, Control, and Exhibition at the World Exposition. IEEE Robotics and Automation Magazine, 2007, 14, 43-51.	2.0	12
61	Humanoid robot simulator for the METI HRP Project. Robotics and Autonomous Systems, 2001, 37, 101-114.	5.1	11
62	Motion Suspension System for Humanoids in case of Emergency; Real-time Motion Generation and Judgment to suspend Humanoid. , 2006, , .		11
63	Kinodynamic gait planning for full-body humanoid robots. , 2008, , .		11
64	Humanoid Robots in the Future. Advanced Robotics, 2009, 23, 1527-1531.	1.8	11
65	Development of an indirect-type teleoperation interface for biped humanoid robots. , 2014, , .		10
66	Task-level teleoperated manipulation for the HRP-2Kai humanoid robot. , 2015, , .		10
67	VocaListener and VocaWatcher: Imitating a human singer by using signal processing. , 2012, , .		9
68	Effective teleoperated manipulation for humanoid robots in partially unknown real environments: team AIST-NEDOâ€™s approach for performing the Plug Task during the DRC Finals. Advanced Robotics, 2016, 30, 1544-1558.	1.8	9
69	Position-Based Lateral Balance Control for Knee-Stretched Biped Robot. , 2019, , .		9
70	Vertical vibration suppression for a position controlled biped robot. , 2013, , .		8
71	Running Pattern Generation for a Humanoid Robot. Journal of the Robotics Society of Japan, 2003, 21, 902-908.	0.1	7
72	Toward Industrialization of Humanoid Robots: Autonomous Plasterboard Installation to Improve Safety and Efficiency. IEEE Robotics and Automation Magazine, 2019, 26, 20-29.	2.0	7

#	ARTICLE	IF	CITATIONS
73	Quick slip-turn of HRP-4C on its toes. , 2012, , .		6
74	Biped Gait Control Based on Spatially Quantized Dynamics. , 2018, , .		6
75	Hardware improvement of cybernetic human HRP-4C for entertainment use. , 2011, , .		6
76	A stable foot teleoperation method for humanoid robots. , 2004, , .		5
77	Combining haptic sensing with safe interaction. , 2009, , .		4
78	Risk evaluation of ground surface using multichannel foot sensors for biped robots. , 2014, , .		4
79	Biped-type leg-wheeled robot. <i>Advanced Robotics</i> , 1999, 13, 235-236.	1.8	4
80	Preemptive Foot Compliance to Lower Impact During Biped Robot Walking Over Unknown Terrain. <i>IEEE Robotics and Automation Letters</i> , 2022, 7, 8006-8011.	5.1	4
81	Evaluation of a stabilizer for biped walk with toe support phase. , 2012, , .		3
82	Linear Inverted Pendulum-Based Gait. , 2019, , 905-922.		3
83	Limbed Systems. <i>Springer Handbooks</i> , 2016, , 419-442.	0.6	2
84	Development and Lessons Learned in DARPA Robotics Challenge Finals. <i>Journal of the Robotics Society of Japan</i> , 2016, 34, 360-365.	0.1	2
85	Quick squatting motion generation of a humanoid robot for falling damage reduction. , 2017, , .		2
86	Feedback Control of Inverted Pendulums. , 2019, , 1467-1488.		2
87	Integration of Manipulation and Locomotion by a Humanoid Robot. <i>Springer Tracts in Advanced Robotics</i> , 2006, , 187-197.	0.4	2
88	Knee-stretched Biped Gait Generation along Spatially Quantized Curves. , 2021, , .		2
89	Online detection of calibration errors in humanoid robots. , 2014, , .		1
90	Enabling a teleoperated humanoid robot to pass through debris-filled terrain using manipulation. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
91	Developing semi-autonomous humanoid robots that perform various composite tasks via a task sequencer and dynamics simulator. , 2017, , .		1
92	Whole-Body Control [TC Spotlight]. IEEE Robotics and Automation Magazine, 2017, 24, 12-14.	2.0	1
93	Linear Inverted Pendulum-Based Gait. , 2017, , 1-18.		1
94	Simultaneous Whole-Body/Foot-Place Planning for Full-Body Humanoid Robots(Mechanical Systems). Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2010, 76, 2686-2693.	0.2	0
95	Walk Stabilization Control at DRC Finals. Journal of the Robotics Society of Japan, 2018, 36, 140-143.	0.1	0
96	Mechanism Design of Human-Like HRP-4C. , 2019, , 597-613.		0
97	HRP-4 and Other HRP Robots. , 2019, , 101-116.		0
98	ééš”æ“ä1/2œã«ã,^ã,ç1/2â©3ã~3/4ã¿œãf’ãf¥ãf1/4ãfžãfŽã,ãf%ããfœãfãf`HRP-2æ”1. IEICE Communications Society Magazine, 2016, , 1-11.		0
99	Feedback Control of Inverted Pendulums. , 2017, , 1-22.		0
100	Mechanism Design of Human-Like HRP-4C. , 2017, , 1-17.		0
101	Spatial Dynamics Representation and Recoverable One-degree Model Reduction for Nonlinear Systems. IFAC-PapersOnLine, 2021, 54, 325-328.	0.9	0