

Ikuo Mizuuchi

List of Publications by Year in descending order

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Version: 2024-02-01

110
papers

786
citations

1306789

7
h-index

1058022

14
g-index

113
all docs

113
docs citations

113
times ranked

403
citing authors

#	ARTICLE	IF	CITATIONS
1	An advanced musculoskeletal humanoid Kojiro. , 2007, , .		126
2	Development of musculoskeletal humanoid Kotaro. , 0, , .		75
3	Design Approach of Biologically-Inspired Musculoskeletal Humanoids. International Journal of Advanced Robotic Systems, 2013, 10, 216.	1.3	56
4	Thermal control of electrical motors for high-power humanoid robots. , 2008, , .		40
5	Anthropomorphic Movement Analysis and Synthesis: A Survey of Methods and Applications. IEEE Transactions on Robotics, 2016, 32, 776-795.	7.3	40
6	The development and control of a flexible-spine for a human-form robot. Advanced Robotics, 2003, 17, 179-196.	1.1	35
7	Building Spined Muscle-Tendon Humanoid. , 2003, , 113-127.		29
8	A shoulder structure of muscle-driven humanoid with shoulder blades. , 2005, , .		26
9	Development of bilateral wearable device “kento” for control robots using muscle actuator modules. , 2009, , .		21
10	Picking up dishes based on active groping with multisensory robot hand. , 2009, , .		19
11	Development of muscle-driven flexible-spine humanoids. , 0, , .		17
12	Development of a remote-brained humanoid for research on whole body action. , 0, , .		16
13	Realization of large joint movement while standing by a musculoskeletal humanoid using its spine and legs coordinately. , 2008, , .		15
14	Analysis of the 1-Joint Spring-Motor Coupling System and optimization criteria focusing on the velocity increasing effect. , 2011, , .		14
15	A reinforceable-muscle flexible-spine humanoid "Kenji". , 2005, , .		13
16	Joint proprioception acquisition strategy based on joints-muscles topological maps for musculoskeletal humanoids. , 2010, , .		12
17	Adaptive pick-and-place behaviors in a whole-body humanoid robot with an autonomous layer based on parallel sensor-motor modules. Robotics and Autonomous Systems, 1999, 28, 99-113.	3.0	11
18	The designs and motions of a shoulder structure with a spherical thorax, scapulas and collarbones for humanoid “Kojiro”. , 2008, , .		11

#	ARTICLE	IF	CITATIONS
19	Behavior System Design and Implementation in Spined Musle-Tendon Humanoid ""Kenta"". Journal of Robotics and Mechatronics, 2003, 15, 143-152.	0.5	10
20	Pedaling by a redundant musculo-skeletal humanoid robot. , 0, , .		9
21	Development of BilateralWearable Device Kento for Control Robots Using Muscle-Actuator Modules. Journal of Robotics and Mechatronics, 2010, 22, 308-314.	0.5	9
22	Realization of Standing of the Musculoskeletal Humanoid Kotaro by Reinforcing Muscles. , 2006, , .		8
23	A Musculoskeletal Flexible-Spine Humanoid Kotaro Aiming at the Future in 15 Years Time. , 2006, , .		8
24	Design of high D.O.F. mobile micro robot using electrical resistance control of shape memory alloy. , 2007, , .		8
25	Design of the musculoskeletal trunk and realization of powerful motions using spines. , 2007, , .		8
26	Evaluating the usability and users' acceptance of a kitchen assistant robot in household environment. , 2017, , .		8
27	Body Information Acquisition System of Redundant Musculo-Skeletal Humanoid. Springer Tracts in Advanced Robotics, 2006, , 249-258.	0.3	8
28	Design and development of a compressor-embedded pneumatic-driven musculoskeletal humanoid. , 2012, , .		7
29	Detection of object arrangement patterns using images for robot picking. ROBOMECH Journal, 2018, 5, .	0.9	7
30	A Kitchen Assistant Manipulation System of a Variety of Dishes based on Shape Estimation with Tracing Dish Surfaces by Sensing Proximity and Touch Information. Journal of the Robotics Society of Japan, 2012, 30, 889-898.	0.0	7
31	The designs and motions of a shoulder structure with a wide range of movement using bladebone-collarbone structures. , 2007, , .		6
32	Automatic parameter adjustment of reflexive walking of a musculo-skeletal humanoid. , 2008, , .		6
33	Design of tendon driven humanoid’s lower body equipped with redundant and high-powered actuators. , 2007, , .		5
34	Determining the optimal multiarticular muscle arrangement of a musculoskeletal robot for a specific motion using dynamics simulation. , 2012, , .		5
35	Design and modal analysis of feedback excitation control system for vertical series elastic manipulator. , 2013, , .		5
36	End-tip speed maximization for noncyclic swing motion based on time reversal integral in multiple-joint robots. , 2015, , .		5

#	ARTICLE	IF	CITATIONS
37	Impression Change on Nonverbal Non-Humanoid Robot by Interaction with Humanoid Robot. , 2019, , .		5
38	Analysis of time optimization for a robot arm with series elastic joints. , 2017, , .		4
39	Touching a Human or a Robot? Investigating Human-likeness of a Soft Warm Artificial Hand. , 2020, , .		4
40	Organization and Design of Biologically-Inspired Musculoskeletal Humanoids. Journal of the Robotics Society of Japan, 2010, 28, 689-694.	0.0	3
41	Determining an optimal multiarticular muscle arrangement of a musculoskeletal robot for a specific motion using human motion data. , 2012, , .		3
42	Jumping motion experiments on a NAO robot with elastic devices. , 2012, , .		3
43	A situation-aware action selection based on individual's preference using emotion estimation. , 2014, , .		3
44	Design method of non-circular pulleys for pneumatic-driven musculoskeletal robots that generate specific direction force by one-shot valve operations. , 2015, , .		3
45	Motion pattern generation based on the free vibration for an explosive increase of the kinetic energy in the robot end-link during swing motion. Transactions of the JSME (in Japanese), 2016, 82, 15-00405-15-00405.	0.1	3
46	Operating a robot by nonverbal voice based on ranges of formants. , 2017, , .		3
47	Towards Individualized Affective Human-Machine Interaction. , 2018, , .		3
48	Improvement of Performance for Musculoskeletal Robots by Mountable Actuator Units. Journal of Robotics and Mechatronics, 2010, 22, 391-401.	0.5	3
49	Kinetic Energy Maximization on Elastic Joint Robots Based on Feedback Excitation Control and Excitation Limit Hypersurface. Journal of Robotics and Mechatronics, 2013, 25, 347-354.	0.5	3
50	A Control Method for a Swarm of Plant Pot Robots that Uses Artificial Potential Fields for Effective Utilization of Sunlight. Journal of Robotics and Mechatronics, 2014, 26, 505-512.	0.5	3
51	Multi-sensor guided behaviors in whole body tendon-driven humanoid Kenta. , 0, , .		2
52	Robot motion evaluation of a musculoskeletal robot by simulation in terms of energy flow in the kinetic chain. , 2013, , .		2
53	Reaching hidden objects based on memory of environmental states and robot's movement and manipulation. , 2013, , .		2
54	Hanamogera speech robot which makes a person feel a talking is fun. , 2017, , .		2

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55	Generation of the swing motion pattern of a multi-link robot for the explosive increase of the kinetic energy of the end-link by exploiting dynamic coupling. Transactions of the JSME (in Japanese), 2017, 83, 16-00191-16-00191.	0.1	2
56	Allocating Multiple Types of Tasks to Heterogeneous Agents Based on the Theory of Comparative Advantage. Journal of Robotics, 2018, 2018, 1-18.	0.6	2
57	Proposal for Robot Hand and Forearm Design to Reproduce Human-to-human Physical Contact. , 2019, , .		2
58	Enhanced Mother Environment with Humanoid Specialization in IRT Robot Systems. Springer Tracts in Advanced Robotics, 2011, , 379-396.	0.3	2
59	Development of Human Mimetic Hand Aiming to Achieve both "Active Touch" Functions and "Passive Touch" Reproducibility. Transactions of the Society of Instrument and Control Engineers, 2019, 55, 739-744.	0.1	2
60	Gravity Compensation Modular Robot: Proposal and Prototyping. Journal of Robotics and Mechatronics, 2019, 31, 697-706.	0.5	2
61	CameraRoach: various electronic backs packs for Search and Rescue. , 2021, , .		2
62	Exploring the possibility of mechanical energy as a multipurpose evaluation function for learning of whole body dynamic motions. , 2012, , .		1
63	Analysis of the energy flow on quadruped robot having a flexible trunk joint. , 2015, , .		1
64	Investigation of joint action: Eye blinking behavior improving human-robot collaboration. , 2017, , .		1
65	2P1-V06 Allocating Multiple Tasks to Heterogeneous Robots Based on the Theory of Comparative Advantage. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2015, 2015, _2P1-V06_1-_2P1-V06_4.	0.0	1
66	Autonomous Behavior Integration System with Parallel Evaluating Monitors for Humanoid Robots. Journal of the Robotics Society of Japan, 2010, 28, 85-94.	0.0	1
67	2P1-H02 Automatic Generation of Evaluation Function from Human's Improvement Process of Intuitive Operation of Humanoid Robot based on time series of Sensor-based Motion Control(Sense, Motion) Tj ETQq1 1 0.784314 rgBT /Over (Robomec). 2013, 2013. _2P1-H02_1-_2P1-H02_4.	0.0	1
68	Analysis of the Energy Loss on Quadruped Robot Having a Flexible Trunk Joint. Journal of Robotics and Mechatronics, 2017, 29, 536-545.	0.5	1
69	Human-mimetic Hand Control Method Aiming at Reproducing Human-to-Human Contact Force. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2019, 2019, 2A1-G06.	0.0	1
70	Robotic Surgical training simulation for dexterity training of hands and fingers (LESUR). , 2020, , .		1
71	Analysis of Responses and Evaluation of Impressions by Older Adults to the Sensing/Voice-Calling Robot. Journal of the Robotics Society of Japan, 2021, 39, 866-869.	0.0	1
72	Developing a Collaborative Robotic Dishwasher Cell System for Restaurants. Lecture Notes in Networks and Systems, 2022, , 261-275.	0.5	1

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73	A humanoid behavior modification system by monitoring & evaluating causality between sensors & actions. , 0, , .		0
74	An autonomous reactive system for humanoids equipped with very many actuators and sensors. , 2007, , .		0
75	Design and realization of fingertiped and multifingered hand for pinching and rolling minute objects. , 2009, , .		0
76	Muscle geometric topology estimation based on muscle length - joint angle nonlinearity in tendon-driven robot systems. , 2010, , .		0
77	Integration of Artificial Neural Networks and linear systems for the output feedback control of nonlinear vibration systems. , 2014, , .		0
78	Development of a whole-body elastic humanoid "Baneoid". , 2015, , .		0
79	Painting creation method by impression feedback to a painting generator from an impression estimator. , 2016, , .		0
80	DECREASING OF NEGATIVE WORK BY ELASTICITY OF TRUNK JOINTS OF QUADRUPED ROBOT. , 2016, , 124-131.		0
81	Generation of the swing motion pattern of a multi-link robot for the explosive increase of the kinetic energy of the end-link by exploiting the elasticity and the dynamic coupling. Transactions of the JSME (in Japanese), 2017, 83, 16-00483-16-00483.	0.1	0
82	Deciding Shapes and Motions of a Robot based on Personal Preferences. , 2018, , .		0
83	2P1-D05 Joint-Muscle Body Designs and Static Motion Performance of Fully Tendon-Driven Musculoskeletal Humanoids. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2010, 2010, _2P1-D05_1-_2P1-D05_4.	0.0	0
84	2P1-C22 Picking up Stacked Dishes based on Approach Planning and Active Groping. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2010, 2010, _2P1-C22_1-_2P1-C22_4.	0.0	0
85	0717 Body Design of Musculo-Skeletal Humanoids : from small robots with spines to life-size humanoids. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2010, 2009.22, 120.	0.0	0
86	2P1-D02 A design and development about the placement of the actuator around hip joint output torque increase for a Musculo-Skeletal Humanoid. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2010, 2010, _2P1-D02_1-_2P1-D02_4.	0.0	0
87	2P1-C19 Musculo-Skeletal Humanoid's obtaining contact constraint motion by teaching poses using muscle tension control.. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2010, 2010, _2P1-C19_1-_2P1-C19_4.	0.0	0
88	2A2-B13 Muscle Layout Estimation Method Based on Nonlinearity of Relationship Between Muscle Length and Joint Angle in Tendon-Driven System. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2010, 2010, _2A2-B13_1-_2A2-B13_4.	0.0	0
89	2A2-C24 A Design Guideline for Motion Realization by a Pneumatic Robot that has Embedded Compressors. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2010, 2010, _2A2-C24_1-_2A2-C24_3.	0.0	0
90	2A1-E18 Grasplless Manipulation on a Robot Hand for Clearing away Dishes. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2010, 2010, _2A1-E18_1-_2A1-E18_4.	0.0	0

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91	1A1-J06 Study on control of magnitude and direction of contact force in grasping spherical objects on the points of upper hemisphere by a robot manipulator(Robot Hand Mechanism and Grasping Strategy). The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2011, 2011, 1A1-J06_1- 1A1-J06_3.	0.0	0
92	Analysis of the 1-Joint Spring-Motor Coupling System and Optimization Criteria Focusing on the Velocity Increasing Effect. Journal of the Robotics Society of Japan, 2011, 29, 675-682.	0.0	0
93	2P2-J03 Realization of a Behavior of Carrying and Getting on the Stepstool to be capable of manipulate objects on the Table by a Small Humanoid(Humanoid). The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2011, 2011, _2P2-J03_1-_2P2-J03_4.	0.0	0
94	2A1-G11 Realization of Jumping by a Humanoid Robot with Spring Equipment(Dynamics & Design of) Tj ETQq0 0 0 rgBT /Overlock 2012, 2012, _2A1-G11_1-_2A1-G11_4.	0.0	0
95	Development of aWeeding Robot that Identifies Registered Plants based on Extraction of a Single Leaf Image using Multiple Lights. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2015, 2015.6, 227-228.	0.0	0
96	Allocating 2 Types of Tasks to 2 Types of Robots Based on the Theory of Comparative Advantage. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2015, 2015.6, 209-210.	0.0	0
97	Elicitation of Specific Facial Expression by Robot's Action. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2015, 2015.6, 53-54.	0.0	0
98	Diversive Curiosity in Robots and Action Selection Method for Obtaining Unexperienced Sensory Information. Advances in Intelligent Systems and Computing, 2016, , 1343-1355.	0.5	0
99	Analysis of The Energy Loss on Quadruped Robot having a Flexible Trunk Joint. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2017, 2017, 1A1-C12.	0.0	0
100	Method for Robot to Create New Function by Uniting with Surrounding Objects. Advances in Intelligent Systems and Computing, 2019, , 346-357.	0.5	0
101	Human-Following Mobile Umbrella Robot Capable of Avoiding Obstacles. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2019, 2019, 2P2-A16.	0.0	0
102	Prototyping of a Quadruped Robot Having Passive Elastic Joints in the Trunk and Analysis of the Motion around Roll and Pitch axes. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2019, 2019, 2A2-K03.	0.0	0
103	Reducing Energy Loss in Walking of a Quadruped Robot with a Passive Elastic Trunk by Entrainment between Leg and Trunk. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2019, 2019, 2A2-K08.	0.0	0
104	Flight Planning of a Drone which Recognizes a Tree Branch Structure for Compensating Missing 3-Dimensional Data. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2019, 2019, 1A1-E06.	0.0	0
105	Stability analysis of Excitation Control for Elastic Joint Arm with Joint Limits. The Proceedings of the Dynamics & Design Conference, 2020, 2020, 551.	0.0	0
106	Sound Reactive Bio-Inspired Snake Robot Simulation. , 2020, , .		0
107	Study on Efficiency of Cleaning by Large and Small Robots Using Path Search Method. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2020, 2020, 2P1-H05.	0.0	0
108	A Curiosity Algorithm for Robots Based on the Free Energy Principle. , 2022, , .		0

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109	An anthropomorphic surgical simulator arm based on series elastic actuators with haptic feedback. , 2021, , .		0
110	A Single Motor Driving and Steering Mechanism for a Transformable Bicycle. , 2022, , .		0