Kei Okada

List of Publications by Year
in descending order

158	1,621	933447	677142
papers	citations	10 h-index	22 g-index

160	160	160	999
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design, Modeling, and Control of an Aerial Robot DRAGON: A Dual-Rotor-Embedded Multilink Robot With the Ability of Multi-Degree-of-Freedom Aerial Transformation. IEEE Robotics and Automation Letters, 2018, 3, 1176-1183.	5.1	132
2	Development of life-sized high-power humanoid robot JAXON for real-world use. , 2015, , .		95
3	Online decision of foot placement using singular LQ preview regulation. , 2011, , .		87
4	Design of high torque and high speed leg module for high power humanoid. , 2010, , .		85
5	Design principles of a human mimetic humanoid: Humanoid platform to study human intelligence and internal body system. Science Robotics, 2017, 2, .	17.6	78
6	Vision based behavior verification system of humanoid robot for daily environment tasks. , 2006, , .		72
7	Design Approach of Biologically-Inspired Musculoskeletal Humanoids. International Journal of Advanced Robotic Systems, 2013, 10, 216.	2.1	56
8	Online walking pattern generation for push recovery and minimum delay to commanded change of direction and speed. , 2012, , .		45
9	Component Modularized Design of Musculoskeletal Humanoid Platform Musashi to Investigate Learning Control Systems. , 2019, , .		40
10	Transformable multirotor with two-dimensional multilinks: modeling, control, and motion planning for aerial transformation. Advanced Robotics, 2016, 30, 825-845.	1.8	34
11	The Exchange of Knowledge Using Cloud Robotics. IEEE Robotics and Automation Letters, 2018, 3, 1072-1079.	5.1	32
12	Design methodology for the thorax and shoulder of human mimetic musculoskeletal humanoid Kenshiro -a thorax structure with rib like surface -. , 2012, , .		29
13	Development of life-sized humanoid robot platform with robustness for falling down, long time working and error occurrence. , 2017, , .		29
14	Recognition and manipulation integration for a daily assistive robot working on kitchen environments. , 2010, , .		28
15	Multi-cue 3D object recognition in knowledge-based vision-guided humanoid robot system. , 2007, , .		26
16	System integration of a daily assistive robot and its application to tidying and cleaning rooms. , 2010, , .		23
17	High Speed Whole Body Dynamic Motion Experiment with Real Time Master-Slave Humanoid Robot System. , 2018, , .		23
18	Working with movable obstacles using on-line environment perception reconstruction using active sensing and color range sensor. , 2010, , .		22

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19	Bilateral Humanoid Teleoperation System Using Whole-Body Exoskeleton Cockpit TABLIS. IEEE Robotics and Automation Letters, 2020, 5, 6419-6426.	5.1	21
20	Lower thigh design of detailed musculoskeletal humanoid “Kenshiro”. , 2012, , .		18
21	Development of humanoid robot system for disaster response through team NEDO-JSK's approach to DARPA Robotics Challenge Finals. , 2015, , .		17
22	Distributed torque estimation toward low-latency variable stiffness control for gear-driven torque sensorless humanoid. , 2017, , .		17
23	Global planning of whole-body manipulation by humanoid robot based on transition graph of object motion and contact switching. Advanced Robotics, 2017, 31, 322-340.	1.8	16
24	Task guided attention control and visual verification in tea serving by the daily assistive humanoid HRP2JSK. , 2008, , .		15
25	Bipedal oriented whole body master-slave system for dynamic secured locomotion with LIP safety constraints. , 2017, , .		15
26	Online Self-body Image Acquisition Considering Changes in Muscle Routes Caused by Softness of Body Tissue for Tendon-driven Musculoskeletal Humanoids. , 2018, , .		15
27	Biped humanoid navigation system supervised through interruptible user-interface with asynchronous vision and foot sensor monitoring. , 2014, , .		14
28	Determining proper grasp configurations for handovers through observation of object movement patterns and inter-object interactions during usage. , 2014, , .		14
29	Multi-layered real-time controllers for humanoid's manipulation and locomotion tasks with emergency stop. , 2015, , .		14
30	Aerial Regrasping: Pivoting with Transformable Multilink Aerial Robot. , 2020, , .		14
31	A Hybrid Approach to Practical Self Collision Detection System of Humanoid Robot. , 2006, , .		13
32	Shuffle motion for humanoid robot by sole load distribution and foot force control. , 2015, , .		13
33	Biomimetic design of musculoskeletal humanoid knee joint with patella and screw-home mechanism. , 2011, , .		12
34	Achievement of dynamic tennis swing motion by offline motion planning and online trajectory modification based on optimization with a humanoid robot. , 2016, , .		12
35	Flight Motion of Passing Through Small Opening by DRAGON: Transformable Multilinked Aerial Robot. , 2018, , .		12
36	External Wrench Estimation for Multilink Aerial Robot by Center of Mass Estimator Based on Distributed IMU System. , 2019, , .		12

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37	Robust real-time visual tracking using dual-frame deep comparison network integrated with correlation filters. , 2017, , .		11
38	Multi-rigid-body dynamics and online model predictive control for transformable multi-links aerial robot. Advanced Robotics, 2019, 33, 971-984.	1.8	11
39	Manipulation of multiple objects in close proximity based on visual hierarchical relationships. , 2013, , .		10
40	Cooking Behavior with Handling General Cooking Tools based on a System Integration for a Life-sized Humanoid Robot. Paladyn, 2013, 4, .	2.7	10
41	Enhanced Modeling and Control for Multilinked Aerial Robot With Two DoF Force Vectoring Apparatus. IEEE Robotics and Automation Letters, 2021, 6, 135-142.	5.1	10
42	Realization of Trash Separation of Bottles and Cans for Humanoids using Eyes, Hands and Ears. Journal of the Robotics Society of Japan, 2007, 25, 813-821.	0.1	10
43	Predicting Part Affordances of Objects Using Two-Stream Fully Convolutional Network with Multimodal Inputs. , 2018, , .		9
44	Development and Evaluation of Mixed Reality Co-eating System: Sharing the Behavior of Eating Food with a Robot Could Improve Our Dining Experience. , 2020, , .		9
45	Robust continuous motion strategy against muscle rupture using online learning of redundant intersensory networks for musculoskeletal humanoids. Robotics and Autonomous Systems, 2022, 152, 104067.	5.1	9
46	Integrating Recognition and Action Through Task-Relevant Knowledge for Daily Assistive Humanoids. Advanced Robotics, 2009, 23, 459-480.	1.8	8
47	Creating household environment map for environment manipulation using color range sensors on environment and robot. , 2011, , .		8
48	Whole body joint load reduction control for high-load tasks of humanoid robot through adapting joint torque limitation based on online joint temperature estimation. , 2014, , .		8
49	Online master-slave footstep control for dynamical human-robot synchronization with wearable sole sensor. , 2016, , .		8
50	Pick-and-verify: verification-based highly reliable picking system for various target objects in clutter. Advanced Robotics, 2017, 31, 311-321.	1.8	8
51	Musculoskeletal design, control, and application of human mimetic humanoid Kenshiro. Bioinspiration and Biomimetics, 2019, 14, 036011.	2.9	8
52	Semi-Passive Walk and Active Walk by One Bipedal Robot. , 2018, , .		7
53	Design of Tiny High-Power Motor Driver without Liquid Cooling for Humanoid JAXON. , 2018, , .		7
54	Task-specific Self-body Controller Acquisition by Musculoskeletal Humanoids: Application to Pedal Control in Autonomous Driving. , 2019, , .		7

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55	Forceful Valve Manipulation With Arbitrary Direction by Articulated Aerial Robot Equipped With Thrust Vectoring Apparatus. IEEE Robotics and Automation Letters, 2022, 7, 4893-4900.	5.1	7
56	Development of a full body multi-axis soft tactile sensor suit for life sized humanoid robot and an algorithm to detect contact states. , 2012, , .		6
57	Implementation of a robot-human object handover controller on a compliant underactuated hand using joint position error measurements for grip force and load force estimations. , 2014, , .		6
58	Contact involving whole-body behavior generation based on contact transition strategies switching. , 2015, , .		6
59	Implementation of a framework for learning handover grasp configurations through observation during human-robot object handovers. , 2015, , .		6
60	Achievement of recognition guided teleoperation driving system for humanoid robots with vehicle path estimation. , 2015, , .		6
61	Achievement of localization system for humanoid robots with virtual horizontal scan relative to improved odometry fusing internal sensors and visual information. , 2016, , .		6
62	Rotational Sliding Motion Generation for Humanoid Robot by Force Distribution in Each Contact Face. IEEE Robotics and Automation Letters, 2017, 2, 2088-2095.	5.1	6
63	Goal-Oriented Simulation-Based Motion Interpolator for Complex Contact Transition: Experiments on Knee-Contact Behavior. , 2018, , .		6
64	Continuous Modeling of Affordances in a Symbolic Knowledge Base. , 2019, , .		6
65	Reflex-Based Motion Strategy of Musculoskeletal Humanoids under Environmental Contact Using Muscle Relaxation Control. , 2019, , .		6
66	Online Acquisition of Close-Range Proximity Sensor Models for Precise Object Grasping and Verification. IEEE Robotics and Automation Letters, 2020, 5, 5993-6000.	5.1	6
67	Adaptive Robotic Tool-Tip Control Learning Considering Online Changes in Grasping State. IEEE Robotics and Automation Letters, 2021, 6, 5992-5999.	5.1	6
68	Adaptive Body Schema Learning System Considering Additional Muscles for Musculoskeletal Humanoids. IEEE Robotics and Automation Letters, 2022, 7, 3459-3466.	5.1	6
69	Realization of Dynamics Simulator Embedded Robot Brain for Humanoid Robots. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	5
70	A Method of Joint Angle Estimation Using Only Relative Changes in Muscle Lengths for Tendon-Driven Humanoids with Complex Musculoskeletal Structures. , 2018, , .		5
71	TWIMP: Two-Wheel Inverted Musculoskeletal Pendulum as a Learning Control Platform in the Real World with Environmental Physical Contact. , 2018, , .		5
72	Model Reference Adaptive Control of Multirotor for Missions with Dynamic Change of Payloads During Flight. , 2020, , .		5

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73	Imitation Learning With Additional Constraints on Motion Style Using Parametric Bias. IEEE Robotics and Automation Letters, 2021, 6, 5897-5904.	5.1	5
74	Diabolo Orientation Stabilization by Learning Predictive Model for Unstable Unknown-Dynamics Juggling Manipulation. , 2020, , .		5
75	Design Optimization of Musculoskeletal Humanoids with Maximization of Redundancy to Compensate for Muscle Rupture. , 2021, , .		5
76	Gesture Recognition for Humanoids using Proto-symbol Space. , 2006, , .		4
77	Tidying and Cleaning Rooms using a Daily Assistive Robot - An Integrated System for Doing Chores in the Real World -. Paladyn, 2010, 1, .	2.7	4
78	View-based multi-touch gesture interface for furniture manipulation robots. , 2011, , .		4
79	End point tracking for a moving object with several attention regions by composite vision system. , 2011, , .		4
80	Transformable semantic map based navigation using autonomous deep learning object segmentation. , 2016, , .		4
81	Online generation and control of quasi-static multi-contact motion by PWT Jacobian matrix with contact wrench estimation and joint load reduction*. Advanced Robotics, 2021, 35, 48-63.	1.8	4
82	Environment Recognition and Behavior Control of Humanoid for Daily Tasks. Journal of the Robotics Society of Japan, 2008, 26, 330-333.	0.1	4
83	Design of Soft Flexible Wire-driven Finger Mechanism for Contact Pressure Distribution. , 2019, , .		4
84	Drive-Train Design in JAXON3-P and Realization of Jump Motions: Impact Mitigation and Force Control Performance for Dynamic Motions. , 2020, , .		4
85	Self-Supervised Learning of Visual Servoing for Low-Rigidity Robots Considering Temporal Body Changes. IEEE Robotics and Automation Letters, 2022, 7, 7881-7887.	5.1	4
86	Environment situation reasoning integrating human recognition and life sound recognition using DBN. , 2009, , .		3
87	Pedestrian detection using a LRF and a small omni-view camera for outdoor personal mobility robot. , 2010, , .		3
88	Controlling tendon driven humanoids with a wearable device with Direct-Mapping Method. , 2012, , .		3
89	Interactive symbol generation of task planning for daily assistive robot. , 2012, , .		3
90	Assistive system research for creative life management on robotics and home economics. , 2013, , .		3

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91	Retrieving unknown objects using robot in-the-loop based interactive segmentation. , 2016, , .		3
92	Tool force adaptation in soil-digging task for humanoid robot. , 2017, , .		3
93	Effect of Walking with a Robot on Child-Child Interactions. , 2018, , .		3
94	Ankle-hip-stepping stabilizer on tendon-driven humanoid Kengoro by integration of muscle-joint-work space controllers for knee-stretched humanoid balance. , 2019, , .		3
95	Modification of muscle antagonistic relations and hand trajectory on the dynamic motion of Musculoskeletal Humanoid. , 2019, , .		3
96	Achievement of Online Agile Manipulation Task for Aerial Transformable Multilink Robot. , 2019, , .		3
97	Toward Autonomous Driving by Musculoskeletal Humanoids: A Study of Developed Hardware and Learning-Based Software. IEEE Robotics and Automation Magazine, 2020, 27, 84-96.	2.0	3
98	Few-experiential learning system of robotic picking task with selective dual-arm grasping. Advanced Robotics, 2020, 34, 1171-1189.	1.8	3
99	Miniature Tangible Cube: Concept and Design of Target-Object-Oriented User Interface for Dual-Arm Telemanipulation. IEEE Robotics and Automation Letters, 2021, 6, 6977-6984.	5.1	3
100	Biomimetic Operational Space Control for Musculoskeletal Humanoid Optimizing Across Muscle Activation and Joint Nullspace. , 2021, , .		3
101	Development of Amphibious Humanoid for Behavior Acquisition on Land and Underwater. , 2021, , .		3
102	Exceeding the Maximum Speed Limit of the Joint Angle for the Redundant Tendon-driven Structures of Musculoskeletal Humanoids. , 2020, , .		3
103	Environmentally Adaptive Control Including Variance Minimization Using Stochastic Predictive Network with Parametric Bias: Application to Mobile Robots. , 2021, , .		3
104	Design and Development for Humanoid-Vehicle Transformer Platform with Plastic Resin Structure and Distributed Redundant Sensors. , 2022, , .		3
105	Creating Household Environment Map and Modeling Unknown Objects Using Fast Registration with Color Histogram of Color Range Image. Journal of the Robotics Society of Japan, 2011, 29, 694-701.	0.1	2
106	What am i doing? Robotic self-action recognition. , 2016, , .		2
107	Development of High-Speed and High-Power Humanoid Research Platform JAXON. Journal of the Robotics Society of Japan, 2016, 34, 458-467.	0.1	2
108	Perspective from International Robotics Competicion. Journal of the Robotics Society of Japan, 2017, 35, 9-12.	0.1	2

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109	STAIR3D: Simultaneous tracking and incremental registration for modeling 3D handheld objects. , 2017, , .		2
110	Development of Musculoskeletal Legs with Planar Interskeletal Structures to Realize Human Comparable Moving Function. , 2021, , .		2
111	Online Learning of Danger Avoidance for Complex Structures of Musculoskeletal Humanoids and Its Applications. , 2021, , .		2
112	Instruction and Recognition System for Operating Variable Structures by Manipulation Robots. Transactions of the Society of Instrument and Control Engineers, 2012, 48, 86-92.	0.2	2
113	Basic Implementation of FPGA-GPU Dual SoC Hybrid Architecture for Low-Latency Multi-DOF Robot Motion Control. , 2020, , .		2
114	Aerial Manipulation Using Contact with the Environment by Thrust Vectorable Multilinked Aerial Robot. , 2022, , .		2
115	Grasp observation and reproduction by humanoid robots using color camera and 3D sensor. , 2011, , .		1
116	Creating socially acceptable robots: Leaning grasp configurations for object handovers from demonstrations. , 2013, , .		1
117	Implementation of Human Mimetic Knee Joint with Screw-Home Mechanism and Achievement of Motion under Environment Contact by Musculoskeletal Humanoid. Journal of the Robotics Society of Japan, 2014, 32, 887-894.	0.1	1
118	Dual Connected Bi-Copter with New Locomotion Feasibility That Can Fly at Arbitrary Tilt Angle. Journal of the Robotics Society of Japan, 2015, 33, 285-291.	0.1	1
119	Design of Human Mimetic Musculoskeletal Upper Limb by Adhesion of Muscles and Bones. Journal of the Robotics Society of Japan, 2015, 33, 704-711.	0.1	1
120	Evaluation-controlling mechanism of perception, planning, and execution for a life-sized humanoid robot. , 2016, , .		1
121	Whole-body Pushing Manipulation of Large and Heavy Objects by Life-sized Humanoidbased on Contact Posture Planning and Online Footstep Modification. Journal of the Robotics Society of Japan, 2016, 34, 448-457.	0.1	1
122	Tricycle Manipulation by Arms and Legs of Humanoid Robot based on Active and Passive Switching Control System. Journal of the Robotics Society of Japan, 2016, 34, 468-477.	0.1	1
123	Speed governing behavior on parallel two-wheeled electric scooter by life-sized humanoid robot based on learning control with online tuning for PID gain during control. Transactions of the JSME (in Japanese), 2018, 84, 18-00032-18-00032.	0.2	1
124	Design, Control and Preliminary Test of Robotic Ankle Prosthesis. , 2018, , .		1
125	Humanoid Robotâ€™s Force-Based Heavy Manipulation Tasks with Torque-Controlled Arms and Wrist Force Sensors. , 2019, , .		1
126	Automatic Grouping of Redundant Sensors and Actuators Using Functional and Spatial Connections: Application to Muscle Grouping for Musculoskeletal Humanoids. IEEE Robotics and Automation Letters, 2021, 6, 1981-1988.	5.1	1

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127	Extended balance stabilization control for humanoid robot on rotational slope based on seesaw-inverted-pendulum model. Advanced Robotics, 2021, 35, 1116-1130.	1.8	1
128	Fixed-root Aerial Manipulator: Design, Modeling, and Control of Multilink Aerial Arm to Adhere Foot Module to Ceilings using Rotor Thrust. , 2021, , .		1
129	A Simultaneous Estimation Method of Camera Pose and Environment Model using Head Mounted Stereo Vision. Journal of the Robotics Society of Japan, 2008, 26, 470-475.	0.1	1
130	Object Recognition with Multi Visual Cue Integration for Shared Knowledge-based Action Recognition System. Journal of the Robotics Society of Japan, 2008, 26, 537-545.	0.1	1
131	Robot Motion Generation by Time-series Inverse Kinematics Optimization Considering Time-variance/Time-invariance and Adjacency of Configuration. Transactions of the Society of Instrument and Control Engineers, 2019, 55, 664-673.	0.2	1
132	Human Mimetic Forearm and Hand Design with a Radioulnar Joint and Flexible Machined Spring Finger for Human Skillful Motions. Journal of Robotics and Mechatronics, 2020, 32, 445-458.	1.0	1
133	Demonstration Experiment of Automobile Driving by Tendon-driven Humanoids and Prosthesis Development toward Social Implementation of Robot Technology. Journal of the Robotics Society of Japan, 2022, 40, 240-250.	0.1	1
134	Waterproof Soft Robot Hand with Variable Stiffness Wire-driven Finger Mechanism Using Low Melting Point Alloy for Contact Pressure Distribution and Concentration. , 2022, , .		1
135	Human-mimetic binaural ear design and sound source direction estimation for task realization of musculoskeletal humanoids. ROBOMECH Journal, 2022, 9, .	1.6	1
136	Grasp Pose Selection Under Region Constraints for Dirty Dish Grasps Based on Inference of Grasp Success Probability through Self-Supervised Learning. , 2022, , .		1
137	Head-mounted 3D multi sensor system for modeling in daily-life environment. , 2009, , .		0
138	Redundancy embedding for search space reduction using deep auto-encoder: Application to collision-free posture generation. , 2016, , .		0
139	Coarse-to-fine Humanoid Motion Planning Using COM Feasible Region and Achievement of Humanoids Ladder Climbing and Transition. Journal of the Robotics Society of Japan, 2018, 36, 66-77.	0.1	0
140	Transparent Integration of Humanoid Robot System for Performing Various Tasks. , 2018, , .		0
141	Does an Introduction of a Person in a Group by a Robot Have a Positive Effect on People's Communication?. , 2018, , .		0
142	Stability Recognition with Active Vibration for Bracing Behaviors and Motion Extensions Using Environment in Musculoskeletal Humanoids. , 2021, , .		0
143	A Basic Study for Acceptance of Robots as Meal Partners: Number of Robots During Mealtime, Frequency of Solitary Eating, and Past Experience with Robots. , 2021, , .		0
144	Motion Modification Method of Musculoskeletal Humanoids by Human Teaching Using Muscle-Based Compensation Control. , 2021, , .		0

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145	1A1-K11 Designing Thorax and Shoulder of Human Mimetic Musculoskeletal Humanoid Kenshiro : Development of Thorax with Rib Like Surface(Robot Hand Mechanism and Grasping Strategy(1)). The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2012, 2012, _1A1-K11_1-_1A1-K11_4.	0.0	0
146	2P1-A12 Design of Upper limb for Detail Human Mimetic Musculoskeletal Humanoid Kenshiro(Humanoid). The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2013, 2013, _2P1-A12_1-_2P1-A12_2.	0.0	0
147	3P1-G05 Design of Forearm for Detail Human Mimetic Musculoskeletal Humanoid Kenshiro : Forearm with Radius and Ulna by Linear actuator with integrated sensor system(Medical Robotics and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T (Robomec), 2014, 2014, _3P1-G05_1-_3P1-G05_2.	0.0	0
148	Achievement of Pedaling Manipulation Based on Cooperative System for Active Leg and Passive Leg by Tendon-driven Humanoid. Transactions of the Society of Instrument and Control Engineers, 2016, 52, 428-436.	0.2	0
149	ROS, 5 Years After. Journal of the Robotics Society of Japan, 2017, 35, 270-273.	0.1	0
150	Contact-motion Planning Integrating Multiple Contact Transition Strategies and its Application to Slide Contact Motion for Humanoid Robot. Journal of the Robotics Society of Japan, 2017, 35, 393-402.	0.1	0
151	Development of Life-Sized Humanoid Robot Platform (RHP2) with Tough Contact Point for Continuing to Perform After Falls. Journal of the Robotics Society of Japan, 2018, 36, 703-712.	0.1	0
152	Development of Waterproof Suit for Life-sized Humanoid and Walking Control in Water using Online Buoyancy Estimation and Footstep Modification. Journal of the Robotics Society of Japan, 2019, 37, 427-437.	0.1	0
153	Design Method for Weight Saving Based on Joint Drive Force and Frame Stiffness and Realization of Jump Motions by a Lightweight and High-Power Humanoid JAXON3-P. Journal of the Robotics Society of Japan, 2020, 38, 975-984.	0.1	0
154	Path Planning Based on Differential Kinematics for Passing Through Small Opening by Transformable Multilinked Aerial Robot. Springer Proceedings in Advanced Robotics, 2020, , 536-548.	1.3	0
155	Applications of Stretch Reflex for the Upper Limb of Musculoskeletal Humanoids: Protective Behavior, Postural Stability, and Active Induction. , 2020, , .		0
156	Biomimetic Control Scheme for Musculoskeletal Humanoids Based on Motor Directional Tuning in the Brain. , 2020, , .		0
157	Construction of a Basic System for Research on Housework Assistance Robots through the Realization of Bento-serving Behavior as a Task That Requires Dialogue and Tool Use. Transactions of the Society of Instrument and Control Engineers, 2022, 58, 290-303.	0.2	0
158	Development of prosthesis prototype through industry-government-academia collaboration of automobile driving by tendon-driven humanoids. , 2022, , .		0