Koichi Suzumori

List of Publications by Year
in descending order

302	3,724	218677	214800
papers	citations	26 h-index	47 g-index

306	306	306	2104
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Analysis of the multi-balloon dielectric elastomer actuator for traveling wave motion. Sensors and Actuators A: Physical, 2022, 333, 113243.	4.1	14
2	Roadmap on soft robotics: multifunctionality, adaptability and growth without borders. Multifunctional Materials, 2022, 5, 032001.	3.7	37
3	Giraffe Neck Robot: First Step Toward a Powerful and Flexible Robot Prototyping Based on Giraffe Anatomy. IEEE Robotics and Automation Letters, 2022, 7, 3539-3546.	5.1	13
4	Experimental comparison of antagonistic hydraulic muscle actuation under single/dual and zero/overlapped servovalve configurations. Mechatronics, 2022, 83, 102737.	3.3	2
5	Soft Tensegrity Robot Driven by Thin Artificial Muscles for the Exploration of Unknown Spatial Configurations. IEEE Robotics and Automation Letters, 2022, 7, 5349-5356.	5.1	21
6	Three-Dimensional Ion Polymerâ€“Metal Composite Soft Robots. Journal of Robotics and Mechatronics, 2022, 34, 231-233.	1.0	2
7	Overview of the Kakenhi Grant-in-Aid for Scientific Research on Innovative Areas: Science of Soft Robots. Journal of Robotics and Mechatronics, 2022, 34, 195-201.	1.0	3
8	Special Issue on Science of Soft Robots. Journal of Robotics and Mechatronics, 2022, 34, 193-194.	1.0	0
9	Design and Fabrication of 3D Papercraft IPMC Robots. , 2022, , .		1
10	Utility of a wearable robot for the fingers that uses pneumatic artificial muscles for patients with post-stroke spasticity. , 2022, 13, 12-16.		1
11	Stability analysis of multi-serial-link mechanism driven by antagonistic multiarticular artificial muscles. ROBOMECH Journal, 2022, 9, .	1.6	1
12	Alternating pressure control system for hydraulic robots. Mechatronics, 2022, 85, 102822.	3.3	8
13	Safety-enhanced control strategy of a power soft robot driven by hydraulic artificial muscles. ROBOMECH Journal, 2021, 8, .	1.6	7
14	Au/Pt Double-Layer Electrodes and Expanding Internal Chamber for Improving Air-Hose-Free Thin McKibben Muscles. , 2021, , .		1
15	A method to 3D print a programmable continuum actuator with single material using internal constraint. Sensors and Actuators A: Physical, 2021, 324, 112674.	4.1	6
16	Shape Recognition of a Tensegrity With Soft Sensor Threads and Artificial Muscles Using a Recurrent Neural Network. IEEE Robotics and Automation Letters, 2021, 6, 6228-6234.	5.1	13
17	Tension Control Method Utilizing Antagonistic Tension to Enlarge the Workspace of Coupled Tendon-Driven Articulated Manipulator. IEEE Robotics and Automation Letters, 2021, 6, 6647-6653.	5.1	4
18	Self-excitation pneumatic soft actuator inspired by vocal cords. Sensors and Actuators A: Physical, 2021, 331, 112816.	4.1	7

#	Article	IF	Citations
19	Walking Trajectory Design of Hydraulic Legged Robot with Limited Powered Pump. , 2021, , .		0
20	Design of a Compliant 7-DoF Power Soft Robot driven by Hydraulic Artificial Muscles. , 2021, , .		0
21	Recurrent Braiding of Thin McKibben Muscles to Overcome Their Limitation of Contraction. Soft Robotics, 2020, 7, 251-258.	8.0	19
22	Development of Hiryu-II: A Long-Reach Articulated Modular Manipulator Driven by Thrusters. IEEE Robotics and Automation Letters, 2020, 5, 4963-4969.	5.1	6
23	Design of knee support device based on four-bar linkage and hydraulic artificial muscle. ROBOMECH Journal, 2020, 7, .	1.6	12
24	A small three-way valve using particle excitation driven by a single piezoelectric transducer for hydraulic actuator. Sensors and Actuators A: Physical, 2020, 316, 112363.	4.1	4
25	A Wearable Ankle Exercise Device for Deep Vein Thrombosis Prevention Using Thin McKibben Muscles. , 2020, , .		4
26	Experimental Verification of Impact Absorbing Property of Wire Driven Joint with Synthetic Fiber Rope. , 2020, , .		0
27	Proposal and Prototyping of Self-Excited Pneumatic Actuator Using Automatic-Flow-Path-Switching-Mechanism. IEEE Robotics and Automation Letters, 2020, 5, 3058-3065.	5.1	4
28	Tendon-driven Elastic Telescopic Arm -Integration of Linear Motion and Bending Motion-. , 2020, , .		3
29	New Soft Robot Hand Configuration With Combined Biotensegrity and Thin Artificial Muscle. IEEE Robotics and Automation Letters, 2020, 5, 4345-4351.	5.1	31
30	A Compact McKibben Muscle Based Bending Actuator for Close-to-Body Application in Assistive Wearable Robots. IEEE Robotics and Automation Letters, 2020, 5, 3042-3049.	5.1	29
31	Pneumatic Soft Actuator Using Self-Excitation Based on Automatic-Jet-Switching-Structure. IEEE Robotics and Automation Letters, 2020, 5, 4042-4048.	5.1	4
32	Design of a Guide Pulley Achieving Identical Wire Path Length for a Double Joint Mechanism. , 2020, , .		0
33	PF-IPMC: Paper/Fabric Assisted IPMC Actuators for 3D Crafts. IEEE Robotics and Automation Letters, 2020, 5, 4035-4041.	5.1	7
34	Application of Micro-Electro-Mechanical Systems (MEMS) as Sensors: A Review. Journal of Robotics and Mechatronics, 2020, 32, 281-288.	1.0	24
35	New Robotics Pioneered by Fluid Power. Journal of Robotics and Mechatronics, 2020, 32, 854-862.	1.0	8
36	Special Issue on MEMS for Robotics and Mechatronics. Journal of Robotics and Mechatronics, 2020, 32, 279-280.	1.0	0

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37	Simultaneous 3D Forming and Patterning Method of Realizing Soft IPMC Robots. , 2020, , .		2
38	Experimental Evaluation of Textile Mechanisms Made of Artificial Muscles. , 2019, , .		17
39	IPMC Monolithic Thin Film Robots Fabricated Through a Multi-Layer Casting Process. IEEE Robotics and Automation Letters, 2019, 4, 1335-1342.	5.1	25
40	New Hydraulic Components for Tough Robots. Springer Tracts in Advanced Robotics, 2019, , 401-451.	0.4	4
41	Active Textile Braided in Three Strands with Thin McKibben Muscle. Soft Robotics, 2019, 6, 250-262.	8.0	32
42	Fabrication of â€œ18 Weaveâ€•Muscles and Their Application to Soft Power Support Suit for Upper Limbs Using Thin McKibben Muscle. IEEE Robotics and Automation Letters, 2019, 4, 2532-2538.	5.1	53
43	Bundled Wire Drive: Proposal and Feasibility Study of a Novel Tendon-Driven Mechanism Using Synthetic Fiber Ropes. IEEE Robotics and Automation Letters, 2019, 4, 966-972.	5.1	11
44	Soft Robotics seen from Actuator Technology. Journal of the Robotics Society of Japan, 2019, 37, 26-29.	0.1	2
45	Soft Polymer-Electrolyte-Fuel-Cell Tube Realizing Air-Hose-Free Thin McKibben Muscles. , 2019, , .		7
46	Electrically-Driven Soft Fluidic Actuators Combining Stretchable Pumps With Thin McKibben Muscles. Frontiers in Robotics and AI, 2019, 6, 146.	3.2	24
47	Hydraulic Actuators for Tough Robots. Journal of the Robotics Society of Japan, 2019, 37, 829-834.	0.1	1
48	Frequency Response of Honeycomb Structured IPMC Actuator Fabricated through 3D Printing with Dispersion Liquid. , 2019, , .		1
49	A small three-way valve using particle excitation with piezoelectric transducers for hydraulic actuators. Advanced Robotics, 2018, 32, 500-510.	1.8	5
50	A Modular Soft Robotic Wrist for Underwater Manipulation. Soft Robotics, 2018, 5, 399-409.	8.0	98
51	Trends in hydraulic actuators and components in legged and tough robots: a review. Advanced Robotics, 2018, 32, 458-476.	1.8	54
52	Modeling of Synthetic Fiber Ropes and Frequency Response of Long-Distance Cableâ€“Pulley System. IEEE Robotics and Automation Letters, 2018, 3, 1743-1750.	5.1	16
53	Index Finger of a Human-Like Robotic Hand Using Thin Soft Muscles. IEEE Robotics and Automation Letters, 2018, 3, 92-99.	5.1	53
54	Long-Legged Hexapod Giacometti Robot Using Thin Soft McKibben Actuator. IEEE Robotics and Automation Letters, 2018, 3, 100-107.	5.1	26

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55	Fabrication and Evaluation of Hydraulic Particle Excitation Valve Vibrated Perpendicularly to Direction of Flow Path. JFPS International Journal of Fluid Power System, 2018, 11, 9-17.	0.3	2
56	Effect of Pre-emulsion State for a Generation of Nano-emulsion by an Ultrasonic Vibration Device. IEEJ Transactions on Sensors and Micromachines, 2018, 138, 394-400.	0.1	0
57	Micro Droplets Generation in a Flowing Continuous Liquid Using an Ultrasonic Transducer. , 2018, , .		1
58	Prototyping of cylindrical structures made of helical artificial muscles. Transactions of the JSME (in) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.2	1
59	A Proposal of Super Long Reach Articulated Manipulator with Gravity Compensation using Thrusters. , 2018, , .		9
60	Soft manipulator using thin McKibben actuator. , 2018, , .		16
61	Super-low friction and lightweight hydraulic cylinder using multi-directional forging magnesium alloy and its application to robotic leg. Advanced Robotics, 2018, 32, 524-534.	1.8	7
62	A proposal of a new rotational-compliant joint with oil-hydraulic McKibben artificial muscles. Advanced Robotics, 2018, 32, 511-523.	1.8	25
63	Braiding Thin McKibben Muscles to Enhance Their Contracting Abilities. IEEE Robotics and Automation Letters, 2018, 3, 3240-3246.	5.1	35
64	Muscle textile to implement soft suit to shift balancing posture of the body. , 2018, , .		29
65	Special Issue on â€˜New Hydraulic Components for Tough Robotsâ€™. Advanced Robotics, 2018, 32, 457-457.	1.8	0
66	Recursive Gauss-Seidel median filter for CT lung image denoising. , 2017, , .		0
67	Design of thin McKibben muscle and multifilament structure. Sensors and Actuators A: Physical, 2017, 261, 66-74.	4.1	106
68	Analytical and experimental study on actuation time of displacement amplified electromagnetic actuator. , 2017, , .		1
69	Multifilament pneumatic artificial muscles to mimic the human neck. , 2017, , .		11
70	Development of a 20-m-long Giacometti arm with balloon body based on kinematic model with air resistance. , 2017, , .		29
71	Proposal of tendon-driven elastic telescopic arm and initial bending experiment. , 2017, , .		4
72	Optimization of orifice position in particle-excitation valve for proportional flow control. ROBOMECH Journal, 2017, 4, .	1.6	3

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73	Notice of Removal: A small three-way valve for hydraulic actuators using piezoelectric transducers. , 2017, , .		0
74	Hydraulic Control by Flow Control Valve Using Particle Excitation. JFPS International Journal of Fluid Power System, 2017, 10, 38-46.	0.3	2
75	Particle-Excitation Flow-Control Valve using Piezo Vibration-Improvement for a High Flow Rate and Research on Controllability. IEEJ Transactions on Sensors and Micromachines, 2017, 137, 32-37.	0.1	5
76	Development of a stable localized visual inspection system for underwater structures. Advanced Robotics, 2016, 30, 1415-1429.	1.8	18
77	A novel long-reach robot with propulsion through water-jet. , 2016, , .		7
78	Design of a weight-compensated and coupled tendon-driven articulated long-reach manipulator. , 2016, , .		18
79	Hose-free pneumatic bags-muscle driven by gas/liquid conversion. , 2016, , .		5
80	Turning method that minimizes turning radius for snake-like robot with active joints and active wheels. , 2016, , .		0
81	Untethered three-arm pneumatic robot using hose-free pneumatic actuator. , 2016, , .		14
82	Eccentric Crank Rover: A novel crank wheel mechanism with eccentric wheels. , 2016, , .		4
83	R-Crank: Amphibious all terrain mobile robot. , 2016, , .		4
84	Proposal of flexible robotic arm with thin McKibben actuators mimicking octopus arm structure. , 2016, , .		13
85	Highly responsive and stable flow control valve using a PZT transducer. , 2016, , .		4
86	Energy regenerative hose-free pneumatic actuator. Sensors and Actuators A: Physical, 2016, 249, 1-7.	4.1	8
87	New concept and fundamental experiments of a smart pneumatic artificial muscle with a conductive fiber. Sensors and Actuators A: Physical, 2016, 250, 48-54.	4.1	28
88	Musculoskeletal lower-limb robot driven by multifilament muscles. ROBOMECH Journal, 2016, 3, .	1.6	100
89	A cryogenic ultrasonic actuator using a torsional transducer. , 2016, , .		0
90	A piezoelectric polymer cavitation sensor installed in an emulsion generation microchannel device and an evaluation of cavitation state. Japanese Journal of Applied Physics, 2016, 55, 07KE07.	1.5	2

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91	Development of a gas/liquid phase change actuator for high temperatures. ROBOMECH Journal, 2016, 3, .	1.6	12
92	Microdroplet generation using an ultrasonic torsional transducer which has a micropore with a tapered nozzle. Archive of Applied Mechanics, 2016, 86, 1751-1762.	2.2	11
93	Modeling and Force Control of Thin Soft McKibben Actuator. International Journal of Automation Technology, 2016, 10, 487-493.	1.0	11
94	Omnidirectional Soft Robot Platform with Flexible Actuators for Medical Assistive Device. International Journal of Automation Technology, 2016, 10, 494-502.	1.0	12
95	Development of a Rubber Soft Actuator Driven with Gas/Liquid Phase Change. International Journal of Automation Technology, 2016, 10, 517-524.	1.0	8
96	Development of Novel Particle Excitation Flow Control Valve for Stable Flow Characteristics. International Journal of Automation Technology, 2016, 10, 540-548.	1.0	3
97	Hydraulic control by flow control valve using particle excitation. Transactions of the Japan Fluid Power System Society, 2016, 47, 39-46.	0.4	2
98	Study of Droplet Manipulation Condition in Droplet Manipulation Device using Ultrasonic Vibration. IEEJ Transactions on Sensors and Micromachines, 2016, 136, 348-356.	0.1	1
99	Hose-free Pneumatic Actuator using Reversible Chemical Reaction. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2016, 2016, 2A1-05a5.	0.0	2
100	Development of a Hose-Free FMA Driven by a Built-In Gas/Liquid Chemical Reactor. International Journal of Automation Technology, 2016, 10, 511-516.	1.0	4
101	Experimental investigation of conductive fibers for a smart pneumatic artificial muscle. , 2015, , .		7
102	A study on temperature dependence of an ultrasonic motor for cryogenic environment. Japanese Journal of Applied Physics, 2015, 54, 07HE15.	1.5	12
103	Trot gait based feed-forward walking on challenging terrain: Case of high step climbing. , 2015, , .		2
104	Locomotion characteristics of soft mobile robot platform for upper gastrointestinal (UGI) fluoroscopic examination. , 2015, , .		0
105	Contact angle of water droplet on deforming rubber sheet with micro surface structures. , 2015, , .		0
106	Next-generation Actuators Leading New Robotics. Journal of the Robotics Society of Japan, 2015, 33, 656-659.	0.1	5
107	Static analysis of powered low-back orthosis driven by thin pneumatic artificial muscles considering body surface deformation. , 2015, , .		10
108	Intelligent pneumatic assisted therapy on ankle rehabilitation. , 2015, , .		6

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109	Simulations of fiber braided bending actuator: Investigation on position of fiber layer placement and air chamber diameter. , 2015, , .		3
110	Low flow rate spraying using a torsional ultrasonic transducer. , 2015, , .		1
111	Study of swing-grouser wheel: A wheel for climbing high steps, even in low friction environment. , 2015, , .		11
112	Predictive Functional Control with Observer (PFC-O) Design and Loading Effects Performance for a Pneumatic System. Arabian Journal for Science and Engineering, 2015, 40, 633-643.	1.1	11
113	Small size pneumatic valve for smooth flow control using PZT vibrator. , 2015, , .		1
114	Design and locomotion of eight-legged soft mobile robot. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2015, 2015.6, 128-129.	0.0	1
115	A small water flow control valve using particle excitation by PZT vibrator. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2015, 2015.6, 221-222.	0.0	2
116	Strength of Synthetic Fiber Ropes Degraded by Repetitive Bending. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2015, 2015.6, 27-28.	0.0	0
117	1A1-B10 Development of proportional control valve using particle excitation : Development of Prototype for Stable Flow Characteristic. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2015, 2015, _1A1-B10_1-_1A1-B10_3.	0.0	1
118	Design of Hexapod Giacometti Robot with Very Long, Light, and Thin Legs. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2015, 2015.6, 136-137.	0.0	2
119	FastWalking with Consideration of an Acceleration and a Deceleration for a Quadruped Robot. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2015, 2015.6, 206-207.	0.0	1
120	Establishment of a simplified simulation method for Axially Reinforced Pneumatic Artificial Muscle by introducing Anisotropic Material. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2015, 2015.6, 276-277.	0.0	0
121	Speed Control of Pneumatic Cylinder using Particle-Excitation Flow Control Valve. Transactions of the Japan Fluid Power System Society, 2015, 46, 7-13.	0.4	1
122	Comparison in Characteristics of Textile Woven by Thin Pneumatic Artificial Muscle. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2015, 2015.6, 43-44.	0.0	7
123	Evaluation of thermal stress of transducers for cryogenic ultrasonic motors. , 2014, , .		2
124	A multiplex pneumatic actuator drive method based on acoustic communication in air supply line. , 2014, , .		0
125	Light driven SMA actuator using optical waveguide made of past type organic material. , 2014, , .		0
126	Ultrasonic motor for sample spinning of solid-state nuclear magnetic resonance spectrometer in high magnetic field. , 2014, , .		2

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127	System Identification and Embedded Controller Design for Pneumatic Actuator with Stiffness Characteristic. Mathematical Problems in Engineering, 2014, 2014, 1-13.	1.1	5
128	Development of a hand rehabilitation system to prevent contracture for finger joints based on the therapy of occupational therapists (Massage a hand and range of motion exercises using pneumatic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		8
129	Gas/Liquid Phase Change Actuator for Use in Extreme Temperature Environments. International Journal of Automation Technology, 2014, 8, 140-146.	1.0	7
130	Micro-Beaker Chemical Process using a Slide Type Three-Port Valve System for Slug Flow Generation. Kagaku Kogaku Ronbunshu, 2014, 40, 38-42.	0.3	2
131	New Pneumatic Rubber Leg Mechanism for Omnidirectional Locomotion. International Journal of Automation Technology, 2014, 8, 222-230.	1.0	5
132	Comparison between PFC and PID control system for tendon-driven balloon actuator. , 2013, , .		3
133	Real-time position control of intelligent pneumatic actuator (IPA) system using optical encoder and pressure sensor. Sensor Review, 2013, 33, 341-351.	1.8	12
134	3-D finite-element analysis of fiber-reinforced soft bending actuator for finger flexion. , 2013, , .		18
135	Predictive Functional Controller design for pneumatic actuator with stiffness characteristic. , 2013, , .		9
136	A new mobile pressure control system for pneumatic actuators using reversible chemical reactions of water. , 2013, , .		10
137	New mobile pressure control system for pneumatic actuators, using reversible chemical reactions of water. Sensors and Actuators A: Physical, 2013, 201, 148-153.	4.1	35
138	Robot skin with integrated micro rubber suction cups adhering rough surfaces. , 2013, , .		1
139	Proportional-integrative controller design of Pneumatic system using particle swarm optimization. , 2013, , .		5
140	Generalized predictive controller using Bat algorithm for double acting pneumatic cylinder. , 2013, , .		4
141	Long bending rubber mechanism combined contracting and extending tluidic actuators. , 2013, , .		18
142	A nano emulsion generator using a microchannel and a bolt blamped type transducer. , 2013, , .		2
143	Evaluation of piezoelctric materials for cryogenic ultrasonic motor. , 2013, , .		1
144	An Ultrasonic Motor Using a Titanium Transducer for a Cryogenic Environment. Japanese Journal of Applied Physics, 2013, 52, 07HE13.	1.5	7

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145	Development of Worm-Rack Driven Cylindrical Crawler Unit. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2013, 7, 422-431.	0.7	13
146	Predictive Functional Control of Tendon-Driven Actuator Using Pneumatic Balloon. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2013, 7, 752-762.	0.7	3
147	Light-Driven Actuator Using Hydrothermally Deposited PLZT Film. IEEJ Transactions on Sensors and Micromachines, 2013, 133, 330-336.	0.1	2
148	Ultrasonic Motor Using Two Sector-Shaped Piezoelectric Transducers for Sample Spinning in High Magnetic Field. Journal of Robotics and Mechatronics, 2013, 25, 384-391.	1.0	14
149	Adhesive Soft Robot Skin with Integrated Micro Suction Cups. Journal of the Robotics Society of Japan, 2013, 31, 98-106.	0.1	2
150	Predictive Functional Control System for Stroke Control of a Pneumatic Tendon-driven Balloon Actuator. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2013, , 225-232.	0.6	1
151	DEVELOPMENT OF WORM-RACK DRIVEN CYLINDRICAL CRAWLER UNIT. , 2013, , .		0
152	PD-Fuzzy Logic Controller Design for Position Control of Intelligent Pneumatic Actuator System. Communications in Computer and Information Science, 2012, , 288-295.	0.5	4
153	An Ultrasonic Motor for Use at Ultralow Temperature Using Lead Magnesium Niobateâ€“Lead Titanate Single Crystal. Japanese Journal of Applied Physics, 2012, 51, 07GE09.	1.5	11
154	Droplets generation in the flowing ambient liquid by using an ultrasonic torsional transducer. , 2012, , .		4
155	Development and fundamental experiments of rubber structural color sheet with multi grating patterns. , 2012, , .		0
156	Development and control of a multifingered robotic hand using a pneumatic tendon-driven actuator. Journal of Intelligent Material Systems and Structures, 2012, 23, 345-352.	2.5	7
157	Development of Slide Type Three-Port Valve for Slug Flow Chemical Process. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2012, 78, 305-311.	0.2	2
158	Bolt-Clamped Langevin-Type Transducer for Ultrasonic Motor used at Ultralow Temperature. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2012, 6, 104-112.	0.7	16
159	Controller Design for Simulation Control of Intelligent Pneumatic Actuators (IPA) System. Procedia Engineering, 2012, 41, 593-599.	1.2	15
160	GPC Controller Design for an Intelligent Pneumatic Actuator. Procedia Engineering, 2012, 41, 657-663.	1.2	12
161	A functional adhesive robot skin with integrated micro rubber suction cups. , 2012, , .		9
162	System Identification model for an Intelligent Pneumatic Actuator (IPA) system. , 2012, , .		11

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163	Nonlinear mathematical model of an Intelligent Pneumatic Actuator (IPA) systems: Position and force controls. , 2012, , .		11
164	An ultrasonic motor for cryogenic temperature using bolt-clamped Langevin-type transducer. Sensors and Actuators A: Physical, 2012, 184, 134-140.	4.1	28
165	Evaluation of generated micro droplets using micropore plates oscillated by ultrasonic torsional transducers. Sensors and Actuators A: Physical, 2012, 185, 92-92.	4.1	6
166	Flow Rate Control using Particle Excitation Valve with Non-linear Compensation. Transactions of the Japan Fluid Power System Society, 2012, 43, 117-121.	0.4	1
167	A Method of Designing and Fabricating Mckibben Muscles Driven by 7 MPa Hydraulics. International Journal of Automation Technology, 2012, 6, 482-487.	1.0	18
168	An Ultrasonic Motor for Use at Ultralow Temperature Using Lead Magnesium Niobateâ€“Lead Titanate Single Crystal. Japanese Journal of Applied Physics, 2012, 51, 07GE09.	1.5	10
169	1208 Working Fluid Phase Transition Actuator for High Temperature Environment 3^<rd> report : Driving Experiment Under 180â„ƒ Environment. The Proceedings of the Machine Design and Tribology Division Meeting in JSME, 2012, 2012.12, 65-66.	0.0	1
170	2P1-F02 Working Fluid Phase Transition Actuator for High Temperature Environment : 2^<nd> report: Static Property of Actuator(Robotics & Mechatronics in Hyper Environment). The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2012, 2012, _2P1-F02_1-_2P1-F02_4.	0.0	1
171	Predictive Functional Control of Stiffness-changeable Finger Using Soft Rubber Device. Transactions of the Society of Instrument and Control Engineers, 2012, 48, 470-478.	0.2	2
172	Design and Evaluation of Electromagnetic Wobble Motor. Journal of Robotics and Mechatronics, 2012, 24, 480-486.	1.0	1
173	Evaluation of electro conductive film and strain gage as displacement sensor for pneumatic artificial muscle. , 2011, , .		4
174	Micro droplet generation using micropore plates oscillated by ultrasonic torsional transducers. , 2011, , .		2
175	Design and evaluation of ultrasonic motor located in cryogenic temperature environments. , 2011, , .		1
176	Development of a thin electromagnetic wobble motor. , 2011, , .		4
177	A low-profile micro ultrasonic motor for NMR sample spinning in high magnetic field. , 2011, , .		2
178	Miniature Pneumatic Curling Rubber Actuator Generating Bidirectional Motion with One Air-Supply Tube. Advanced Robotics, 2011, 25, 1311-1330.	1.8	128
179	Design and Evaluation of Emulsion Generation Device Using Ultrasonic Vibration and Microchannel. Japanese Journal of Applied Physics, 2011, 50, 07HE24.	1.5	6
180	Continuous air control using particle excitation valve. , 2011, , .		2

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181	Novel design of rubber tube actuator improving mountability and drivability for assisting colonosocope insertion. , 2011, , .		20
182	Development of Active Separation System for Slug Flow in Chemical Process. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2011, 77, 1109-1118.	0.2	4
183	Expectations about New Actuators. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2011, 77, 2412-2419.	0.2	3
184	Design and evaluation of orifice arrangement for particle-excitation flow control valve. Sensors and Actuators A: Physical, 2011, 171, 283-291.	4.1	16
185	A new sliding micro valve generating/separating slug flow in micro chemical process. , 2011, , .		0
186	Stiffness and viscous coefficient characteristics for ergonomics chair design. , 2011, , .		1
187	Beautiful Flexible Microactuator changing its structural color with variable pitch grating. , 2011, , .		12
188	Design of a variable-stiffness robotic hand using pneumatic soft rubber actuators. Smart Materials and Structures, 2011, 20, 105015.	3.5	60
189	Flexible artificial muscle by bundle of McKibben fiber actuators. , 2011, , .		29
190	Development of Variable Stiffness Colonoscope Consisting of Pneumatic Drive Devices. International Journal of Automation Technology, 2011, 5, 551-558.	1.0	8
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