Youngsu Cha

List of Publications by Year
in descending order

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		430754	414303
67	1,149	18	32
papers	citations	h-index	g-index

67	67	67	944
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wearable Multifunctional Additive Hand System for Enhancing the Workspace and Grasping Capability of the Human Hand. IEEE Access, 2022, 10, 28094-28108.	2.6	2
2	Electrohydraulic actuator based on multiple pouch modules for bending and twisting. Sensors and Actuators A: Physical, 2022, 337, 113450.	2.0	3
3	Energy harvesting from flexion motion using a flexible piezoelectric ring. Sensors and Actuators A: Physical, 2022, 343, 113664.	2.0	1
4	Origami Pump Actuator Based Pneumatic Quadruped Robot (OPARO). IEEE Access, 2021, 9, 41010-41018.	2.6	15
5	Solvation-Driven Electrochemical Actuation. Physical Review Letters, 2021, 126, 046001.	2.9	9
6	Thermal Feedback System From Robot Hand for Telepresence. IEEE Access, 2021, 9, 827-835.	2.6	5
7	A Soft Actuation System with Origami Pump for Maximizing Haptic Feedback. The Journal of Korea Robotics Society, 2021, 16, 29-34.	0.2	1
8	Virtual thermal feedback system using thermal conductivity. , 2021, , .		0
9	Double-layered electrohydraulic actuator for bi-directional bending motion of soft gripper. , 2021, , .		2
10	Modeling Actuation of Ionomer Cilia in Salt Solution Under an External Electric Field. ASME Letters in Dynamic Systems and Control, 2021, 1, .	0.4	1
11	Tendon-Inspired Piezoelectric Sensor for Biometric Application. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2538-2547.	3.7	9
12	Thin Piezoelectric Mobile Robot Using Curved Tail Oscillation. IEEE Access, 2021, 9, 145477-145485.	2.6	6
13	Electrohydraulic Actuator for a Soft Gripper. Soft Robotics, 2020, 7, 68-75.	4.6	68
14	Cross-shaped piezoelectric beam for torsion sensing. Smart Materials and Structures, 2020, 29, 015023.	1.8	5
15	Thermal display glove for interacting with virtual reality. Scientific Reports, 2020, 10, 11403.	1.6	27
16	Piezoelectric Sensor with a Helical Structure on the Thread Core. Applied Sciences (Switzerland), 2020, 10, 5073.	1.3	4
17	Fiber-based Piezoelectric Sensors in Woven Structure. , 2020, , .		0
18	Multidirectional Cylindrical Piezoelectric Force Sensor: Design and Experimental Validation. Sensors, 2020, 20, 4840.	2.1	7

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19	Soft Pneumatic Gripper With a Tendon-Driven Soft Origami Pump. Frontiers in Bioengineering and Biotechnology, 2020, 8, 461.	2.0	48
20	Hemispherical Cell-Inspired Soft Actuator. Frontiers in Bioengineering and Biotechnology, 2020, 8, 20.	2.0	6
21	Rotary Motion and Manipulation Using Electro-Hydraulic Actuator With Asymmetric Electrodes. IEEE Robotics and Automation Letters, 2020, 5, 3945-3951.	3.3	9
22	Soft electromagnetic actuator for assembly robots. Smart Materials and Structures, 2020, 29, 067001.	1.8	6
23	Torsion Sensing on a Cylinder Using a Flexible Piezoelectric Wrist Band. IEEE/ASME Transactions on Mechatronics, 2020, 25, 460-467.	3.7	10
24	Chopstick Robot Driven by X-shaped Soft Actuator. Actuators, 2020, 9, 32.	1.2	3
25	Estimation of Hand Motion from Piezoelectric Soft Sensor Using Deep Recurrent Network. Applied Sciences (Switzerland), 2020, 10, 2194.	1.3	11
26	Object classification based on piezoelectric actuator-sensor pair on robot hand using neural network. Smart Materials and Structures, 2020, 29, 105020.	1.8	4
27	Contactless actuation of perfluorinated ionomer membranes in salt solution: an experimental investigation. Scientific Reports, 2019, 9, 11989.	1.6	5
28	Pneumatic actuator and flexible piezoelectric sensor for soft virtual reality glove system. Scientific Reports, 2019, 9, 8988.	1.6	75
29	Soft mobile robot inspired by animal-like running motion. Scientific Reports, 2019, 9, 14700.	1.6	29
30	Flexible Shear and Normal Force Sensor Using Only One Layer of Polyvinylidene Fluoride Film. Applied Sciences (Switzerland), 2019, 9, 4339.	1.3	11
31	Flexible piezoelectric sensor array for touch sensing of robot hand. , 2019, , .		8
32	Seesaw Type Actuator for Haptic Application. Lecture Notes in Electrical Engineering, 2019, , 169-172.	0.3	0
33	Energy harvesting from flexible piezoelectric ring. Smart Materials and Structures, 2019, 28, 084007.	1.8	4
34	Parameter Study on Piezoelectric Length to Harvesting Power in Torsional Loads. IEEE/ASME Transactions on Mechatronics, 2019, 24, 1220-1227.	3.7	10
35	Searching for clues about Maxwell stress in the back-relaxation of ionic polymer-metal composites. , 2019, , .		3
36	Ring energy harvester using cylinder shape change. , 2019, , .		0

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37	Torsion sensing based on patterned piezoelectric beams. Smart Materials and Structures, 2018, 27, 035010.	1.8	11
38	Energy harvesting from a piezoelectric slipper during walking. Journal of Intelligent Material Systems and Structures, 2018, 29, 1456-1463.	1.4	21
39	Seesaw type actuator using balancing between electrostatic force, elasticity, and gravity. AIP Advances, 2018, 8, 075029.	0.6	0
40	Tri-Iron Tetra-Oxide and Silicone Composite Beam Actuator. , 2018, , .		0
41	Gait analysis system based on slippers with flexible piezoelectric sensors. , 2018, , .		2
42	A V-Shaped Actuator Utilizing Electrostatic Force. Actuators, 2018, 7, 30.	1.2	7
43	Fe3O4â€“Silicone Mixture as Flexible Actuator. Materials, 2018, 11, 753.	1.3	9
44	Flexible Piezoelectric Sensor-Based Gait Recognition. Sensors, 2018, 18, 468.	2.1	36
45	Energy harvesting from torsions of patterned piezoelectrics. , 2018, , .		0
46	Energy harvesting from mouse click of robot finger using piezoelectrics. Proceedings of SPIE, 2017, , .	0.8	0
47	Humanâ€“computer interface glove using flexible piezoelectric sensors. Smart Materials and Structures, 2017, 26, 057002.	1.8	39
48	Energy harvesting using flexible piezoelectric materials from human walking motion: Theoretical analysis. Journal of Intelligent Material Systems and Structures, 2017, 28, 3006-3015.	1.4	14
49	Flexible printed circuit board actuators. Smart Materials and Structures, 2017, 26, 125019.	1.8	2
50	Automatic page-turning mechanism with near-field electroadhesive force for linearly correctable imaging. , 2017, , .		4
51	Patient Posture Monitoring System Based on Flexible Sensors. Sensors, 2017, 17, 584.	2.1	38
52	Integrating mechatronics in project-based learning of Malaysian high school students and teachers. International Journal of Mechanical Engineering Education, 2017, 45, 297-320.	0.6	7
53	Flexible Piezoelectric Energy Harvesting from Mouse Click Motions. Sensors, 2016, 16, 1045.	2.1	44
54	Energy harvesting from walking motion of a humanoid robot using a piezoelectric composite. Smart Materials and Structures, 2016, 25, 10LT01.	1.8	16

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55	Voltage attenuation along the electrodes of ionic polymer metal composites. Journal of Intelligent Material Systems and Structures, 2016, 27, 2426-2430.	1.4	7
56	Energy harvesting from a piezoelectric biomimetic fish tail. Renewable Energy, 2016, 86, 449-458.	4.3	86
57	Energy harvesting from underwater vibration of an annular ionic polymer metal composite. Meccanica, 2015, 50, 2675-2690.	1.2	19
58	Influence of temperature on the impedance of ionic polymer metal composites. Materials Letters, 2014, 133, 179-182.	1.3	12
59	Matching the impedance of ionic polymer metal composites for energy harvesting. Smart Materials and Structures, 2014, 23, 127002.	1.8	8
60	Mechanics and electrochemistry of ionic polymer metal composites. Journal of the Mechanics and Physics of Solids, 2014, 71, 156-178.	2.3	86
61	Energy harvesting from fluid-induced buckling of ionic polymer metal composites. Journal of Intelligent Material Systems and Structures, 2014, 25, 1496-1510.	1.4	26
62	Energy harvesting from the tail beating of a carangiform swimmer using ionic polymerâ€“metal composites. Bioinspiration and Biomimetics, 2013, 8, 036003.	1.5	50
63	Fabrication and buckling analysis of ionic polymer metal composite pipes. Smart Materials and Structures, 2013, 22, 105032.	1.8	10
64	Bias-dependent model of the electrical impedance of ionic polymer-metal composites. Physical Review E, 2013, 87, 022403.	0.8	29
65	Electrical impedance controls mechanical sensing in ionic polymer metal composites. Physical Review E, 2013, 88, 062603.	0.8	30
66	Energy harvesting from underwater base excitation of a piezoelectric composite beam. Smart Materials and Structures, 2013, 22, 115026.	1.8	52
67	A physics-based model of the electrical impedance of ionic polymer metal composites. Journal of Applied Physics, 2012, 111, .	1.1	77