Controlled flight of a microrobot powered by soft artific

Nature 575, 324-329

DOI: 10.1038/s41586-019-1737-7

Citation Report

#	Article	IF	CITATIONS
1	Power optimization of a conical dielectric elastomer actuator for resonant robotic systems. Extreme Mechanics Letters, 2020, 35, 100619.	2.0	36
2	Lighting up soft robotics. Nature Materials, 2020, 19, 134-135.	13.3	5
3	Highâ€Strain Peanoâ€HASEL Actuators. Advanced Functional Materials, 2020, 30, 1908821.	7.8	50
4	Mimicking nature's flyers: a review of insect-inspired flying robots. Current Opinion in Insect Science, 2020, 42, 70-75.	2.2	21
5	Dynamic modeling, simulation and design of smart membrane systems driven by soft actuators of multilayer dielectric elastomers. Nonlinear Dynamics, 2020, 102, 1463-1483.	2.7	15
6	Recent advances in bioelectronics chemistry. Chemical Society Reviews, 2020, 49, 7978-8035.	18.7	54
7	An agglutinate magnetic spray transforms inanimate objects into millirobots for biomedical applications. Science Robotics, 2020, 5, .	9.9	115
8	Elastomeric high- $\hat{\mathbb{I}}^{\mathbb{P}}$ composites of low dielectric loss tangent: Experiment and simulation. Composites Part B: Engineering, 2020, 201, 108337.	5.9	11
9	Mechanisms of collision recovery in flying beetles and flapping-wing robots. Science, 2020, 370, 1214-1219.	6.0	79
10	Programmable, UV-Printable Dielectric Elastomers Actuate at Low Voltage without Prestretch and Supporting Frames. ACS Applied Electronic Materials, 2020, 2, 4042-4053.	2.0	6
11	Insights into the Complex Prebreakdown Actuation of Silicone Elastomers and its Influence on Breakdown Behavior. ACS Omega, 2020, 5, 18584-18593.	1.6	3
12	Efficient flapping wing drone arrests high-speed flight using post-stall soaring. Science Robotics, 2020, 5, .	9.9	36
13	Landing mosquitoes bounce when engaging a substrate. Scientific Reports, 2020, 10, 15744.	1.6	5
14	Shape-Memory Polymeric Artificial Muscles: Mechanisms, Applications and Challenges. Molecules, 2020, 25, 4246.	1.7	48
15	Intelligent Polymerâ€Based Bioinspired Actuators: From Monofunction to Multifunction. Advanced Intelligent Systems, 2020, 2, 2000138.	3.3	33
16	Feedback-cascaded inverse feedforward for viscoelastic creep, hysteresis and cross-coupling compensation in dielectric-elastomer actuated XY stages. , 2020, , .		4
17	Stimuli-responsive functional materials for soft robotics. Journal of Materials Chemistry B, 2020, 8, 8972-8991.	2.9	118
18	Characterization and Optimization of Elastomeric Electrodes for Dielectric Elastomer Artificial Muscles. Materials, 2020, 13, 5542.	1.3	4

#	ARTICLE	IF	CITATIONS
19	Reconfigurable and Latchable Shapeâ€Morphing Dielectric Elastomers Based on Local Stiffness Modulation. Advanced Functional Materials, 2020, 30, 2001597.	7.8	42
20	Drones become even more insect-like. Science, 2020, 368, 586-587.	6.0	3
21	Electromechanical properties of soft dissipative dielectric elastomer actuators influenced by electrode thickness and conductivity. Journal of Applied Physics, 2020, 127, .	1.1	6
22	Large actuation in an electromechanical actuator using gel, elastomer, and oil. International Journal of Non-Linear Mechanics, 2020, 124, 103499.	1.4	5
23	Tutorial Review of Bio-Inspired Approaches to Robotic Manipulation for Space Debris Salvage. Biomimetics, 2020, 5, 19.	1.5	12
24	Wing rapid responses and aerodynamics of fruit flies during headwind gust perturbations. Bioinspiration and Biomimetics, 2020, 15, 056001.	1.5	8
25	Untethered, ultra-light soft actuator based on positively charged 3D fluffy silica micro-nanofibers by electrospinning. Journal of Materials Science, 2020, 55, 12789-12800.	1.7	3
26	Tunable Multi-Modal Locomotion in Soft Dielectric Elastomer Robots. IEEE Robotics and Automation Letters, 2020, 5, 3868-3875.	3.3	39
27	A Unidirectional Soft Dielectric Elastomer Actuator Enabled by Built-In Honeycomb Metastructures. Polymers, 2020, 12, 619.	2.0	18
28	A Survey on Swarming With Micro Air Vehicles: Fundamental Challenges and Constraints. Frontiers in Robotics and Al, 2020, 7, 18.	2.0	65
29	Dynamics of electrohydraulic soft actuators. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16207-16213.	3.3	42
30	Lightweight High Voltage Generator for Untethered Electroadhesive Perching of Micro Air Vehicles. IEEE Robotics and Automation Letters, 2020, 5, 4485-4492.	3.3	21
31	Direct Visual-Inertial Ego-Motion Estimation Via Iterated Extended Kalman Filter. IEEE Robotics and Automation Letters, 2020, 5, 1476-1483.	3.3	17
32	Anisotropic electroactive elastomer for highly maneuverable soft robotics. Nanoscale, 2020, 12, 7514-7521.	2.8	44
33	Temperature effect on electromechanical properties of polyacrylic dielectric elastomer: an experimental study. Smart Materials and Structures, 2020, 29, 047002.	1.8	11
34	A Jumping Robot Driven by a Dielectric Elastomer Actuator. Applied Sciences (Switzerland), 2020, 10, 2241.	1.3	14
35	Nonlinear dynamics of a conical dielectric elastomer oscillator with switchable mono to bi-stability. International Journal of Solids and Structures, 2021, 221, 18-30.	1.3	25
36	Ultrasoft-yet-strong pentablock copolymer as dielectric elastomer highly responsive to low voltages. Chemical Engineering Journal, 2021, 405, 126634.	6.6	23

3

#	ARTICLE	IF	CITATIONS
37	A Single-Chamber Pneumatic Soft Bending Actuator With Increased Stroke-Range by Local Electric Guidance. IEEE Transactions on Industrial Electronics, 2021, 68, 8455-8463.	5.2	10
38	The frequency-response behaviour of flexible piezoelectric devices for detecting the magnitude and loading rate of stimuli. Journal of Materials Chemistry C, 2021, 9, 584-594.	2.7	34
39	Locomotion of Miniature Soft Robots. Advanced Materials, 2021, 33, e2003558.	11.1	95
40	Materials, Actuators, and Sensors for Soft Bioinspired Robots. Advanced Materials, 2021, 33, e2003139.	11.1	209
41	Recent Progress in Artificial Muscles for Interactive Soft Robotics. Advanced Materials, 2021, 33, e2003088.	11,1	139
42	Development of a Small and Lightweight Missile Fin Control Actuation System Driven by Novel Dielectric Elastomer Actuators. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1002-1012.	3.7	7
43	Shape Changing Robots: Bioinspiration, Simulation, and Physical Realization. Advanced Materials, 2021, 33, e2002882.	11.1	66
44	Dynamic Modeling and Tracking Control for Dielectric Elastomer Actuator With a Model Predictive Controller. IEEE Transactions on Industrial Electronics, 2022, 69, 1819-1828.	5.2	21
45	2D-Material-integrated hydrogels as multifunctional protective skins for soft robots. Materials Horizons, 2021, 8, 2065-2078.	6.4	31
46	Designing bioactive micro-/nanomotors for engineered regeneration. Engineered Regeneration, 2021, 2, 109-115.	3.0	60
47	Collision Resilient Insect-Scale Soft-Actuated Aerial Robots With High Agility. IEEE Transactions on Robotics, 2021, 37, 1752-1764.	7.3	49
48	Enhancing the Universality of a Pneumatic Gripper via Continuously Adjustable Initial Grasp Postures. IEEE Transactions on Robotics, 2021, 37, 1604-1618.	7.3	51
49	Biomimetic soft micro-swimmers: from actuation mechanisms to applications. Biomedical Microdevices, 2021, 23, 6.	1.4	26
50	A One-Step Visual–Inertial Ego-Motion Estimation Using Photometric Feedback. IEEE/ASME Transactions on Mechatronics, 2022, 27, 12-23.	3.7	7
51	Adaptively reconstructing network of soft elastomers to increase strand rigidity: towards free-standing electro-actuation strain over 100%. Materials Horizons, 2021, 8, 2834-2841.	6.4	17
52	Sustainable development of natural rubber in the 21st century. , 2021, , 463-479.		0
53	Modeling and approximate analytical solution of nonlinear behaviors for a self-excited electrostatic actuator. Nonlinear Dynamics, 2021, 103, 279-292.	2.7	9
54	Light-powered self-excited motion of a liquid crystal elastomer rotator. Nonlinear Dynamics, 2021, 103, 2437-2449.	2.7	31

#	ARTICLE	IF	Citations
55	Humidity Effect on Dynamic Electromechanical Properties of Polyacrylic Dielectric Elastomer: An Experimental Study. Polymers, 2021, 13, 784.	2.0	6
56	Collective locomotion of two-dimensional lattices of flapping plates. Part 2. Lattice flows and propulsive efficiency. Journal of Fluid Mechanics, 2021, 915, .	1.4	6
57	Design, Manufacturing, and Characterization of Thin, Core-Free, Rolled Dielectric Elastomer Actuators. Actuators, 2021, 10, 69.	1.2	17
58	Self-powered soft robot in the Mariana Trench. Nature, 2021, 591, 66-71.	13.7	545
59	Legged-wheeled small robot capable of terrain-adaptive locomotion via a soft actuator. Engineering Research Express, 2021, 3, 015032.	0.8	0
60	Exploiting Mechanical Instabilities in Soft Robotics: Control, Sensing, and Actuation. Advanced Materials, 2021, 33, e2006939.	11.1	93
61	Thermoelectromechanical instability of dielectric elastomer undergoes polarization saturation and temperature variation. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 414-421.	1.5	4
62	Muscle-fiber array inspired, multiple-mode, pneumatic artificial muscles through planar design and one-step rolling fabrication. National Science Review, 2021, 8, nwab048.	4.6	22
63	Printing Reconfigurable Bundles of Dielectric Elastomer Fibers. Advanced Functional Materials, 2021, 31, 2010643.	7.8	63
64	Selfâ€Strengthening Dielectric Elastomer of Triblock Copolymer with Significantly Improved Electromechanical Performance under Low Voltage. Macromolecular Materials and Engineering, 2021, 306, 2000732.	1.7	8
65	Customizing a self-healing soft pump for robot. Nature Communications, 2021, 12, 2247.	5.8	54
66	The new material science of robots. Current Opinion in Solid State and Materials Science, 2021, 25, 100894.	5. 6	3
67	An Efficient Iterated EKF-Based Direct Visual-Inertial Odometry for MAVs Using a Single Plane Primitive. IEEE Robotics and Automation Letters, 2021, 6, 486-493.	3.3	9
68	Programmable and reprocessable multifunctional elastomeric sheets for soft origami robots. Science Robotics, 2021, 6, .	9.9	42
69	Improved Design of Polymer Micromachined Transmission for Flapping Wing Nano Air Vehicle., 2021,,.		4
70	Bistable Actuation in Multi-DoF Soft Robotic Modules Driven by Rolled Dielectric Elastomer Actuators. , 2021, , .		6
71	Dielectric elastomer actuators. Journal of Applied Physics, 2021, 129, .	1.1	88
72	Liftoff of a New Hovering Oscillating-wing Micro Aerial Vehicle. Journal of Bionic Engineering, 2021, 18, 649-661.	2.7	2

#	Article	IF	CITATIONS
73	The emerging technology of biohybrid micro-robots: a review. Bio-Design and Manufacturing, 2022, 5, 107-132.	3.9	38
74	Study of Mosquito Aerodynamics for Imitation as a Small Robot and Flight in a Low-Density Environment. Micromachines, 2021, 12, 511.	1.4	3
75	Re-foldable origami-inspired bidirectional twisting of artificial muscles reproduces biological motion. Cell Reports Physical Science, 2021, 2, 100407.	2.8	17
76	Multi-Layers Planar Dielectric Elastomer Actuator Toward Reducing Control Voltage in In-Plane Actuation Applications. International Journal of Applied Mechanics, 2021, 13, 2150044.	1.3	2
77	Spiderâ€Inspired Electrohydraulic Actuators for Fast, Softâ€Actuated Joints. Advanced Science, 2021, 8, e2100916.	5.6	46
78	Effects of airfoil on aerodynamic performance of flapping wing. Biomimetic Intelligence and Robotics, 2021, 1, 100004.	1.1	2
79	Fast-moving piezoelectric micro-robotic fish with double caudal fins. Robotics and Autonomous Systems, 2021, 140, 103733.	3.0	42
80	A review: Learning from the flight of beetles. Computers in Biology and Medicine, 2021, 133, 104397.	3.9	12
81	Arthropodâ€Metamerismâ€Inspired Resonant Piezoelectric Millirobot. Advanced Intelligent Systems, 2021, 3, 2100015.	3.3	64
82	Electrostatic footpads enable agile insect-scale soft robots with trajectory control. Science Robotics, 2021, 6, .	9.9	66
83	Soft-Tentacle Gripper for Pipe Crawling to Inspect Industrial Facilities Using UAVs. Sensors, 2021, 21, 4142.	2.1	10
84	A Numerical Approach Based on Finite Element Method for the Wrinkling Analysis of Dielectric Elastomer Membranes. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	1.1	7
85	Review of Dielectric Elastomer Actuators and Their Applications in Soft Robots. Advanced Intelligent Systems, 2021, 3, 2000282.	3.3	111
86	Untethered Soft Robots for Future Planetary Explorations?. Advanced Intelligent Systems, 2023, 5, 2100106.	3.3	9
87	TENG-Bot: Triboelectric nanogenerator powered soft robot made of uni-directional dielectric elastomer. Nano Energy, 2021, 85, 106012.	8.2	55
88	Systemâ€Engineered Miniaturized Robots: From Structure to Intelligence. Advanced Intelligent Systems, 2021, 3, 2000284.	3.3	18
89	Bioinspired Shape Memory Hydrogel Artificial Muscles Driven by Solvents. ACS Nano, 2021, 15, 13712-13720.	7.3	99
90	Asynchronous and Selfâ€Adaptive Flight Assembly via Electrostatic Actuation of Flapping Wings. Advanced Intelligent Systems, 2021, 3, 2100048.	3.3	3

#	Article	IF	Citations
91	A dynamic electrically driven soft valve for control of soft hydraulic actuators. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	24
92	Nanoscale Nickel-Based Thin Films as Highly Conductive Electrodes for Dielectric Elastomer Applications with Extremely High Stretchability up to 200%. ACS Applied Materials & Interfaces, 2021, 13, 39894-39904.	4.0	14
93	Scalability of resonant motor-driven flapping wing propulsion systems. Royal Society Open Science, 2021, 8, 210452.	1.1	11
94	Biomimetic cell-actuated artificial muscle with nanofibrous bundles. Microsystems and Nanoengineering, 2021, 7, 70.	3.4	12
95	One-wing polymer micromachined transmission for insect-inspired flapping wing nano air vehicles. Engineering Research Express, 2021, 3, 045006.	0.8	9
96	Biology and bioinspiration of soft robotics: Actuation, sensing, and system integration. IScience, 2021, 24, 103075.	1.9	34
97	Ultrafast, Highâ€Contractile Electrothermalâ€Driven Liquid Crystal Elastomer Fibers towards Artificial Muscles. Small, 2021, 17, e2103700.	5.2	52
98	Liquidâ€Phase Super Photoactuator through the Synergetic Effects of a Janus Structure and Solvent/Thermal/Photo Responses. Advanced Functional Materials, 2021, 31, 2105728.	7.8	18
99	Geometric optimization of dielectric elastomer electrodes for dynamic applications. Applied Acoustics, 2021, 181, 108120.	1.7	1
100	Origami-inspired magnetic-driven soft actuators with programmable designs and multiple applications. Nano Energy, 2021, 89, 106424.	8.2	42
101	Light-powered self-excited oscillation of a liquid crystal elastomer pendulum. Mechanical Systems and Signal Processing, 2022, 163, 108140.	4.4	35
102	Vinylsilane-rich silicone filled by polydimethylsiloxane encapsulated carbon black particles for dielectric elastomer actuator with enhanced out-of-plane actuations. Chemical Engineering Journal, 2022, 428, 131354.	6.6	27
103	Multiscale Modeling of Polymeric Artificial Muscles. , 2021, , .		0
104	Transparent low-voltage-driven soft actuators with silver nanowires Joule heaters. Polymer Chemistry, 2021, 12, 5251-5256.	1.9	8
105	Feedback Altitude Control of a Flying Insect–Computer Hybrid Robot. IEEE Transactions on Robotics, 2021, 37, 2041-2051.	7.3	21
106	On the Mechanical Power Output Comparisons of Cone Dielectric Elastomer Actuators. IEEE/ASME Transactions on Mechatronics, 2021, 26, 3151-3162.	3.7	23
107	Multiresponse Shape-Memory Nanocomposite with a Reversible Cycle for Powerful Artificial Muscles. Chemistry of Materials, 2021, 33, 987-997.	3.2	42
108	Stable and Highâ€Strain Dielectric Elastomer Actuators Based on a Carbon Nanotubeâ€Polymer Bilayer Electrode. Advanced Functional Materials, 2021, 31, 2008321.	7.8	35

#	Article	IF	CITATIONS
109	Mechanics of dielectric elastomer structures: A review. Extreme Mechanics Letters, 2020, 38, 100752.	2.0	105
110	Ultrarobust Ti ₃ C ₂ T _{<i>x</i>>/i>x>/sub> MXene-Based Soft Actuators <i>via</i> Bamboo-Inspired Mesoscale Assembly of Hybrid Nanostructures. ACS Nano, 2020, 14, 7055-7065.}	7.3	199
111	Stiffness-tunable robotic gripper driven by dielectric elastomer composite actuators. Smart Materials and Structures, 2020, 29, 125013.	1.8	10
112	Dielectric Elastomer Actuator for Soft Robotics Applications and Challenges. Applied Sciences (Switzerland), 2020, 10, 640.	1.3	129
114	Muscular stimulation based biological actuator from locust's hindleg. , 2021, , .		2
115	Programmable Tactile Feedback Patterns for Cognitive Assistance by Flexible Electret Actuators. Advanced Functional Materials, 2022, 32, .	7.8	11
116	An Integrated Design and Fabrication Strategy for Planar Soft Dielectric Elastomer Actuators. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2629-2640.	3.7	8
117	Electro-pneumatic dielectric elastomer actuator incorporating tunable bending stiffness. Physical Review Research, 2020, 2, .	1.3	5
118	Longâ€Lifeâ€Cycle and Damageâ€Recovery Artificial Muscles via Controllable and Observable Selfâ€Clearing Process. Advanced Engineering Materials, 2022, 24, 2101017.	1.6	12
119	Influence of electric field, temperature, humidity, elastomer material, and encapsulation on the lifetime of dielectric elastomer actuators (DEAs) under DC actuation. Smart Materials and Structures, 2021, 30, 125022.	1.8	12
120	Modeling and experimental validation of thin, tightly rolled dielectric elastomer actuators. Smart Materials and Structures, 2022, 31, 015008.	1.8	7
121	Suctionâ€Cupâ€Inspired Adhesive Micromotors for Drug Delivery. Advanced Science, 2022, 9, e2103384.	5.6	50
122	Survey on the Development of Aerial–Aquatic Hybrid Vehicles. Unmanned Systems, 2021, 09, 263-282.	2.7	13
123	Flying Insects and Their Robot Imitators. Physics Magazine, 0, 13, .	0.1	0
124	Dimensional effect of SrTiO ₃ particles on functional performance optimization of polydimethylsiloxane-based composites for dielectric elastomer actuators. Materials Research Express, 2020, 7, 105012.	0.8	2
125	Design optimization and wind tunnel investigation of a flapping system based on the flapping wing trajectories of a beetle's hindwings. Computers in Biology and Medicine, 2022, 140, 105085.	3.9	8
126	A comparative review of artificial muscles for microsystem applications. Microsystems and Nanoengineering, 2021, 7, 95.	3.4	21
127	A Highâ€Lift Microâ€Aerialâ€Robot Powered by Lowâ€Voltage and Longâ€Endurance Dielectric Elastomer Actuators. Advanced Materials, 2022, 34, e2106757.	11.1	64

#	ARTICLE	IF	CITATIONS
128	Stimuli-Responsive Polymers for Soft Robotics. Annual Review of Control, Robotics, and Autonomous Systems, 2022, 5, 515-545.	7.5	21
129	Realizing pure shear mode of dielectric elastomers by tuning biaxial prestress of a deformation controller. Smart Materials and Structures, 2022, 31, 015016.	1.8	4
130	Dielectric Elastomer Actuators with Biphasic Ag–EGaIn Electrodes. Advanced Engineering Materials, 2022, 24, 2100953.	1.6	12
131	Magneto†electro†responsive polymers toward manufacturing, characterization, and biomedical/soft robotic applications. Applied Materials Today, 2022, 26, 101306.	2.3	70
132	Towards Cooperative Transport of a Suspended Payload via Two Aerial Robots with Inertial Sensing. , 2020, , .		5
133	Applications and challenges. , 0, , .		0
134	Magnetic Miniature Actuators with Sixâ€Degreesâ€ofâ€Freedom Multimodal Softâ€Bodied Locomotion. Advanced Intelligent Systems, 2022, 4, .	3.3	16
135	Smart materials for mini-actuators. , 2022, , 117-163.		3
136	Exploiting Molecular Dynamics in Composite Coatings to Design Robust Superâ€Repellent Surfaces. Advanced Science, 2022, 9, e2104331.	5.6	9
137	Roadmap on soft robotics: multifunctionality, adaptability and growth without borders. Multifunctional Materials, 2022, 5, 032001.	2.4	37
138	A Shift from Efficiency to Adaptability: Recent Progress in Biomimetic Interactive Soft Robotics in Wet Environments. Advanced Science, 2022, 9, e2104347.	5.6	29
139	Increasingly Intelligent Micromachines. Annual Review of Control, Robotics, and Autonomous Systems, 2022, 5, 279-310.	7.5	35
140	Peanoâ€Hydraulically Amplified Selfâ€Healing Electrostatic Actuators Based on a Novel Bilayer Polymer Shell for Enhanced Strain, Load, and Rotary Motion. Advanced Intelligent Systems, 2022, 4, .	3.3	4
141	Liquid-amplified zipping actuators for micro-air vehicles with transmission-free flapping. Science Robotics, 2022, 7, eabi8189.	9.9	22
142	Polyphenol-based hydrogels: Pyramid evolution from crosslinked structures to biomedical applications and the reverse design. Bioactive Materials, 2022, 17, 49-70.	8.6	64
143	A New Architecture of Morphing Wing Based on Hyperelastic Materials and Metastructures With Tunable Stiffness. Frontiers in Mechanical Engineering, 2022, 7, .	0.8	4
144	Intrinsically Anisotropic Dielectric Elastomer Fiber Actuators., 2022, 4, 472-479.		16
145	Light-fueled self-excited vibration of a liquid crystal elastomer spring oscillator. Journal of Sound and Vibration, 2022, 526, 116820.	2.1	7

#	Article	IF	CITATIONS
146	Designing and Modeling of Tightly Wrapped Twisted Artificial Muscles With Large Stroke and Low Hysteresis. IEEE Transactions on Industrial Electronics, 2022, 69, 10374-10384.	5.2	4
147	Control Strategies for Soft Robot Systems. Advanced Intelligent Systems, 2022, 4, .	3.3	64
148	Towards enduring autonomous robots via embodied energy. Nature, 2022, 602, 393-402.	13.7	84
149	Triboresistive Touch Sensing: Gridâ€Free Touchâ€Point Recognition Based on Monolayered Ionic Power Generators. Advanced Materials, 2022, 34, e2108586.	11.1	24
150	A unimorph nanocomposite dielectric elastomer for large out-of-plane actuation. Science Advances, 2022, 8, eabm6200.	4.7	40
151	Influence of aspect ratio on the wake dynamics of a pitching wing. Physics of Fluids, 2022, 34, .	1.6	3
152	Preparation and application of dielectric polymers with high permittivity and low energy loss: A mini review. Journal of Applied Polymer Science, 2022, 139, .	1.3	33
153	Visual-Inertial Cross Fusion: A Fast and Accurate State Estimation Framework for Micro Flapping Wing Rotors. Drones, 2022, 6, 90.	2.7	5
154	Rapidly and Repeatedly Reprogrammable Liquid Crystalline Elastomer via a Shape Memory Mechanism. Advanced Materials, 2022, 34, e2201679.	11.1	44
155	Mechanochemical characteristics and influence mechanisms of a biomass hydrogel artificial muscle based on different parameters of the sodium alginate adjustment. Smart Materials and Structures, 2022, 31, 055002.	1.8	6
156	Coiled polymer fibers for artificial muscle and more applications. Matter, 2022, 5, 1092-1103.	5.0	15
157	Study on the improved electromechanical properties of composited dielectric elastomer by tailoring three-dimensional segregated multi-walled carbon nanotube (MWCNT) network. Composites Science and Technology, 2022, 223, 109424.	3.8	9
158	Dielectric elastomer with excellent electromechanical performance by dipole manipulation of Poly(vinyl chloride) for artificial muscles under low driving voltage application. Chemical Engineering Journal, 2022, 441, 136000.	6.6	11
159	Untethered Cable-driven Soft Actuators for Quadruped Robots. , 2021, , .		3
160	Asymmetric Soft \hat{l} ©-robot Utilizing Minimized Energy Structure of Unequally Pre-stretched Dielectric Elastomer. , 2021, , .		1
161	A Design Window Search Using Nonlinear Dynamic Simulation for Polymer Micro-machined Transmission in Insect-inspired Flapping wing Nano Air Vehicles. , 2021, , .		1
162	Coolingâ€Accelerated Nanowireâ€Nitinol Hybrid Muscle for Versatile Prosthetic Hand and Biomimetic Retractable Claw. Advanced Functional Materials, 2022, 32, .	7.8	13
163	A Dataâ€Driven Review of Soft Robotics. Advanced Intelligent Systems, 2022, 4, .	3.3	28

#	Article	IF	Citations
164	Optically Controlled Latching and Launching in Soft Actuators. Advanced Functional Materials, 2022, 32, .	7.8	24
165	Soft Mobile Robots: a Review of Soft Robotic Locomotion Modes. Current Robotics Reports, 2021, 2, 371-397.	5.1	18
166	Memristor Circuits for Colloidal Robotics: Temporal Access to Memory, Sensing, and Actuation. Advanced Intelligent Systems, 2022, 4, .	3.3	8
167	Voltage-tunable elastomer composites that use shape instabilities for rapid structural color changes. Materials Horizons, 2022, 9, 1954-1961.	6.4	7
168	SplitFlyer Air: A Modular Quadcopter That Disassembles Into Two Bicopters Mid-Air. IEEE/ASME Transactions on Mechatronics, 2022, 27, 4729-4740.	3.7	6
169	Multiresponsive Ti ₃ C ₂ T _{<i>x</i>} MXene-Based Actuators Enabled by Dual-Mechanism Synergism for Soft Robotics. ACS Applied Materials & Samp; Interfaces, 2022, 14, 21474-21485.	4.0	30
170	Electro-Ribbon Muscles for Biomimetic Wing Flapping. , 2022, , .		1
171	Decade of bio-inspired soft robots: a review. Smart Materials and Structures, 2022, 31, 073002.	1.8	34
172	A Cyborg Insect Reveals a Function of a Muscle in Free Flight. Cyborg and Bionic Systems, 2022, 2022, .	3.7	23
173	Recovery mechanisms in the dragonfly righting reflex. Science, 2022, 376, 754-758.	6.0	8
174	Dual Stiffness Tensegrity Platform for Resilient Robotics. Advanced Intelligent Systems, 2022, 4, .	3.3	4
175	A bioinspired revolving-wing drone with passive attitude stability and efficient hovering flight. Science Robotics, 2022, 7, eabg5913.	9.9	18
176	Shape-programmable, deformation-locking, and self-sensing artificial muscle based on liquid crystal elastomer and low–melting point alloy. Science Advances, 2022, 8, eabn5722.	4.7	46
177	A pipeline inspection robot for navigating tubular environments in the sub-centimeter scale. Science Robotics, 2022, 7, .	9.9	76
178	A thermally-responsive fiber engine in a linear temperature field. International Journal of Mechanical Sciences, 2022, 225, 107391.	3.6	22
179	FireFly: An Insect-Scale Aerial Robot Powered by Electroluminescent Soft Artificial Muscles. IEEE Robotics and Automation Letters, 2022, 7, 6950-6957.	3.3	9
180	Automatic Design of Dielectric Elastomer-Based Crawling Robots Using Shape and Topology Optimization. Journal of Mechanisms and Robotics, 2023, 15, .	1.5	4
181	Structure and Dielectric Properties of TPU Composite Filled with CNTs@PDA Nanofibers and MXene Nanosheets. Polymers, 2022, 14, 2157.	2.0	5

#	Article	IF	CITATIONS
182	Significantly enhancing electro-actuation performance of dielectric elastomer with ZrO2 nanoparticles. Composites Science and Technology, 2022, 227, 109543.	3.8	2
183	Classification of actuation mechanism designs with structural block diagrams for flapping-wing drones: A comprehensive review. Progress in Aerospace Sciences, 2022, 132, 100833.	6.3	10
184	Fabrication and Functionality Integration Technologies for Smallâ \in Scale Soft Robots. Advanced Materials, 2022, 34, .	11.1	13
185	Biorobotics: An Overview of Recent Innovations in Artificial Muscles. Actuators, 2022, 11, 168.	1.2	10
186	Inkjetâ€Printed Xerogel Scaffolds Enabled Roomâ€Temperature Fabrication of Highâ€Quality Metal Electrodes for Flexible Electronics. Advanced Functional Materials, 2022, 32, .	7.8	9
187	Design and printing of embedded conductive patterns in liquid crystal elastomer for programmable electrothermal actuation. Virtual and Physical Prototyping, 2022, 17, 881-893.	5.3	8
188	Dumbbell-Shaped Block Copolymers for the Fabrication of Anisotropic Soft Actuators. ACS Applied Polymer Materials, 0, , .	2.0	0
189	4D-printed dielectric elastomer soft robots: Modeling and fabrications. , 2022, , 19-54.		2
190	Autonomous Actuation of Flapping Wing Robots Inspired by Asynchronous Insect Muscle., 2022,,.		5
191	Progress, Challenges, and Prospects of Soft Robotics for Space Applications. Advanced Intelligent Systems, 2023, 5, .	3.3	31
192	Milli-scale cellular robots that can reconfigure morphologies and behaviors simultaneously. Nature Communications, 2022, 13, .	5.8	12
193	A processable, high-performance dielectric elastomer and multilayering process. Science, 2022, 377, 228-232.	6.0	78
194	Programmed shape-morphing into complex target shapes using architected dielectric elastomer actuators. Science Advances, 2022, 8, .	4.7	25
195	Actuating compact wearable augmented reality devices by multifunctional artificial muscle. Nature Communications, 2022, 13 , .	5.8	24
196	Human Pulse Detection by a Soft Tactile Actuator. Sensors, 2022, 22, 5047.	2.1	4
197	Robots as Energy Systems: Advances in Robotics across Scales and Technologies. Advanced Intelligent Systems, 0, , 2200093.	3.3	0
198	A 3-DOF inertial impact locomotion robot constructed on four piezoelectric bimorph actuators. Smart Materials and Structures, 2022, 31, 095008.	1.8	13
199	The dissipative dynamic performances of dielectric elastomer actuator with viscoelastic effects. Materials Research Express, 2022, 9, 075701.	0.8	1

#	Article	IF	CITATIONS
200	Design, Characterization, and Liftoff of an Insect-Scale Soft Robotic Dragonfly Powered by Dielectric Elastomer Actuators. Micromachines, 2022, 13, 1136.	1.4	4
201	Fully-passive tethered flapping airfoil to harvest high-altitude wind energy. Energy Conversion and Management, 2022, 267, 115940.	4.4	3
202	Single-process 3D-printed stacked dielectric actuator. International Journal of Mechanical Sciences, 2022, 230, 107555.	3.6	14
203	Bio-inspired control for collective motion in swarms of drones. , 2022, , .		3
204	Design and analysis of an untethered micro flapping robot which can glide on the water. Science China Technological Sciences, 2022, 65, 1749-1759.	2.0	3
205	Snap-through path in a bistable dielectric elastomer actuator. Applied Mathematics and Mechanics (English Edition), 2022, 43, 1159-1170.	1.9	6
206	Aquabots. ACS Nano, 2022, 16, 13761-13770.	7.3	10
207	A high-performance dielectric elastomer actuator with programmable actuations. , 2022, , .		1
208	SpringWorm: A Soft Crawling Robot with a Large-Range Omnidirectional Deformable Rectangular Spring for Control Rod Drive Mechanism Inspection. Soft Robotics, 2023, 10, 280-291.	4.6	7
209	Ultrafast small-scale soft electromagnetic robots. Nature Communications, 2022, 13, .	5.8	47
210	Stepwise Artificial Yarn Muscles with Energy-Free Catch States Driven by Aluminum-Ion Insertion. ACS Nano, 2022, 16, 15850-15861.	7.3	17
211	Wireless Miniature Magnetic Phaseâ€Change Soft Actuators. Advanced Materials, 2022, 34, .	11.1	40
212	Miniature, Lightweight, High-Force, Capstan Winch for Mobile Robots. IEEE Robotics and Automation Letters, 2022, 7, 9873-9880.	3.3	2
213	T-phage inspired piezoelectric microrobot. International Journal of Mechanical Sciences, 2022, 231, 107596.	3.6	8
214	Characterization of the Variable Stiffness Actuator Fabricated of SMA/SMP and MWCNT/IL: PDMS Strain-Sensitive Heater Electrode. IEEE Robotics and Automation Letters, 2022, 7, 11190-11196.	3.3	1
215	Exploiting Bistability for High-Performance Dielectric Elastomer Resonators. IEEE/ASME Transactions on Mechatronics, 2022, 27, 5994-6005.	3.7	21
216	Real time high voltage capacitance for rapid evaluation of dielectric elastomer actuators. Soft Matter, 2022, 18, 7123-7130.	1.2	6
217	Agile and Energy-Efficient Jumping–Crawling Robot Through Rapid Transition of Locomotion and Enhanced Jumping Height Adjustment. IEEE/ASME Transactions on Mechatronics, 2022, 27, 5890-5901.	3.7	10

#	Article	IF	CITATIONS
218	A Low-profile Vibration Crawling Robot Driven by A Planar Dielectric Elastomer Actuator., 2022,,.		2
219	Functional Liquid Crystal Elastomers Based on Dynamic Covalent Chemistry. Chemistry - A European Journal, 2022, 28, .	1.7	18
220	Recent Advances in the Application of Piezoelectric Materials in Microrobotic Systems. Micromachines, 2022, 13, 1422.	1.4	10
221	Soft Molds with Micro-Machined Internal Skeletons Improve Robustness of Flapping-Wing Robots. Micromachines, 2022, 13, 1489.	1.4	1
222	Mechano-Regulable and Healable Silk-Based Materials for Adaptive Applications. Biomacromolecules, 2022, 23, 4296-4307.	2.6	3
223	Kirigamiâ€Inspired Programmable Soft Magnetoresponsive Actuators with Versatile Morphing Modes. Advanced Science, 2022, 9, .	5. 6	16
224	Dielectric elastomer actuators for artificial muscles: A comprehensive review of soft robot explorations., 2022, 1, 308-324.		5
225	Morphology modulation of artificial muscles by thermodynamic-twist coupling. National Science Review, 2023, 10, .	4.6	12
226	Proxy-based sliding-mode tracking control of dielectric elastomer actuators through eliminating rate-dependent viscoelasticity. Smart Materials and Structures, 2022, 31, 104002.	1.8	4
227	Dielectric Polymer with Designable Large Motion under Low Electric Field. Advanced Materials, 2022, 34, .	11.1	11
228	Untethered Robotic Millipede Driven by Low-Pressure Microfluidic Actuators for Multi-Terrain Exploration. IEEE Robotics and Automation Letters, 2022, 7, 12142-12149.	3.3	8
229	Optically addressable dielectric elastomer actuator arrays using embedded percolative networks of zinc oxide nanowires. Materials Horizons, 2022, 9, 3110-3117.	6.4	2
230	Physiological Signatures of Changes in Honeybee's Central Complex During Wing Flapping. Journal of Insect Science, 2022, 22, .	0.6	1
231	High-performance electrified hydrogel actuators based on wrinkled nanomembrane electrodes for untethered insect-scale soft aquabots. Science Robotics, 2022, 7, .	9.9	24
232	A Dielectric Elastomer Actuator-Driven Vibro-Impact Crawling Robot. Micromachines, 2022, 13, 1660.	1.4	10
233	Networking of Block Copolymer Nanoassemblies via Digital Light Processing Four-Dimensional Printing for Programmable Actuation. ACS Applied Polymer Materials, 2022, 4, 8676-8683.	2.0	4
234	Review of Biomimetic Approaches for Drones. Drones, 2022, 6, 320.	2.7	8
235	Adopting Physical Artificial Intelligence in Soft Aerial Robots. IOP Conference Series: Materials Science and Engineering, 2022, 1261, 012006.	0.3	5

#	ARTICLE	IF	Citations
236	Powerful 2D Soft Morphing Actuator Propels Giant Manta Ray Robot. Advanced Intelligent Systems, 2022, 4, .	3.3	1
237	Wireless Autonomous Soft Crawlers for Adjustable Climbing Actuation. Chinese Journal of Polymer Science (English Edition), 0, , .	2.0	0
238	Dielectric elastomer minimum energy structure with a unidirectional actuation for a soft crawling robot: Design, modeling, and kinematic study. International Journal of Mechanical Sciences, 2023, 238, 107837.	3.6	10
239	Rolled Dielectric Elastomer Antagonistic Actuators for Biomimetic Underwater Robots. Polymers, 2022, 14, 4549.	2.0	4
240	Analytical Modeling for Flapping Wing Deformation and Kinematics with Beam Flexibility. AIAA Journal, 2023, 61, 875-889.	1.5	1
241	A Review of Electrically Driven Soft Actuators for Soft Robotics. Micromachines, 2022, 13, 1881.	1.4	11
242	The Soft Ray-Inspired Robots Actuated by Solid–Liquid Interpenetrating Silicone-Based Dielectric Elastomer Actuator. Soft Robotics, 2023, 10, 354-364.	4.6	3
243	Triple physically cross-linked hydrogel artificial muscles with high-stroke and high-work capacity. Chemical Engineering Journal, 2023, 453, 139893.	6.6	18
244	Untethered Microrobots Driven by kV-Level Capacitive Actuators via Mechanical Electrostatic Inverters. IEEE Robotics and Automation Letters, 2022, 7, 12483-12490.	3.3	5
245	Electromechanics of solenoid electroribbon actuators. European Physical Journal Plus, 2022, 137, .	1.2	0
246	Dielectric elastomer actuators as artificial muscles for wearable robots. Journal of Intelligent Material Systems and Structures, 2023, 34, 1007-1025.	1.4	9
247	Moisture-Sensitive Response and High-Reliable Cycle Recovery Effectiveness of Yarn-Based Actuators with Tether-Free, Multi-Hierarchical Hybrid Construction. ACS Applied Materials & Samp; Interfaces, 2022, 14, 53274-53284.	4.0	2
248	Enhanced electro-actuation property of heterogeneous multi-layered polydimethylsiloxane-based dielectric elastomer composites. Applied Physics Letters, 2022, 121, .	1.5	1
249	Preparation and optical properties of AgNWs/WO3:Eu3+ composite film. Journal of Materials Science, 0, , .	1.7	1
250	Advanced Acrylate Dielectric Elastomers with Large Actuation Strains at Very Low Electric Field. ACS Applied Polymer Materials, 2022, 4, 8892-8899.	2.0	2
251	On the Timescales of Embodied Intelligence for Autonomous Adaptive Systems. Annual Review of Control, Robotics, and Autonomous Systems, 2023, 6, 95-122.	7.5	2
252	Snapping for high-speed and high-efficient butterfly stroke–like soft swimmer. Science Advances, 2022, 8, .	4.7	27
253	Indoor Stockpile Reconstruction Using Drone-Borne Actuated Single-Point LiDARs. Drones, 2022, 6, 386.	2.7	1

#	Article	IF	CITATIONS
254	Design and Application of a Twisted and Coiled Polymer Driven Artificial Musculoskeletal Actuation Module. Materials, 2022, 15, 8261.	1.3	0
255	Microrobots for Targeted Delivery and Therapy in Digestive System. ACS Nano, 2023, 17, 27-50.	7. 3	22
256	Design of soft and hard active-passive composite beams. Mechanics of Advanced Materials and Structures, 2023, 30, 945-960.	1.5	1
257	Finger-palm synergistic soft gripper for dynamic capture via energy harvesting and dissipation. Nature Communications, 2022, 13, .	5.8	7
258	Theoretical study of the electroactive bistable actuator and regulation methods. International Journal of Smart and Nano Materials, 2023, 14, 36-56.	2.0	9
259	Autonomous self-healing optical sensors for damage intelligent soft-bodied systems. Science Advances, 2022, 8, .	4.7	19
260	Nonlinear Dynamics of a Resonant-Impact Dielectric Elastomer Actuator. Applied System Innovation, 2022, 5, 122.	2.7	2
261	Piezoelectric soft robot driven by mechanical energy. Nano Research, 2023, 16, 4970-4979.	5.8	1
262	Lightâ€Fueled Nonreciprocal Selfâ€Oscillators for Fluidic Transportation and Coupling. Advanced Materials, 0, , .	11.1	10
263	Additively manufactured unimorph dielectric elastomer actuators: Design, materials, and fabrication. Frontiers in Robotics and Al, 0, 9, .	2.0	2
264	Application of MWCNT-SA based sol–gel coatings to enhance the electrically-actuated performance of biomass hydrogel paper actuators. Cellulose, 2023, 30, 1741-1757.	2.4	4
265	Lithographic Microneedleâ€Motors from Multimodal Microfluidics for Cargo Delivery. Small, 2023, 19, .	5.2	4
266	Self-Oscillating Curling of a Liquid Crystal Elastomer Beam under Steady Light. Polymers, 2023, 15, 344.	2.0	21
267	Design principles for a single-process 3D-printed stacked dielectric actuators — Theory and experiment. International Journal of Mechanical Sciences, 2023, 246, 108128.	3.6	4
268	A supramolecular electrode with high self-healing efficiency at room temperature, recyclability and durability for dielectric elastomer generators. Journal of Materials Chemistry A, 2023, 11, 3565-3574.	5.2	4
269	Bioinspired Antagonist-agonist Artificial Muscles for Humanoid Eyeball Motions. , 2022, , .		0
270	A compliant thorax design for robustness and elastic energy exchange in flapping-wing robots. , 2022, , .		0
271	A vibro-impact crawling robot driven by dielectric elastomer artificial muscles. , 2022, , .		0

#	Article	IF	CITATIONS
272	Dandelionâ€Inspired, Windâ€Dispersed Polymerâ€Assembly Controlled by Light. Advanced Science, 2023, 10, .	5.6	13
273	Thin Film Piezoelectric Nanogenerator Based on (100)-Oriented Nanocrystalline AlN Grown by Pulsed Laser Deposition at Room Temperature. Micromachines, 2023, 14, 99.	1.4	2
274	Bird-inspired robotics principles as a framework for developing smart aerospace materials. Journal of Composite Materials, 2023, 57, 679-710.	1.2	3
275	Untethered Flight of a 270 mg Microrobot Powered by Onboard Energy. Advanced Intelligent Systems, 2023, 5, .	3.3	5
276	An Anisotropic Dielectric Elastomer Actuator with an Oriented Electrospun Nanofiber Composite Film. Advanced Materials Technologies, 2023, 8, .	3.0	4
277	3D-Printed High-Frequency Dielectric Elastomer Actuator toward Insect-Scale Ultrafast Soft Robot. , 2023, 5, 704-714.		9
278	Active-Cooling-in-the-Loop Controller Design and Implementation for an SMA-Driven Soft Robotic Tentacle. IEEE Transactions on Robotics, 2023, 39, 2325-2341.	7.3	11
279	Harnessing Soft Elasticity of Liquid Crystal Elastomers to Achieve Low Voltage Driven Actuation. Advanced Materials Technologies, 2023, 8, .	3.0	7
280	Dynamic modeling with quantifying dissipated power density and experimental validation of dielectric elastomer actuators. Smart Materials and Structures, 2023, 32, 055013.	1.8	1
281	A versatile jellyfish-like robotic platform for effective underwater propulsion and manipulation. Science Advances, 2023, 9, .	4.7	21
282	Polybutadiene Dielectric Elastomers with High Dielectric Constant and Ultralow Dielectric Loss via Tuning Grafted Polar Groups. Macromolecular Rapid Communications, 2023, 44, .	2.0	2
283	Untethered artificial muscles powered by wearable sweat-based energy generator. Nano Today, 2023, 49, 101765.	6.2	7
284	Comparative Assessment between PD and Fuzzy Control for a Novel Unmanned Aerial Vehicle Inspired by Owls. , 2022, , .		0
285	Soft Actuators and Robots Enabled by Additive Manufacturing. Annual Review of Control, Robotics, and Autonomous Systems, 2023, 6, 31-63.	7.5	11
286	Tailoring Functional Micromotors for Sensing. Research, 2023, 6, .	2.8	8
287	Electric Fieldâ€Driven Dielectrophoretic Elastomer Actuators. Advanced Functional Materials, 2023, 33, .	7.8	5
288	Wing kinematics measurement and aerodynamics of hovering droneflies with wing damage. Bioinspiration and Biomimetics, 2023, 18, 026013.	1.5	0
289	Engineering solvation in initiated chemical vapour deposition for control over polymerization kinetics and material properties., 2023, 2, 373-383.		1

#	Article	IF	CITATIONS
290	Modeling dynamic behavior of dielectric elastomer muscle for robotic applications. Frontiers in Bioengineering and Biotechnology, $0,11,.$	2.0	0
291	Power Autonomy and Agility Control of an Untethered Insect-Scale Soft Robot. Soft Robotics, 2023, 10, 749-759.	4.6	0
292	Performance of Actuators for Facial Robot: A Comparison Study Between Electric Motor and Dielectric Elastomer Actuator., 2022,,.		0
293	Design Analysis and Actuation Performance of a Push-Pull Dielectric Elastomer Actuator. Polymers, 2023, 15, 1037.	2.0	1
294	Liquid Crystal Elastomer Based Dexterous Artificial Motor Unit. Advanced Materials, 2023, 35, .	11.1	12
295	A Monolithic Electrostatic–Hydraulic Coupled Suction Pad. Advanced Intelligent Systems, 0, , 2200425.	3.3	2
296	Static modeling and experimental analysis of three-degree-of-freedom pneumatic flexible arm. AIP Advances, 2023, 13, 035014.	0.6	0
297	A Soft Robot Driven by a Spring-Rolling Dielectric Elastomer Actuator with Two Bristles. Micromachines, 2023, 14, 618.	1.4	0
298	Laser-assisted failure recovery for dielectric elastomer actuators in aerial robots. Science Robotics, 2023, 8, .	9.9	9
299	Skinâ€Mountable Vibrotactile Stimulator Based on Laterally Multilayered Dielectric Elastomer Actuators. Advanced Functional Materials, 2023, 33, .	7.8	8
300	Review on ultra-lightweight flapping-wing nano air vehicles: Artificial muscles, flight control mechanism, and biomimetic wings. Chinese Journal of Aeronautics, 2023, 36, 63-91.	2.8	6
301	Modeling and Control Strategies for Liquid Crystal Elastomer-Based Soft Robot Actuator. Journal of Advanced Computational Intelligence and Intelligent Informatics, 2023, 27, 235-242.	0.5	1
302	Plant‣ike Tropisms in Artificial Muscles. Advanced Materials, 2023, 35, .	11.1	5
303	Polyvinyl chloride-based dielectric elastomer with high permittivity and low viscoelasticity for actuation and sensing. Nature Communications, 2023, 14, .	5.8	8
304	Dielectric elastomer artificial muscle materials advancement and soft robotic applications. SmartMat, 2023, 4, .	6.4	8
305	High-Performance Six-DOF Flight Control of the Bee\$^{++}\$: An Inclined-Stroke-Plane Approach. IEEE Transactions on Robotics, 2023, 39, 1668-1684.	7.3	2
306	Liquid Manipulator with Printed Electrode Patterns for Soft Robotic Systems. Advanced Materials Technologies, 0, , .	3.0	0
307	A Highly Robust Amphibious Soft Robot with Imperceptibility Based on a Waterâ€Stable and Selfâ€Healing Ionic Conductor. Advanced Materials, 2023, 35, .	11.1	15

#	Article	IF	CITATIONS
308	Micro and Nano Robotics-assisted Targeted Drug Delivery, Surgery and Radiotherapy for Cancer Treatment. Current Cancer Therapy Reviews, 2024, 20, 18-25.	0.2	0
309	Enabling Highâ€Performance Artificial Muscles via a High Strength Fiber Reinforcement Strategy. Advanced Materials Technologies, 2023, 8, .	3.0	4
310	Modular and Scalable Fabrication of Insectâ€Scale Aerial Robots toward Demonstrating Swarm Flights. Advanced Intelligent Systems, 2024, 6, .	3.3	0
311	Light-propelled Self-swing of a Liquid Crystal Elastomer Balloon Swing. International Journal of Applied Mechanics, 0, , .	1.3	0
312	Ultra-tunable bistable structures for universal robotic applications. Cell Reports Physical Science, 2023, , 101365.	2.8	0
313	Liquid-phase drawing of LCE/CNT composites for electrothermal actuators. Sensors and Actuators B: Chemical, 2023, 390, 133846.	4.0	4
314	An Artificial Neuromuscular System for Bimodal Human–Machine Interaction. Advanced Functional Materials, 2023, 33, .	7.8	14
315	Takeoff of a 2.1 g Fully Untethered Tailless Flapping-Wing Micro Aerial Vehicle With Integrated Battery. IEEE Robotics and Automation Letters, 2023, 8, 3574-3580.	3.3	1
328	Small-scale robots with programmable magnetization profiles. , 2023, , 119-139.		0
331	ParSwarm: A C++ Framework for Evaluating Distributed Algorithms for Robot Swarms., 2023,,.		0
344	Control of Shape Memory Alloy Actuator via Electrostatic Capacitive Sensor for Meso-scale Mirror Tilting System., 2023,,.		0
345	Robust, High-Rate Trajectory Tracking on Insect-Scale Soft-Actuated Aerial Robots with Deep-Learned Tube MPC. , 2023, , .		1
346	Heading Control of a Long-Endurance Insect-Scale Aerial Robot Powered by Soft Artificial Muscles. , 2023, , .		1
348	A lightweight high-voltage boost circuit for soft-actuated micro-aerial-robots. , 2023, , .		1
355	Composite elastomers with on-demand convertible phase separations achieve large and healable electro-actuation. Materials Horizons, 0, , .	6.4	0
359	Design, Fabrication and Dynamic Testing of Insect-Inspired Nano Air Vehicles. , 2023, , .		0
360	Improving Piezoceramic Artificial Muscles for Flying Insect-Sized Mini Robots. Lecture Notes on Data Engineering and Communications Technologies, 2023, , 527-538.	0.5	0
371	Electroresponsive Materials for Soft Robotics. Nanobiotechnology Reports, 2023, 18, 189-206.	0.2	0

#	Article	IF	CITATIONS
382	Research on the treatment method of COVID-19 sequelae with intelligent soft manipulator based on haptic feedback. , 2023, , .		0
383	Performance Characterization of a Resonant-Impact Crawling Robot Driven by Dielectric Elastomer Actuator*., 2023,,.		0
386	Soft Humanoid Hand with C-Shaped joint and Granular-Jamming Palm. Lecture Notes in Computer Science, 2023, , 533-545.	1.0	0
389	Model-Based Performance Enhancement forÂCompound Twisted andÂCoiled Actuators. Lecture Notes in Computer Science, 2023, , 16-25.	1.0	0
390	A Self-loading Suction Cup Driven by Resonant-Impact Dielectric Elastomer Artificial Muscles. Lecture Notes in Computer Science, 2023, , 113-124.	1.0	0
391	Modeling andÂDesign Optimization ofÂaÂPre-stretched Rolled Dielectric Elastomer Actuator. Lecture Notes in Computer Science, 2023, , 138-149.	1.0	O
392	Design and Analysis of a High-performance Flexible Joint Actuator Based on the Peano-HASEL Actuator. Lecture Notes in Computer Science, 2023, , 220-231.	1.0	0
397	Fabrication and Properties of DielectricÂElastomer-Based Nanocomposites. Nanostructure Science and Technology, 2024, , 213-241.	0.1	0
403	Humidity Dependence of the Dielectric Constant of a Thermosetting Polyurethane. , 2023, , .		1
420	Toward Sub-Gram Helicopters: Designing a Miniaturized Flybar for Passive Stability. , 2023, , .		0
421	Underwater and Surface Aquatic Locomotion of Soft Biomimetic Robot Based on Bending Rolled Dielectric Elastomer Actuators. , 2023, , .		0
428	介电弹性体朖™åŠå…¶é©±åЍ噍å‱±,å†å工艰ç"ç©¶è¿≀展. Journal of Zhejiang University: Scienc	e A ,32024,	2 5 , 183-20
436	Batteries for small-scale robotics. MRS Bulletin, 2024, 49, 115-124.	1.7	2
439	Vibration Experiment for a Conductive Structure with Curved Surface Using a Dielectric Elastomer Actuator with Electro Adhesion Technique. , 2024, , .		O
444	Modelling of Homogeneous and Composite Non-linear Electro-Elastic Elastomers. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2024, , 27-57.	0.3	0
451	Robotic applications. , 2024, , 223-259.		0