

Gih-Keong Lau

List of Publications by Year in descending order

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53
papers

1,202
citations

361296

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377752

34
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56
all docs

56
docs citations

56
times ranked

1156
citing authors

#	ARTICLE	IF	CITATIONS
1	Axial force transmission in flexible bowtie dielectric elastomer actuators. Applied Physics Letters, 2022, 120, .	1.5	6
2	Maximal strengths of dielectric elastomer fingers for a passive grip. Smart Materials and Structures, 2022, 31, 045014.	1.8	6
3	Dielectric Elastomer Actuator-Based Multifunctional Smart Window for Transparency Tuning and Noise Absorption. Actuators, 2021, 10, 16.	1.2	4
4	High humidity sensing by "hygromorphic" dielectric elastomer actuator. Sensors and Actuators B: Chemical, 2021, 329, 129268.	4.0	13
5	Buttons on Demand Sliding Mechanism Driven by Smart Materials and Mechanical Design. Actuators, 2021, 10, 251.	1.2	1
6	Efficient flapping wing drone arrests high-speed flight using post-stall soaring. Science Robotics, 2020, 5, .	9.9	36
7	A stunt flying hawk-inspired drone. Science Robotics, 2020, 5, .	9.9	4
8	Effects of Thinner Compliant Electrodes on Self-Clearability of Dielectric Elastomer Actuators. Actuators, 2020, 9, 121.	1.2	5
9	Multifunctional Smart Window Based on Dielectric Elastomer Actuator. , 2020, 64, .		3
10	Transparent Tunable Acoustic Absorber Membrane Using Inkjet-Printed PEDOT:PSS Thin-Film Compliant Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 39942-39951.	4.0	30
11	Spring-Assisted Motorized Transmission for Efficient Hover by Four Flapping Wings. Journal of Mechanisms and Robotics, 2018, 10, .	1.5	8
12	Event-triggered control for a saturated nonlinear system with prescribed performance and finite-time convergence. International Journal of Robust and Nonlinear Control, 2018, 28, 5312-5325.	2.1	39
13	Smart Window Based on Electric Unfolding of Microwrinkled TiO ₂ Nanometric Films. ACS Photonics, 2018, 5, 3255-3262.	3.2	36
14	Development of elastomeric flight muscles for flapping wing micro air vehicles. , 2017, , .		3
15	Theoretical and practical investigation into the use of a bio-inspired "click" mechanism for the flight motor of a micro air vehicle. International Journal of Micro Air Vehicles, 2017, 9, 136-145.	1.0	6
16	Electrically tunable window based on microwrinkled ZnO/Ag thin film. Proceedings of SPIE, 2017, , .	0.8	3
17	Dielectric elastomer fingers for versatile grasping and nimble pinching. Applied Physics Letters, 2017, 110, .	1.5	99
18	Strong dielectric-elastomer grippers with tension arch flexures. Proceedings of SPIE, 2017, , .	0.8	5

#	ARTICLE	IF	CITATIONS
19	Electrically tunable and broader-band sound absorption by using micro-perforated dielectric elastomer actuator. Applied Physics Letters, 2017, 110, .	1.5	47
20	Controlled micro-wrinkling of ultrathin indium-tin-oxide films for transparency tuning. , 2017, , .		0
21	Ink-Jet Printing of Micro-Electro-Mechanical Systems (MEMS). Micromachines, 2017, 8, 194.	1.4	62
22	Tunable window device based on micro-wrinkling of nanometric zinc-oxide thin film on elastomer. Optics Letters, 2016, 41, 4433.	1.7	30
23	Stronger multilayer acrylic dielectric elastomer actuators with silicone gel coatings. Smart Materials and Structures, 2016, 25, 125006.	1.8	12
24	Inhibiting electro-thermal breakdown of acrylic dielectric elastomer actuators by dielectric gel coating. Applied Physics Letters, 2016, 108, .	1.5	34
25	Enhanced dielectric strength and actuation of acrylic elastomer with silicone gel encapsulation. Proceedings of SPIE, 2016, , .	0.8	2
26	Microscopically crumpled indium-tin-oxide thin films as compliant electrodes with tunable transmittance. Applied Physics Letters, 2015, 107, .	1.5	26
27	Large-strain, high-stress tubular dielectric elastomer actuator with high pre-stretch and oil encapsulation. Proceedings of SPIE, 2015, , .	0.8	2
28	Large axial actuation of pre-stretched tubular dielectric elastomer and use of oil encapsulation to enhance dielectric breakdown strength. Smart Materials and Structures, 2015, 24, 045025.	1.8	8
29	Lightweight mechanical amplifiers for rolled dielectric elastomer actuators and their integration with bio-inspired wing flappers. Smart Materials and Structures, 2014, 23, 025021.	1.8	68
30	Bi-axially crumpled silver thin-film electrodes for dielectric elastomer actuators. Smart Materials and Structures, 2014, 23, 125021.	1.8	29
31	Can DC Motors Directly Drive Flapping Wings at High Frequency and Large Wing Strokes?. IEEE/ASME Transactions on Mechatronics, 2014, 19, 109-120.	3.7	45
32	Muscle-like high-stress dielectric elastomer actuators with oil capsules. Smart Materials and Structures, 2014, 23, 105006.	1.8	16
33	Insect-inspired thoracic mechanism with non-linear stiffness for flapping-wing micro air vehicles. , 2014, , .		2
34	High stress actuation by dielectric elastomer with oil capsules. Proceedings of SPIE, 2014, , .	0.8	2
35	Dipteran-Insect-Inspired Thoracic Mechanism With Nonlinear Stiffness to Save Inertial Power of Flapping-Wing Flight. IEEE Transactions on Robotics, 2014, 30, 1187-1197.	7.3	72
36	High-stress dielectric elastomer actuators with oil encapsulation. , 2014, , .		0

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37	Flapping wings via direct-driving by DC motors. , 2013, , .		16
38	Very high dielectric strength for dielectric elastomer actuators in liquid dielectric immersion. Applied Physics Letters, 2013, 102, .	1.5	43
39	The effect of folds in thin metal film electrodes used in dielectric elastomer actuators. Proceedings of SPIE, 2013, , .	0.8	4
40	Is clicking mechanism good for flapping wing micro aerial vehicle?. , 2013, , .		3
41	Fast electrothermally activated micro-positioner using a high-aspect-ratio micro-machined polymeric composite. Applied Physics Letters, 2012, 101, .	1.5	9
42	“Clicking” compliant mechanism for flapping-wing micro aerial vehicle. , 2012, , .		6
43	Large actuation and high dielectric strength in metallized dielectric elastomer actuators. Applied Physics Letters, 2012, 100, .	1.5	27
44	Dielectric elastomer unimorph using flexible electrodes of electrolessly deposited (ELD) silver. Sensors and Actuators A: Physical, 2011, 169, 234-241.	2.0	38
45	Optimum Design of Polymeric Thermal Microactuator With Embedded Silicon Skeleton. Journal of Microelectromechanical Systems, 2010, 19, 992-1001.	1.7	8
46	Thermo-elastic behavior of a polymeric layer bonded between rigid interfaces. International Journal of Solids and Structures, 2008, 45, 5152-5164.	1.3	5
47	Polymeric Thermal Microactuator With Embedded Silicon Skeleton: Part Iâ€™Design and Analysis. Journal of Microelectromechanical Systems, 2008, 17, 809-822.	1.7	75
48	Electrothermal Microgripper With Large Jaw Displacement and Integrated Force Sensors. Journal of Microelectromechanical Systems, 2008, 17, 1546-1555.	1.7	88
49	Polymeric Thermal Microactuator With Embedded Silicon Skeleton: Part IIâ€™Fabrication, Characterization, and Application for 2-DOF Microgripper. Journal of Microelectromechanical Systems, 2008, 17, 823-831.	1.7	87
50	Influence of test capacitor features on piezoelectric and dielectric measurement of ferroelectric films. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 15-22.	1.7	19
51	A piezoelectric micro-actuator with extended base-plate for HDD. Microsystem Technologies, 2005, 11, 598-605.	1.2	4
52	Numerical simulation of slider air bearings based on a mesh-free method for HDD applications. Microsystem Technologies, 2005, 11, 797-804.	1.2	5
53	An integral flexure for rotary actuators in hard disk drives. Sensors and Actuators A: Physical, 2004, 113, 248-256.	2.0	1