Sungryul Yun

List of Publications by Year
in descending order

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74 papers	3,250 citations	147801 31 h-index	144013 57 g-index
75 all docs	75 docs citations	75 times ranked	3771 citing authors

#	Article	IF	Citations
1	Discovery of Cellulose as a Smart Material. Macromolecules, 2006, 39, 4202-4206.	4.8	639
2	Compliant Silver Nanowireâ€Polymer Composite Electrodes for Bistable Large Strain Actuation. Advanced Materials, 2012, 24, 1321-1327.	21.0	199
3	Flexible humidity and temperature sensor based on celluloseâ€“polypyrrole nanocomposite. Sensors and Actuators A: Physical, 2011, 165, 194-199.	4.1	186
4	Intrinsically stretchable transparent electrodes based on silver-nanowireâ€“crosslinked-polyacrylate composites. Nanotechnology, 2012, 23, 344002.	2.6	162
5	Polymerâ€Waveguideâ€Based Flexible Tactile Sensor Array for Dynamic Response. Advanced Materials, 2014, 26, 4474-4480.	21.0	130
6	Cellulose based electro-active papers: performance and environmental effects. Smart Materials and Structures, 2006, 15, 719-723.	3.5	108
7	Multi-walled carbon nanotubesâ€“cellulose paper for a chemical vapor sensor. Sensors and Actuators B: Chemical, 2010, 150, 308-313.	7.8	98
8	Electro-Active Polymer Based Soft Tactile Interface for Wearable Devices. IEEE Transactions on Haptics, 2018, 11, 15-21.	2.7	92
9	Paper transistor made with covalently bonded multiwalled carbon nanotube and cellulose. Applied Physics Letters, 2009, 95, .	3.3	91
10	Highâ€Performance Flexible Multilayer MoS₂ Transistors on Solutionâ€Based Polyimide Substrates. Advanced Functional Materials, 2016, 26, 2426-2434.	14.9	75
11	A bending electro-active paper actuator made by mixing multi-walled carbon nanotubes and cellulose. Smart Materials and Structures, 2007, 16, 1471-1476.	3.5	70
12	Bistable Largeâ€Strain Actuation of Interpenetrating Polymer Networks. Advanced Materials, 2012, 24, 6513-6519.	21.0	66
13	Paper Actuators Made with Cellulose and Hybrid Materials. Sensors, 2010, 10, 1473-1485.	3.8	65
14	Long lifetime, fault-tolerant freestanding actuators based on a silicone dielectric elastomer and self-clearing carbon nanotube compliant electrodes. RSC Advances, 2013, 3, 2272.	3.6	61
15	Studies on conducting polymer electroactive paper actuators: effect of humidity and electrode thickness. Smart Materials and Structures, 2005, 14, 876-880.	3.5	60
16	A Comparative Study of Conductive Polypyrrole and Polyaniline Coatings on Electro-Active Papers. Polymer Journal, 2006, 38, 659-668.	2.7	60
17	Effect of solvent mixture on properties and performance of electro-active paper made with regenerated cellulose. Sensors and Actuators B: Chemical, 2008, 129, 652-658.	7.8	54
18	Mechanical, electrical, piezoelectric and electro-active behavior of aligned multi-walled carbon nanotube/cellulose composites. Carbon, 2011, 49, 518-527.	10.3	49

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19	New electro-active paper actuator using conducting polypyrrole: actuation behaviour in LiClO4 acetonitrile solution. Synthetic Metals, 2005, 149, 53-58.	3.9	48
20	Performance of Electro-active paper actuators with thickness variation. Sensors and Actuators A: Physical, 2007, 133, 225-230.	4.1	48
21	Cellulose Smart Material: Possibility and Challenges. Journal of Intelligent Material Systems and Structures, 2008, 19, 417-422.	2.5	46
22	A Soft and Transparent Visuo-Haptic Interface Pursuing Wearable Devices. IEEE Transactions on Industrial Electronics, 2020, 67, 717-724.	7.9	40
23	Single-walled carbon nanotube/polyaniline coated cellulose based electro-active paper (EAPap) as hybrid actuator. Smart Materials and Structures, 2006, 15, N61-N65.	3.5	38
24	Multiwalled-carbon nanotubes and polyaniline coating on electro-active paper for bending actuator. Journal Physics D: Applied Physics, 2006, 39, 2580-2586.	2.8	37
25	A Robust Soft Lens for Tunable Camera Application Using Dielectric Elastomer Actuators. Soft Robotics, 2018, 5, 777-782.	8.0	36
26	Electrically tunable binary phase Fresnel lens based on a dielectric elastomer actuator. Optics Express, 2017, 25, 23801.	3.4	34
27	Alignment of cellulose chains of regenerated cellulose by corona poling and its piezoelectricity. Journal of Applied Physics, 2008, 103, 083301.	2.5	33
28	Evaluation of cellulose electro-active paper made by tape casting and zone stretching methods. International Journal of Precision Engineering and Manufacturing, 2010, 11, 987-990.	2.2	33
29	A flexible paper transistor made with aligned single-walled carbon nanotube bonded cellulose composite. Current Applied Physics, 2013, 13, 897-901.	2.4	33
30	Characteristics and performance of functionalized MWNT blended cellulose electro-active paper actuator. Synthetic Metals, 2008, 158, 521-526.	3.9	32
31	Covalently bonded multi-walled carbon nanotubes-cellulose electro-active paper actuator. Sensors and Actuators A: Physical, 2009, 154, 73-78.	4.1	32
32	High-pressure endurable flexible tactile actuator based on microstructured dielectric elastomer. Applied Physics Letters, 2018, 112, .	3.3	32
33	Fabrication of Piezoelectric Cellulose Paper and Audio Application. Journal of Bionic Engineering, 2009, 6, 18-21.	5.0	31
34	Polymer-Based Flexible Visuo-Haptic Display. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1463-1469.	5.8	31
35	Electrically aligned cellulose film for electro-active paper and its piezoelectricity. Smart Materials and Structures, 2009, 18, 117001.	3.5	30
36	A thin film active-lens with translational control for dynamically programmable optical zoom. Applied Physics Letters, 2015, 107, .	3.3	27

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37	An Enhanced Soft Vibrotactile Actuator Based on ePVC Gel with Silicon Dioxide Nanoparticles. IEEE Transactions on Haptics, 2018, 11, 22-29.	2.7	27
38	Perspective and potential of smart optical materials. Smart Materials and Structures, 2017, 26, 093001.	3.5	26
39	Synthesis, characterization and actuation behavior of polyaniline-coated electroactive paper actuators. Polymer International, 2007, 56, 1530-1536.	3.1	25
40	Electro-active-paper actuator made with LiCl/cellulose films: Effect of LiCl content. Macromolecular Research, 2006, 14, 624-629.	2.4	24
41	Sonication time effect on MWNT/PANI-EB composite for hybrid electro-active paper actuator. Synthetic Metals, 2007, 157, 523-528.	3.9	24
42	Transparent and flexible force sensor array based on optical waveguide. Optics Express, 2012, 20, 14486.	3.4	22
43	Dry Electroactive Paper Actuator Based on Cellulose/Poly(Ethylene Oxide)â€"Poly(Ethylene Glycol) MicroComposite. Journal of Intelligent Material Systems and Structures, 2009, 20, 1141-1146.	2.5	18
44	A Light-Driven Vibrotactile Actuator with a Polymer Bimorph Film for Localized Haptic Rendering. ACS Applied Materials & Interfaces, 2021, 13, 6597-6605.	8.0	18
45	Monolithic focus-tunable lens technology enabled by disk-type dielectric-elastomer actuators. Scientific Reports, 2020, 10, 16937.	3.3	16
46	An electro-active polymer based lens module for dynamically varying focal system. Applied Physics Letters, 2016, 109, 141908.	3.3	14
47	Film-type haptic actuator made with cellulose acetate layers. Journal of Intelligent Material Systems and Structures, 2014, 25, 1289-1294.	2.5	13
48	Effect of Li⁺ ions on structure, properties, and actuation of cellulose electroâ€active paper actuator. Journal of Applied Polymer Science, 2008, 108, 2260-2265.	2.6	12
49	Wrinkle structures formed by formulating UV-crosslinkable liquid prepolymers. Polymer, 2016, 99, 447-452.	3.8	12
50	Structure modulated electrostatic deformable mirror for focus and geometry control. Optics Express, 2016, 24, 55.	3.4	10
51	A variation in wrinkle structures of UV-cured films with chemical structures of prepolymers. Materials Letters, 2017, 199, 105-109.	2.6	9
52	A highly stretchable optical strain sensor monitoring dynamically large strain for deformation-controllable soft actuator. Smart Materials and Structures, 2021, 30, 105020.	3.5	8
53	Effect of covalent bonds on the mechanical properties of a multiâ€walled carbon nanotube/cellulose composite. Polymer International, 2010, 59, 1071-1076.	3.1	7
54	Sintering condition effect on the characteristics of ink-jet printed silver pattern on flexible cellulose paper. Current Applied Physics, 2012, 12, e10-e13.	2.4	7

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55	Highly Flexible and Transparent Skin-like Tactile Sensor. Lecture Notes in Electrical Engineering, 2015, , 187-189.	0.4	7
56	A transparent visuo-haptic input device with optical waveguide based thin film display, sensor and surface actuator. Sensors and Actuators A: Physical, 2015, 233, 47-53.	4.1	6
57	Facile Functionalization of Poly(Dimethylsiloxane) Elastomer by Varying Content of Hydridosilyl Groups in a Crosslinker. Polymers, 2019, 11, 1842.	4.5	6
58	A NIR-Light-Driven Twisted and Coiled Polymer Actuator with a PEDOT-Tos/Nylon-6 Composite for Durable and Remotely Controllable Artificial Muscle. Polymers, 2022, 14, 432.	4.5	6
59	Thin film display based on polymer waveguides. Optics Express, 2014, 22, 23433.	3.4	5
60	Elastomer thin-film pressure sensor based on embedded photonic tunnel-junction arrays. Optics Letters, 2018, 43, 3953.	3.3	5
61	The Cause of Nanohole and Nanoparticle Formation on Au-Electrode after Actuation of Electro-Active Paper Actuator. Journal of Physical Chemistry C, 2008, 112, 16204-16208.	3.1	4
62	Silver-Nanowires Coated Pitch-Tuned Coiled Polymer Actuator for Large Contractile Strain under Light-Loading. International Journal of Precision Engineering and Manufacturing, 2018, 19, 1895-1900.	2.2	4
63	Cellulose Electroactive Paper (EAPap): The Potential for a Novel Electronic Material. Materials Research Society Symposia Proceedings, 2008, 1129, 1.	0.1	3
64	Dielectric Elastomers UV-Cured from Poly(dimethylsiloxane) Solution in Vinyl Acetate. Polymers, 2020, 12, 2660.	4.5	3
65	Highly contrastive, real-time modulation of light intensity by reversible stress-whitening of spontaneously formed nanocomposites: application to wearable strain sensors. Journal of Materials Chemistry C, 2021, 9, 8496-8505.	5.5	2
66	Polymerâ€Based Sensors: Polymerâ€Waveguideâ€Based Flexible Tactile Sensor Array for Dynamic Response (Adv. Mater. 26/2014). Advanced Materials, 2014, 26, 4473-4473.	21.0	1
67	Covalently bonded functionalized multi-walled carbon nanotubes and cellulose for electroactive paper actuator. , 2009, , .		0
68	Multi-walled carbon nanotubes covalently bonded cellulose composite for chemical vapor sensor. , 2010, , .		0
69	Paper transistor made with regenerated cellulose and covalently bonded single-walled carbon nanotubes. , 2011, , .		0
70	Flexible visuo-haptic display. , 2013, , .		0
71	Haptic interface design for future interactive devices. , 2015, , .		0
72	Pitch-tuned coiled polymer actuator for large contractile strain under light-loading. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
73	Pressure Sensor using Vertical Coupling of Optical Waveguides. , 2016, , .		0
74	Extended AirPiano: Visuohaptic Virtual Piano with Multiple Ultrasonic Array Modules. Lecture Notes in Electrical Engineering, 2019, , 313-316.	0.4	0