Hyun-Chan Kim

List of Publications by Year
in descending order

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471	11,120	36303	48315
papers	citations	51 h-index	88 g-index

479	479	479	10442
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review of piezoelectric energy harvesting based on vibration. International Journal of Precision Engineering and Manufacturing, 2011, 12, 1129-1141.	2.2	861
2	Discovery of Cellulose as a Smart Material. Macromolecules, 2006, 39, 4202-4206.	4.8	639
3	Review of nanocellulose for sustainable future materials. International Journal of Precision Engineering and Manufacturing - Green Technology, 2015, 2, 197-213.	4.9	373
4	Recent developments in polymers/polymer nanocomposites for additive manufacturing. Progress in Materials Science, 2020, 111, 100638.	32.8	299
5	Bacterial cellulose/poly(ethylene glycol) composite: characterization and first evaluation of biocompatibility. Cellulose, 2010, 17, 83-91.	4.9	225
6	Flexible humidity and temperature sensor based on celluloseâ€“polypyrrole nanocomposite. Sensors and Actuators A: Physical, 2011, 165, 194-199.	4.1	186
7	Preparation and characterization of a Bacterial cellulose/Chitosan composite for potential biomedical application. Journal of Polymer Research, 2011, 18, 739-744.	2.4	179
8	Transparent and Flexible Cellulose Nanocrystal/Reduced Graphene Oxide Film for Proximity Sensing. Small, 2015, 11, 994-1002.	10.0	172
9	Electro-active paper actuators. Smart Materials and Structures, 2002, 11, 355-360.	3.5	150
10	Reduced graphene oxide filled cellulose films for flexible temperature sensor application. Synthetic Metals, 2015, 206, 154-161.	3.9	127
11	Review of Soft Actuator Materials. International Journal of Precision Engineering and Manufacturing, 2019, 20, 2221-2241.	2.2	122
12	Cellulose long fibers fabricated from cellulose nanofibers and its strong and tough characteristics. Scientific Reports, 2017, 7, 17683.	3.3	120
13	Designing flexible energy and memory storage materials using cellulose modified graphene oxide nanocomposites. Physical Chemistry Chemical Physics, 2015, 17, 5923-5931.	2.8	116
14	FINITE ELEMENT MODELLING OF STRUCTURES INCLUDING PIEZOELECTRIC ACTIVE DEVICES. International Journal for Numerical Methods in Engineering, 1997, 40, 817-832.	2.8	115
15	Cellulose based electro-active papers: performance and environmental effects. Smart Materials and Structures, 2006, 15, 719-723.	3.5	108
16	Cellulose nanocrystal/graphene oxide composite film as humidity sensor. Sensors and Actuators A: Physical, 2016, 247, 221-226.	4.1	105
17	Preparation and characterization of synthetic melanin-like nanoparticles reinforced chitosan nanocomposite films. Carbohydrate Polymers, 2020, 231, 115729.	10.2	101
18	Multi-walled carbon nanotubesâ€“cellulose paper for a chemical vapor sensor. Sensors and Actuators B: Chemical, 2010, 150, 308-313.	7.8	98

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19	Disposable chemical sensors and biosensors made on cellulose paper. Nanotechnology, 2014, 25, 092001.	2.6	98
20	Finite-element modeling of a smart cantilever plate and comparison with experiments. Smart Materials and Structures, 1996, 5, 165-170.	3.5	94
21	Flexible NO2 sensors from renewable cellulose nanocrystals/iron oxide composites. Sensors and Actuators B: Chemical, 2016, 233, 633-638.	7.8	94
22	Cellulose/graphene nanocomposite as multifunctional electronic and solvent sensor material. Materials Letters, 2015, 159, 20-23.	2.6	92
23	Paper transistor made with covalently bonded multiwalled carbon nanotube and cellulose. Applied Physics Letters, 2009, 95, .	3.3	91
24	Large amplification of triboelectric property by allicin to develop high performance cellulosic triboelectric nanogenerator. Chemical Engineering Journal, 2020, 385, 123723.	12.7	86
25	Cellulose nanofibers isolated by TEMPO-oxidation and aqueous counter collision methods. Carbohydrate Polymers, 2018, 191, 65-70.	10.2	82
26	Conductometric glucose biosensor made with cellulose and tin oxide hybrid nanocomposite. Sensors and Actuators B: Chemical, 2011, 157, 177-182.	7.8	81
27	Swelling Behavior of Polyacrylamideâ€“Cellulose Nanocrystal Hydrogels: Swelling Kinetics, Temperature, and pH Effects. Materials, 2019, 12, 2080.	2.9	80
28	Force tracking control of a flexible gripper featuring shape memory alloy actuators. Mechatronics, 2001, 11, 677-690.	3.3	77
29	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
30	Celluloseâ€“titanium dioxideâ€“multiwalled carbon nanotube hybrid nanocomposite and its ammonia gas sensing properties at room temperature. Sensors and Actuators B: Chemical, 2012, 171-172, 1186-1191.	7.8	68
31	Porous cellulose/graphene oxide nanocomposite as flexible and renewable electrode material for supercapacitor. Synthetic Metals, 2017, 223, 94-100.	3.9	66
32	Paper Actuators Made with Cellulose and Hybrid Materials. Sensors, 2010, 10, 1473-1485.	3.8	65
33	Studies on conducting polymer electroactive paper actuators: effect of humidity and electrode thickness. Smart Materials and Structures, 2005, 14, 876-880.	3.5	60
34	A Comparative Study of Conductive Polypyrrole and Polyaniline Coatings on Electro-Active Papers. Polymer Journal, 2006, 38, 659-668.	2.7	60
35	Effect of Wet Spinning and Stretching to Enhance Mechanical Properties of Cellulose Nanofiber Filament. International Journal of Precision Engineering and Manufacturing - Green Technology, 2019, 6, 567-575.	4.9	60
36	A hybrid inchworm linear motor. Mechatronics, 2002, 12, 525-542.	3.3	59

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37	Biocompatible Bacterial Cellulose Composites for Biomedical Application. Journal of Nanotechnology in Engineering and Medicine, 2010, 1, .	0.8	59
38	Preparation of cellulose-ZnO hybrid films by a wet chemical method and their characterization. Cellulose, 2011, 18, 675-680.	4.9	59
39	Recent Progress on Cellulose-Based Electro-Active Paper, Its Hybrid Nanocomposites and Applications. Sensors, 2016, 16, 1172.	3.8	59
40	Incorporation of melanin nanoparticles improves UV-shielding, mechanical and antioxidant properties of cellulose nanofiber based nanocomposite films. Materials Today Communications, 2020, 24, 100984.	1.9	59
41	New shunting parameter tuning method for piezoelectric damping based on measured electrical impedance. Smart Materials and Structures, 2000, 9, 868-877.	3.5	57
42	Self-moving cell linear motor using piezoelectric stack actuators. Smart Materials and Structures, 2005, 14, 934-940.	3.5	57
43	Enhanced optical and electrical properties of PEDOT: PSS films by the addition of MWCNT-sorbitol. Synthetic Metals, 2009, 159, 1701-1704.	3.9	57
44	Cellulose Nanofiber-Based Nanocomposite Films Reinforced with Zinc Oxide Nanorods and Grapefruit Seed Extract. Nanomaterials, 2021, 11, 877.	4.1	57
45	Flexible cellulose acetate/graphene blueprints for vibrotactile actuator. RSC Advances, 2015, 5, 34432-34438.	3.6	56
46	Cross-linking of cellulose nanofiber films with glutaraldehyde for improved mechanical properties. Materials Letters, 2019, 250, 99-102.	2.6	56
47	Tannic-Acid-Cross-Linked and TiO2-Nanoparticle-Reinforced Chitosan-Based Nanocomposite Film. Polymers, 2021, 13, 228.	4.5	56
48	Preparation and Characterization of Novel Bacterial Cellulose/Gelatin Scaffold for Tissue Regeneration Using Bacterial Cellulose Hydrogel. Journal of Nanotechnology in Engineering and Medicine, 2010, 1, .	0.8	55
49	Broadband transmission noise reduction of smart panels featuring piezoelectric shunt circuits and sound-absorbing material. Journal of the Acoustical Society of America, 2002, 112, 990-998.	1.1	54
50	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
51	Biocompatible nanocomposites prepared by impregnating bacterial cellulose nanofibrils into poly(3-hydroxybutyrate). Current Applied Physics, 2011, 11, 247-249.	2.4	54
52	Electroactive Hydrogels Made with Polyvinyl Alcohol/Cellulose Nanocrystals. Materials, 2018, 11, 1615.	2.9	53
53	Electroactive-paper actuator made with cellulose/NaOH/urea and sodium alginate. Cellulose, 2007, 14, 217-223.	4.9	52
54	One-step nanocellulose coating converts tissue paper into an efficient separation membrane. Cellulose, 2018, 25, 4871-4886.	4.9	51

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55	Preparation and characterization of hydrogels from polyvinyl alcohol and cellulose and their electroactive behavior. Soft Materials, 2017, 15, 64-72.	1.7	50
56	Effect of aligned cellulose film to the performance of electro-active paper actuator. Sensors and Actuators A: Physical, 2008, 141, 530-535.	4.1	49
57	Mechanical, electrical, piezoelectric and electro-active behavior of aligned multi-walled carbon nanotube/cellulose composites. Carbon, 2011, 49, 518-527.	10.3	49
58	New electro-active paper actuator using conducting polypyrrole: actuation behaviour in LiClO4 acetonitrile solution. Synthetic Metals, 2005, 149, 53-58.	3.9	48
59	Performance of Electro-active paper actuators with thickness variation. Sensors and Actuators A: Physical, 2007, 133, 225-230.	4.1	48
60	Strong and tough long cellulose fibers made by aligning cellulose nanofibers under magnetic and electric fields. Cellulose, 2019, 26, 5821-5829.	4.9	48
61	Electro-mechanical behavior and direct piezoelectricity of cellulose electro-active paper. Sensors and Actuators A: Physical, 2008, 147, 304-309.	4.1	47
62	Cellulose Smart Material: Possibility and Challenges. Journal of Intelligent Material Systems and Structures, 2008, 19, 417-422.	2.5	46
63	A novel approach for fabricating highly tunable and fluffy bioinspired 3D poly(vinyl alcohol) (PVA) fiber scaffolds. Nanoscale, 2017, 9, 7081-7093.	5.6	46
64	Piezoelectricity of wet drawn cellulose electro-active paper. Sensors and Actuators A: Physical, 2009, 154, 117-122.	4.1	44
65	Electromagnetic nanocomposite of bacterial cellulose using magnetite nanoclusters and polyaniline. Colloids and Surfaces B: Biointerfaces, 2013, 102, 238-242.	5.0	44
66	Green nanocomposite made with chitin and bamboo nanofibers and its mechanical, thermal and biodegradable properties for food packaging. International Journal of Biological Macromolecules, 2020, 144, 491-499.	7.5	44
67	Optimal Placement of Piezoelectric Actuators. AIAA Journal, 1997, 35, 526-533.	2.6	43
68	Renewable smart materials. Smart Materials and Structures, 2016, 25, 073001.	3.5	43
69	Nanoporous Sodium Carboxymethyl Cellulose-g-poly (Sodium Acrylate)/FeCl3 Hydrogel Beads: Synthesis and Characterization. Gels, 2020, 6, 49.	4.5	42
70	Frequency selective surface based passive wireless sensor for structural health monitoring. Smart Materials and Structures, 2013, 22, 025002.	3.5	41
71	Compliant bistable mechanism for low frequency vibration energy harvester inspired by auditory hair bundle structures. Smart Materials and Structures, 2013, 22, 014005.	3.5	40
72	Flexible cellulose and ZnO hybrid nanocomposite and its UV sensing characteristics. Science and Technology of Advanced Materials, 2017, 18, 437-446.	6.1	40

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73	Broadband noise reduction of piezoelectric smart panel featuring negative-capacitive-converter shunt circuit. Journal of the Acoustical Society of America, 2006, 120, 2017-2025.	1.1	39
74	Actuation of electrochemical, electro-magnetic, and electro-active actuators for carbon nanofiber and Ni nanowire reinforced polymer composites. Composites Part B: Engineering, 2008, 39, 1161-1169.	12.0	39
75	Review of microwave assisted manufacturing technologies. International Journal of Precision Engineering and Manufacturing, 2012, 13, 2263-2272.	2.2	39
76	Review of state-of-the-art sensor applications using mechanoluminescence microparticles. International Journal of Precision Engineering and Manufacturing, 2016, 17, 1237-1247.	2.2	39
77	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
78	Titanium dioxideâ€“cellulose hybrid nanocomposite and its glucose biosensor application. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 844-848.	3.5	38
79	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
80	Effect of chitosan and ions on actuation behavior of celluloseâ€“chitosan laminated films as electro-active paper actuators. Cellulose, 2007, 14, 439-445.	4.9	37
81	5â€Fluorouracil encapsulated magnetic nanohydrogels for drugâ€delivery applications. Journal of Applied Polymer Science, 2016, 133, .	2.6	37
82	Characterization and electromechanical performance of celluloseâ€“chitosan blend electro-active paper. Smart Materials and Structures, 2008, 17, 035028.	3.5	36
83	Enhanced electromechanical behavior of cellulose film by zinc oxide nanocoating and its vibration energy harvesting. Acta Materialia, 2016, 114, 1-6.	7.9	36
84	Calcinated tea and cellulose composite films and its dielectric and lead adsorption properties. Carbohydrate Polymers, 2017, 171, 183-192.	10.2	36
85	Microwave power transmission using a flexible rectenna for microwave-powered aerial vehicles. Smart Materials and Structures, 2006, 15, 1243-1248.	3.5	35
86	Cause of Slow Phase Transformation of TiO₂ Nanorods. Journal of Physical Chemistry C, 2009, 113, 19753-19755.	3.1	35
87	A Wide Range Conductometric pH Sensor Made With Titanium Dioxide/Multiwall Carbon Nanotube/Cellulose Hybrid Nanocomposite. IEEE Sensors Journal, 2013, 13, 4157-4162.	4.7	35
88	Synthesis and characterization of iron oxide/cellulose nanocomposite film. International Journal of Biological Macromolecules, 2015, 74, 142-149.	7.5	35
89	Performance characterization of flexible dipole rectennas for smart actuator use. Smart Materials and Structures, 2006, 15, 809-815.	3.5	34
90	Fabrication of Cellulose ZnO Hybrid Nanocomposite and Its Strain Sensing Behavior. Materials, 2014, 7, 7000-7009.	2.9	34

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91	Chitosan Nanofiber and Cellulose Nanofiber Blended Composite Applicable for Active Food Packaging. Nanomaterials, 2020, 10, 1752.	4.1	34
92	Alignment of cellulose chains of regenerated cellulose by corona poling and its piezoelectricity. Journal of Applied Physics, 2008, 103, 083301.	2.5	33
93	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
94	A flexible paper transistor made with aligned single-walled carbon nanotube bonded cellulose composite. Current Applied Physics, 2013, 13, 897-901.	2.4	33
95	Finite element analysis for acoustic characteristics of a magnetostrictive transducer. Smart Materials and Structures, 2005, 14, 1273-1280.	3.5	32
96	Blocked force measurement of electro-active paper actuator by micro-balance. Sensors and Actuators A: Physical, 2007, 133, 401-406.	4.1	32
97	Characteristics and performance of functionalized MWNT blended cellulose electro-active paper actuator. Synthetic Metals, 2008, 158, 521-526.	3.9	32
98	Covalently bonded multi-walled carbon nanotubes-cellulose electro-active paper actuator. Sensors and Actuators A: Physical, 2009, 154, 73-78.	4.1	32
99	Synthesis and characterization of conductive silver ink for electrode printing on cellulose film. Applied Physics A: Materials Science and Processing, 2013, 112, 411-418.	2.3	32
100	Flexible and transparent strain sensor made with silver nanowireâ€“coated cellulose. Journal of Intelligent Material Systems and Structures, 2016, 27, 1011-1018.	2.5	32
101	Elastic moduli of cellulose nanofibers isolated from various cellulose resources by using aqueous counter collision. Cellulose, 2018, 25, 4261-4268.	4.9	32
102	Adhesion properties of poly(ethylene oxide)-lignin blend for nanocellulose composites. Composites Part B: Engineering, 2019, 156, 43-50.	12.0	32
103	All-biobased transparent-wood: A new approach and its environmental-friendly packaging application. Carbohydrate Polymers, 2021, 264, 118012.	10.2	32
104	Removal of Impurities from Cellulose Films after Their Regeneration from Cellulose Dissolved in DMAc/LiCl Solvent System. Industrial & Engineering Chemistry Research, 2008, 47, 1702-1706.	3.7	31
105	Fabrication of Piezoelectric Cellulose Paper and Audio Application. Journal of Bionic Engineering, 2009, 6, 18-21.	5.0	31
106	Fabrication and testing of cellulose EAPap actuators for haptic application. Sensors and Actuators A: Physical, 2010, 164, 68-73.	4.1	31
107	The preparation, characterization and actuation behavior of polyaniline and cellulose blended electro-active paper. Smart Materials and Structures, 2010, 19, 045011.	3.5	31
108	Aligned cellulose nanofiber composite made with electrospinning of cellulose nanofiber - Polyvinyl alcohol and its vibration energy harvesting. Composites Science and Technology, 2021, 209, 108795.	7.8	31

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109	Electrically aligned cellulose film for electro-active paper and its piezoelectricity. Smart Materials and Structures, 2009, 18, 117001.	3.5	30
110	Poly(acrylic acid)-Poly(vinyl alcohol) hydrogels for reconfigurable lens actuators. International Journal of Precision Engineering and Manufacturing - Green Technology, 2016, 3, 375-379.	4.9	30
111	Review of Cellulose Smart Material: Biomass Conversion Process and Progress on Cellulose-Based Electroactive Paper. Journal of Renewable Materials, 2018, 6, 1-25.	2.2	29
112	Preparation of cellulose-ZnO hybrid films by a wet chemical method and their characterization. Cellulose, 2011, 18, 675-680.	4.9	29
113	Finite element-optimization methods for the active control of radiated sound from a plate structure. Smart Materials and Structures, 1995, 4, 318-326.	3.5	28
114	Multimode shunt damping of piezoelectric smart panel for noise reduction. Journal of the Acoustical Society of America, 2004, 116, 942-948.	1.1	28
115	Piezoelectric electro-active paper (EAPap) speaker. Journal of Mechanical Science and Technology, 2011, 25, 2763-2768.	1.5	28
116	Passive and active damping characteristics of smart electro-rheological composite beams. Smart Materials and Structures, 2001, 10, 724-729.	3.5	27
117	Performance test and improvement of piezoelectric torsional actuators. Smart Materials and Structures, 2001, 10, 750-757.	3.5	27
118	Micro transfer printing on cellulose electro-active paper. Smart Materials and Structures, 2006, 15, 889-892.	3.5	27
119	Magnetic field effect for cellulose nanofiber alignment. Journal of Applied Physics, 2008, 104, .	2.5	27
120	Celluloseâ€“chitosan interpenetrating polymer network for electroâ€active paper actuator. Journal of Applied Polymer Science, 2009, 114, 288-297.	2.6	27
121	Effect of annealing temperature on the characteristics of ZnO thin films. Journal of Physics and Chemistry of Solids, 2012, 73, 1259-1263.	4.0	27
122	Designing pH-responsive and dielectric hydrogels from cellulose nanocrystals. Journal of Chemical Sciences, 2015, 127, 1119-1125.	1.5	27
123	Parameter identification of partially covered piezoelectric cantilever power scavenger based on the coupled distributed parameter solution. International Journal of Smart and Nano Materials, 2017, 8, 110-124.	4.2	27
124	Perspective and potential of smart optical materials. Smart Materials and Structures, 2017, 26, 093001.	3.5	26
125	In-plane strain of electro-active paper under electric fields. Sensors and Actuators A: Physical, 2007, 140, 225-231.	4.1	25
126	Synthesis, characterization and actuation behavior of polyaniline-coated electroactive paper actuators. Polymer International, 2007, 56, 1530-1536.	3.1	25

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127	Electromechanical Behavior of Room Temperature Ionic Liquid Dispersed Cellulose. Journal of Physical Chemistry C, 2009, 113, 12523-12529.	3.1	25
128	Dielectric and polarization behaviour of cellulose electro-active paper (EAPap). Journal Physics D: Applied Physics, 2009, 42, 082003.	2.8	25
129	Alignment Effect on the Piezoelectric Properties of Ultrathin Cellulose Nanofiber Films. ACS Applied Bio Materials, 2020, 3, 4329-4334.	4.6	25
130	Electro-active-paper actuator made with LiCl/cellulose films: Effect of LiCl content. Macromolecular Research, 2006, 14, 624-629.	2.4	24
131	Sonication time effect on MWNT/PANI-EB composite for hybrid electro-active paper actuator. Synthetic Metals, 2007, 157, 523-528.	3.9	24
132	Modeling elastic, viscous and creep characteristics of cellulose Electro-Active Paper. Mechanics of Materials, 2008, 40, 1001-1011.	3.2	24
133	Durability of PEDOTâ€‰:â€‰PSS-pentacene Schottky diode. Journal Physics D: Applied Physics, 2008, 41, 012003	2.8	24
134	Hybrid nanocomposite based on cellulose and tin oxide: growth, structure, tensile and electrical characteristics. Science and Technology of Advanced Materials, 2011, 12, 055006.	6.1	24
135	Synthesis and characterization of cellulose acetateâ€“calcium carbonate hybrid nanocomposite. Composites Part B: Engineering, 2012, 43, 522-525.	12.0	24
136	Optimal design of a piezoelectric smart structure for noise control. Smart Materials and Structures, 1998, 7, 801-808.	3.5	23
137	Effect of room temperature ionic liquids adsorption on electromechanical behavior of cellulose electro-active paper. Macromolecular Research, 2009, 17, 116-120.	2.4	23
138	Poly(vinyl alcohol)â€“lignin blended resin for celluloseâ€based composites. Journal of Applied Polymer Science, 2018, 135, 46655.	2.6	23
139	Esterified PVAâ€lignin resin by maleic acid applicable for natural fiber reinforced composites. Journal of Applied Polymer Science, 2020, 137, 48836.	2.6	23
140	A novel approach of developing sustainable cellulose coating for self-cleaning-healing fabric. Progress in Organic Coatings, 2020, 140, 105500.	3.9	23
141	Vibration Sensor Characteristics of Piezoelectric Electro-active Paper. Journal of Intelligent Material Systems and Structures, 2010, 21, 1123-1130.	2.5	22
142	Passive wireless structural health monitoring sensor made with a flexible planar dipole antenna. Smart Materials and Structures, 2012, 21, 027001.	3.5	22
143	Recent Research Progress on Lignin-Derived Resins for Natural Fiber Composite Applications. Polymers, 2021, 13, 1162.	4.5	22
144	Electroactive Paper Actuator Made with Chitosan-Cellulose Films: Effect of Acetic Acid. Macromolecular Materials and Engineering, 2007, 292, 748-753.	3.6	21

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145	Effect of heat treatment on the structure, piezoelectricity and actuation behavior of a cellulose electroactive-paper actuator. Acta Materialia, 2008, 56, 1868-1875.	7.9	21
146	Noise reduction of passive and active hybrid panels. Smart Materials and Structures, 2002, 11, 940-946.	3.5	20
147	Design, Fabrication, and Evaluation of Stepper Motors Based on the Piezoelectric Torsional Actuator. IEEE/ASME Transactions on Mechatronics, 2013, 18, 1850-1854.	5.8	20
148	Steered Pull Simulation to Determine Nanomechanical Properties of Cellulose Nanofiber. Materials, 2020, 13, 710.	2.9	20
149	Finite element modeling of a piezoelectric smart structure for the cabin noise problem. Smart Materials and Structures, 1999, 8, 380-389.	3.5	19
150	An electro-active paper actuator made with lithium chloride/cellulose films: effects of glycerol content and film thickness. Smart Materials and Structures, 2007, 16, 1564-1569.	3.5	19
151	Effect of annealing temperature on the conduction mechanism for a solâ€“gel driven ZnO Schottky diode. Journal Physics D: Applied Physics, 2009, 42, 125110.	2.8	19
152	Effect of poly(ethylene oxide)â€•poly(ethylene glycol) addition on actuation behavior of cellulose electroactive paper. Journal of Applied Polymer Science, 2009, 114, 847-852.	2.6	19
153	An electro-active paper actuator made with celluloseâ€“polypyrroleâ€“ionic liquid nanocomposite: influence of ionic liquid concentration, type of anion and humidity. Smart Materials and Structures, 2010, 19, 105014.	3.5	19
154	Porous Tin-Oxide-Coated Regenerated Cellulose as Disposable and Low-Cost Alternative Transducer for Urea Detection. IEEE Sensors Journal, 2013, 13, 2223-2228.	4.7	19
155	Electroactive and Optically Adaptive Bionanocomposite for Reconfigurable Microlens. Journal of Physical Chemistry B, 2016, 120, 4699-4705.	2.6	19
156	High-k dielectric percolative nanocomposites based on multiwalled carbon nanotubes and polyvinyl chloride. Journal of Materials Chemistry C, 2018, 6, 8152-8159.	5.5	19
157	Synergistic effect of polydopamineâ€“polyethylenimine copolymer coating on graphene oxide for EVA nanocomposites and high-performance triboelectric nanogenerators. Nanoscale Advances, 2019, 1, 2444-2453.	4.6	19
158	High-performance Esterified-Poly (vinyl alcohol)-Citric acid-Lignin resin and its application to Wet-spun nanocellulose Filament-Reinforced polymer composite. Composites Part A: Applied Science and Manufacturing, 2022, 153, 106735.	7.6	19
159	The TiO2nanoparticle effect on the performance of a conducting polymer Schottky diode. Nanotechnology, 2008, 19, 505202.	2.6	18
160	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
161	Influence of residual ionic liquid on the thermal stability and electromechanical behavior of cellulose regenerated from 1-ethyl-3-methylimidazolium acetate. Fibers and Polymers, 2012, 13, 289-294.	2.1	18
162	Morphology correlated free volume studies of multi-walled carbon nanotube plasticized poly (vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.8	18

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163	Microâ€“macro linear piezoelectric motor based on self-moving cell. Mechatronics, 2009, 19, 1134-1142.	3.3	17
164	Characterization and sensor application of cellulose electro-active paper (EAPap). Science Bulletin, 2009, 54, 2703-2707.	9.0	17
165	Transparent and semi-interpenetrating network P(vinyl alcohol)- P(Acrylic acid) hydrogels: pH responsive and electroactive application. International Journal of Smart and Nano Materials, 2017, 8, 80-94.	4.2	17
166	High-strength cellulose nanofiber/graphene oxide hybrid filament made by continuous processing and its humidity monitoring. Scientific Reports, 2021, 11, 13611.	3.3	17
167	Magnetostrictive self-moving cell linear motor. Mechatronics, 2003, 13, 739-753.	3.3	16
168	Transient analysis of delaminated smart composite structures by incorporating the Fermiâ€“Dirac distribution function. Smart Materials and Structures, 2006, 15, 221-231.	3.5	16
169	Mechanical properties of cellulose electro-active paper under different environmental conditions. Smart Materials and Structures, 2008, 17, 015029.	3.5	16
170	Nanocoating of ionic liquid and polypyrrole for durable electro-active paper actuators working under ambient conditions. Journal Physics D: Applied Physics, 2010, 43, 205502.	2.8	16
171	Electrical and electromechanical properties of 1-butyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide-blended cellulose. Ionics, 2011, 17, 41-47.	2.4	16
172	The effects of width reduction on the damping of a cantilever beam and its application in increasing the harvesting power of piezoelectric energy harvester. Smart Materials and Structures, 2015, 24, 045006.	3.5	16
173	Graphene oxideâ€“gellan gumâ€“sodium alginate nanocomposites: synthesis, characterization, and mechanical behavior. Composite Interfaces, 2015, 22, 249-263.	2.3	16
174	Green all-cellulose nanocomposites made with cellulose nanofibers reinforced in dissolved cellulose matrix without heat treatment. Cellulose, 2017, 24, 3301-3311.	4.9	16
175	Characteristics of flexible electrode made on cellulose by soluble polypyrrole coating. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2012, 226, 2605-2609.	2.1	15
176	Flexible and conductive ITO electrode made on cellulose film by spin-coating. Synthetic Metals, 2012, 162, 1972-1976.	3.9	15
177	Fabrication of a Miniaturized ZnO Nanowire Accelerometer and Its Performance Tests. Sensors, 2016, 16, 1499.	3.8	15
178	Analytical and experimental investigation of partially covered piezoelectric cantilever energy harvester. International Journal of Precision Engineering and Manufacturing, 2017, 18, 415-424.	2.2	15
179	Soft piezoelectric polymer of poly[di(ethylene glycol) adipate] plasticized poly vinyl chloride and its strain sensing. Materials Letters, 2018, 227, 276-280.	2.6	15
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