Ken Mukai

List of Publications by Year
in descending order

39 papers	1,662 citations	331670 21 h-index	330143 37 g-index
40 all docs	40 docs citations	40 times ranked	1126 citing authors

#	Article	IF	Citations
1	Nanotube length and density dependences of electrical and mechanical properties of carbon nanotube fibres made by wet spinning. Carbon, 2019, 152, 1-6.	10.3	23
2	Effect of platelet-shaped graphene additives on actuating response of carbon nanotube/ionic liquid/polymer composite actuators. Japanese Journal of Applied Physics, 2018, 57, 03EH08.	1.5	1
3	Actuation and blocking force of stacked nanocarbon polymer actuators. International Journal of Smart and Nano Materials, 2018, 9, 184-198.	4.2	4
4	Effect of surfactants and dispersion methods on properties of single-walled carbon nanotube fibers formed by wet-spinning. Applied Physics Express, 2017, 10, 055101.	2.4	15
5	Wet spinning of continuous polymer-free carbon-nanotube fibers with high electrical conductivity and strength. Applied Physics Express, 2016, 9, 055101.	2.4	33
6	Relationship between Mechanical and Electrical Properties of Continuous Polymer-Free Carbon Nanotube Fibers by Wet-Spinning Method and Nanotube-Length Estimated by Far-Infrared Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 20419-20427.	3.1	27
7	Electroactive Shape-Fixing of Bucky-Gel Actuators. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1108-1116.	5.8	7
8	Impact of viscoelastic properties on bucky-gel actuator performance. Journal of Intelligent Material Systems and Structures, 2014, 25, 2235-2245.	2.5	11
9	Mechanical behaviour of bending bucky-gel actuators and its representation. Smart Materials and Structures, 2014, 23, 025031.	3.5	24
10	The viscoelastic effect in bending bucky-gel actuators. , 2014, , .		1
11	Electrochemistry of electromechanical actuators based on carbon nanotubes and ionic liquids. , 2013, , .		2
12	Ionic electroactive polymer actuators based on nano-carbon electrodes. Polymer International, 2013, 62, 1263-1270.	3.1	60
13	Fast-moving bimorph actuator based on electrochemically treated millimeter-long carbon nanotube electrodes and ionic liquid gel. International Journal of Smart and Nano Materials, 2012, 3, 263-274.	4.2	4
14	Electrochemical impedance spectroscopy of the bucky-gel actuators and their electromechanical modeling. , 2012, , .		2
15	Electrochemical and electromechanical properties of high performance polymer actuators using multi-walled carbon nanotubes containing ruthenium oxide. Sensors and Actuators B: Chemical, 2012, 174, 217-224.	7.8	6
16	Superior performance of manganese oxide/multi-walled carbon nanotubes polymer actuator over ruthenium oxide/multi-walled carbon nanotubes and single-walled carbon nanotubes. Sensors and Actuators B: Chemical, 2012, 171-172, 595-601.	7.8	32
17	Improved performance of an activated multi-walled carbon nanotube polymer actuator, compared with a single-walled carbon nanotube polymer actuator. Sensors and Actuators B: Chemical, 2012, 173, 66-71.	7.8	14
18	Superior performance of a vapor grown carbon fiber polymer actuator containing ruthenium oxide over a single-walled carbon nanotube. Journal of Materials Chemistry, 2012, 22, 15104.	6.7	21

#	Article	IF	Citations
19	A multi-walled carbon nanotube/polymer actuator that surpasses the performance of a single-walled carbon nanotube/polymer actuator. Carbon, 2012, 50, 311-320.	10.3	52
20	Superior performance of non-activated multi-walled carbon nanotube polymer actuator containing ruthenium oxide over a single-walled carbon nanotube. Carbon, 2012, 50, 1888-1896.	10.3	25
21	Capacitive and faradic charge components in high-speed carbon nanotube actuator. Electrochimica Acta, 2012, 60, 177-183.	5.2	42
22	High performance polymer actuators based on multi-walled carbon nanotubes that surpass the performance of those containing single-walled carbon nanotubes: Effects of ionic liquid and composition. Sensors and Actuators B: Chemical, 2012, 163, 20-28.	7.8	26
23	Actuator of double layer film composed of carbon nanotubes and polypyrroles. Sensors and Actuators B: Chemical, 2012, 161, 1010-1017.	7.8	13
24	The performance of fast-moving low-voltage electromechanical actuators based on single-walled carbon nanotubes and ionic liquids. Smart Materials and Structures, 2011, 20, 124008.	3.5	11
25	Effect of hexafluoropropylene on the performance of poly(vinylidene fluoride) polymer actuators based on single-walled carbon nanotubeâ€“ionic liquid gel. Sensors and Actuators B: Chemical, 2011, 160, 161-167.	7.8	68
26	Highâ€Speed Carbon Nanotube Actuators Based on an Oxidation/Reduction Reaction. Chemistry - A European Journal, 2011, 17, 10965-10971.	3.3	45
27	Improving the actuating response of carbon nanotube/ionic liquid composites by the addition of conductive nanoparticles. Carbon, 2011, 49, 3560-3570.	10.3	67
28	The effects of alkaline and alkaline earth metal salts on the performance of a polymer actuator based on single-wal led carbon nanotube-ionic liquid gel. Physics Procedia, 2011, 14, 73-86.	1.2	3
29	High performance polymer actuator based on carbon nanotube-ionic liquid gel: Effect of ionic liquid. Sensors and Actuators B: Chemical, 2011, 156, 539-545.	7.8	70
30	The effects of alkaline earth metal salts on the performance of a polymer actuator based on single-walled carbon nanotube-ionic liquid gel. Sensors and Actuators B: Chemical, 2010, 150, 625-630.	7.8	9
31	The effects of Li salts on the performance of a polymer actuator based on single-walled carbon nanotube-ionic liquid gel. Polymer, 2010, 51, 3372-3376.	3.8	18
32	Electrochemical Impedance Spectroscopy and Electromechanical Behavior of Bucky-Gel Actuators Containing Ionic Liquids. Journal of Physical Chemistry C, 2010, 114, 14627-14634.	3.1	48
33	Expansion and contraction of polymer electrodes under applied voltage. Journal of Applied Physics, 2009, 105, .	2.5	26
34	Highly Conductive Sheets from Millimeterâ€Long Singleâ€Walled Carbon Nanotubes and Ionic Liquids: Application to Fastâ€Moving, Lowâ€Voltage Electromechanical Actuators Operable in Air. Advanced Materials, 2009, 21, 1582-1585.	21.0	230
35	Electromechanical behavior of fully plastic actuators based on bucky gel containing various internal ionic liquids. Electrochimica Acta, 2009, 54, 1762-1768.	5.2	175
36	Actuator properties of the complexes composed by carbon nanotube and ionic liquid: The effects of additives. Sensors and Actuators B: Chemical, 2009, 141, 179-186.	7.8	146

#	Article	IF	Citations
37	Electromechanical behavior of a fully plastic actuator based on dispersed nano-carbon/ionic-liquid-gel electrodes. Carbon, 2009, 47, 1373-1380.	10.3	81
38	High performance fully plastic actuator based on ionic-liquid-based bucky gel. Electrochimica Acta, 2008, 53, 5555-5562.	5.2	208
39	Fast fully plastic actuator based on ionic-liquid-based bucky gel. Proceedings of SPIE, 2008, , .	0.8	4