Urmas Johanson

List of Publications by Year
in descending order

44	951	516561	434063
papers	citations	16 h-index	31 g-index

44	44	44	891
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ionic and Capacitive Artificial Muscle for Biomimetic Soft Robotics. Advanced Engineering Materials, 2015, 17, 84-94.	1.6	141
2	Comparative study of the behavior of anions in polypyrrole films. Electrochimica Acta, 2005, 50, 1523-1528.	2.6	86
3	Nanoporous carbon-based electrodes for high strain ionomeric bending actuators. Smart Materials and Structures, 2009, 18, 095028.	1.8	72
4	Ionic electroactive polymer artificial muscles in space applications. Scientific Reports, 2014, 4, 6913.	1.6	64
5	Ionic liquid-based actuators working in air: The effect of ambient humidity. Sensors and Actuators B: Chemical, 2014, 202, 114-122.	4.0	63
6	Electroactive polymer actuators with carbon aerogel electrodes. Journal of Materials Chemistry, 2011, 21, 2577.	6.7	61
7	Charging a supercapacitor-like laminate with ambient moisture: from a humidity sensor to an energy harvester. Physical Chemistry Chemical Physics, 2013, 15, 9605.	1.3	50
8	A Distributed Model of Ionomeric Polymer Metal Composite. Journal of Intelligent Material Systems and Structures, 2009, 20, 1711-1724.	1.4	48
9	Nanoporous Carbide-Derived Carbon Material-Based Linear Actuators. Materials, 2010, 3, 9-25.	1.3	44
10	Electrode reactions in Cuâ€“Pt coated ionic polymer actuators. Sensors and Actuators B: Chemical, 2008, 131, 340-346.	4.0	40
11	A carbide-derived carbon laminate used as a mechanoelectrical sensor. Carbon, 2012, 50, 535-541.	5.4	35
12	Scalable fabrication of ionic and capacitive laminate actuators for soft robotics. Sensors and Actuators B: Chemical, 2017, 246, 154-163.	4.0	35
13	Influence of Anions on Electrochemical Properties of Polypyrrole-Modified Electrodes. Russian Journal of Electrochemistry, 2002, 38, 182-187.	0.3	32
14	A new class of ionic electroactive polymers based on green synthesis. Sensors and Actuators A: Physical, 2016, 249, 32-44.	2.0	23
15	In situ scanning electron microscopy study of strains of ionic electroactive polymer actuators. Journal of Intelligent Material Systems and Structures, 2016, 27, 1061-1074.	1.4	18
16	Study of the Properties of Electrodeposited Polypyrrole Films. Russian Journal of Electrochemistry, 2004, 40, 344-348.	0.3	16
17	Electromechanically active polymer actuators based on biofriendly choline ionic liquids. Smart Materials and Structures, 2020, 29, 055021.	1.8	16
18	Effect of ambient humidity on ionic electroactive polymer actuators. Smart Materials and Structures, 2016, 25, 055038.	1.8	14

#	Article	IF	Citations
19	Lifetime measurements of ionic electroactive polymer actuators. Journal of Intelligent Material Systems and Structures, 2014, 25, 2267-2275.	1.4	12
20	Encapsulation of ionic electromechanically active polymer actuators. Smart Materials and Structures, 2019, 28, 074002.	1.8	10
21	Effect of porosity and tortuosity of electrodes on carbon polymer soft actuators. Journal of Applied Physics, 2018, 123, 014502.	1.1	9
22	Modelling and Control of Ionic Electroactive Polymer Actuators under Varying Humidity Conditions. Actuators, 2018, 7, 7.	1.2	9
23	Mechanical and electro-mechanical properties of EAP actuators with inkjet printed electrodes. Synthetic Metals, 2018, 246, 122-127.	2.1	8
24	An All-Textile Non-muscular Biomimetic Actuator Based on Electrohydrodynamic Swelling. Frontiers in Bioengineering and Biotechnology, 2020, 8, 408.	2.0	8
25	A power-autonomous self-rolling wheel using ionic and capacitive actuators. Proceedings of SPIE, 2015, , .	0.8	4
26	Modeling, fabrication, and characterization of motion platform actuated by carbon polymer soft actuator. Sensors and Actuators A: Physical, 2018, 283, 87-97.	2.0	4
27	Ionic Actuators as Manipulators for Microscopy. Frontiers in Robotics and AI, 2019, 6, 140.	2.0	4
28	Ionic polymer metal composites with nanoporous carbon electrodes. , 2010, , .		3
29	Pulse-width-modulated charging of ionic and capacitive actuators. , 2014, , .		3
30	Thermal behavior of ionic electroactive polymer actuators. , 2015, , .		3
31	Fabrication of Carbon-Based Ionic Electromechanically Active Soft Actuators. Journal of Visualized Experiments, 2020, , .	0.2	3
32	Chapter 6. Ionic Polymer Metal Composites with Electrochemically Active Electrodes. RSC Smart Materials, 2015, , 215-227.	0.1	3
33	Some electrochemical aspects of aqueous ionic polymer-composite actuators. , 2016, , .		2
34	Carbide-derived carbon and poly-3,4-ethylenedioxythiphene composite laminate: linear and bending actuation. Synthetic Metals, 2018, 245, 67-73.	2.1	2
35	Low voltage linear actuators based on carbide-derived carbon powder. Proceedings of SPIE, 2009, , .	0.8	1
36	Carbon-polymer-ionic liquid composite as a motion sensor. Proceedings of SPIE, 2012, , .	0.8	1

#	ARTICLE	IF	CITATIONS
37	An ionic liquid-based actuator as a humidity sensor. , 2013, , .		1
38	Effect of electrical terminals made of copper to the ionic electroactive polymer actuators. Proceedings of SPIE, 2017, , .	0.8	1
39	Modelling and control of self-sensing ionic electroactive polymer actuator. , 2019, , .		1
40	Kinetics of catalyzed dehydrocondensation of hydrogen functionalized siloxane. Journal of Applied Polymer Science, 0, , 52304.	1.3	1
41	Self healing properties of Cu-Pt coated ionic polymer actuators. , 2008, , .		0
42	Fish-skeleton visualization of bending actuators. Proceedings of SPIE, 2016, , .	0.8	0
43	Effect of porosity of the electrodes on ionic electroactive polymer actuators. Proceedings of SPIE, 2017, , .	0.8	0
44	Fabrication of carbon polymer composite manipulated multi-degree motion platform. , 2018, , .		0