Alvo Aabloo

List of Publications by Year in descending order

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221	4,264	94381	149623
papers	citations	37 h-index	56 g-index

222	222	222	3318
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Particle Dynamics-Based Stochastic Modeling of Carbon Particle Charging in the Flow Capacitor Systems. Applied Sciences (Switzerland), 2022, 12, 1887.	1.3	1
2	A Self-Commutated Helical Polypyrrole Actuator Fabricated by Filament Patterning. IEEE Robotics and Automation Letters, 2022, 7, 5858-5865.	3.3	0
3	TeMoto: A Software Framework for Adaptive and Dependable Robotic Autonomy With Dynamic Resource Management. IEEE Access, 2022, 10, 51889-51907.	2.6	3
4	A leaf-inspired robot combining embroidered structure with ion-induced actuation. , 2022, , .		0
5	Effects of ionic liquids and dual curing on vat photopolymerization process and properties of 3d-printed ionogels. Additive Manufacturing, 2022, 56, 102895.	1.7	2
6	Multi-physical modeling and fabrication of high-performance IPMC actuators with serrated interface. Smart Materials and Structures, 2022, 31, 095023.	1.8	2
7	A Green Deformation Sensor Based on Bacterial Cellulose and Bio-Derived Ionic Liquids. , 2021, , .		3
8	GPU Accelerated Convex Approximations for Fast Multi-Agent Trajectory Optimization. IEEE Robotics and Automation Letters, 2021, 6, 3303-3310.	3.3	5
9	Modeling and Experimental Analysis of the Mass Loading Effect on Micro-Ionic Polymer Actuators Using Step Response Identification. Journal of Microelectromechanical Systems, 2021, 30, 243-252.	1.7	1
10	Carbon xerogel from 5-methylresorcinol-formaldehyde gel: The controllability of structural properties. Carbon Trends, 2021, 3, 100037.	1.4	7
11	Allâ€Printed Green Microâ€Supercapacitors Based on a Naturalâ€derived Ionic Liquid for Flexible Transient Electronics. Advanced Functional Materials, 2021, 31, 2102180.	7.8	38
12	Mechanism of Spontaneous Surface Modifications on Polycrystalline Cu Due to Electric Fields. Micromachines, 2021, 12, 1178.	1.4	1
13	Soft parallel manipulator fabricated by additive manufacturing. Sensors and Actuators B: Chemical, 2020, 305, 127355.	4.0	10
14	Fabrication of Carbon-Based Ionic Electromechanically Active Soft Actuators. Journal of Visualized Experiments, 2020, , .	0.2	3
15	Growth mechanism for nanotips in high electric fields. Nanotechnology, 2020, 31, 355301.	1.3	19
16	Dynamic coupling between particle-in-cell and atomistic simulations. Physical Review E, 2020, 101, 053307.	0.8	20
17	An All-Textile Non-muscular Biomimetic Actuator Based on Electrohydrodynamic Swelling. Frontiers in Bioengineering and Biotechnology, 2020, 8, 408.	2.0	8
18	Understanding the Behavior of Fully Non-Toxic Polypyrrole-Gelatin and Polypyrrole-PVdF Soft Actuators with Choline Ionic Liquids. Actuators, 2020, 9, 40.	1.2	10

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19	Optimization of Electrochemical Flow Capacitor (EFC) design via finite element modeling. Journal of Energy Storage, 2020, 29, 101304.	3.9	2
20	Tungsten migration energy barriers for surface diffusion: a parameterization for KMC simulations. Modelling and Simulation in Materials Science and Engineering, 2020, 28, 035011.	0.8	4
21	Influence of Carboxylate Anions on Phase Behavior of Choline Ionic Liquid Mixtures. Molecules, 2020, 25, 1691.	1.7	10
22	Electromechanically active polymer actuators based on biofriendly choline ionic liquids. Smart Materials and Structures, 2020, 29, 055021.	1.8	16
23	Challenges and Perspectives in Control of Ionic Polymer-Metal Composite (IPMC) Actuators: A Survey. IEEE Access, 2020, 8, 121059-121073.	2.6	15
24	Fractional-order modeling and control of ionic polymer-metal composite actuator. Smart Materials and Structures, 2019, 28, 084008.	1.8	15
25	Low concentrated carbonaceous suspensions assisted with carboxymethyl cellulose as electrode for electrochemical flow capacitor. European Physical Journal E, 2019, 42, 8.	0.7	6
26	Encapsulation of ionic electromechanically active polymer actuators. Smart Materials and Structures, 2019, 28, 074002.	1.8	10
27	Ionic Actuators as Manipulators for Microscopy. Frontiers in Robotics and AI, 2019, 6, 140.	2.0	4
28	Modelling and control of self-sensing ionic electroactive polymer actuator. , 2019, , .		1
29	Simulations of surface stress effects in nanoscale single crystals. Modelling and Simulation in Materials Science and Engineering, 2018, 26, 035006.	0.8	3
30	Cu self-sputtering MD simulations for 0.1â€“5â€¯keV ions at elevated temperatures. Nuclear Instruments & Methods in Physics Research B, 2018, 415, 31-40.	0.6	8
31	Effect of porosity and tortuosity of electrodes on carbon polymer soft actuators. Journal of Applied Physics, 2018, 123, 014502.	1.1	9
32	Natural cellulose ionogels for soft artificial muscles. Colloids and Surfaces B: Biointerfaces, 2018, 161, 244-251.	2.5	25
33	Au nanowire junction breakup through surface atom diffusion. Nanotechnology, 2018, 29, 015704.	1.3	27
34	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
35	Effect of contact material and ambient humidity on the performance of MWCNT/PDMS multimodal deformation sensors. Sensors and Actuators A: Physical, 2018, 283, 1-8.	2.0	8
36	Mechanical and electro-mechanical properties of EAP actuators with inkjet printed electrodes. Synthetic Metals, 2018, 246, 122-127.	2.1	8

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37	Dynamic coupling of a finite element solver to large-scale atomistic simulations. Journal of Computational Physics, 2018, 367, 279-294.	1.9	18
38	Availability and variations of cardiac activity in the case of measuring the bioimpedance of wrist. , 2018, , .		11
39	Modelling and Control of Ionic Electroactive Polymer Actuators under Varying Humidity Conditions. Actuators, 2018, 7, 7.	1.2	9
40	Modeling 3D-microbatteries based on carbon foams. Electrochimica Acta, 2018, 281, 665-675.	2.6	4
41	Analysis of Instantaneous Cardiac EBI Signal Variability over the Heart Cycle(s): Non-Linear Time-Scale Approach. IFMBE Proceedings, 2018, , 940-943.	0.2	1
42	Variation of Cardiac and Respiratory Waveform on Human Thoraxin the Case of Inductive Coupling. IFMBE Proceedings, 2018, , 671-674.	0.2	5
43	Solvent change in polymerization influence linear actuation of polypyrrole carbide-derived carbon films. , 2018, , .		0
44	Fabrication of carbon polymer composite manipulated multi-degree motion platform. , 2018, , .		0
45	Vacancies at the Cuâ€“Nb semicoherent interface. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 025012.	0.8	5
46	Scalable fabrication of ionic and capacitive laminate actuators for soft robotics. Sensors and Actuators B: Chemical, 2017, 246, 154-163.	4.0	35
47	Accurate classical short-range forces for the study of collision cascades in Feâ€“Niâ€“Cr. Computer Physics Communications, 2017, 219, 11-19.	3.0	39
48	Effect of porosity of the electrodes on ionic electroactive polymer actuators. Proceedings of SPIE, 2017, , .	0.8	0
49	Temperature and humidity dependence of ionic electroactive polymer actuators. , 2017, , .		0
50	Effect of electrical terminals made of copper to the ionic electroactive polymer actuators. Proceedings of SPIE, 2017, , .	0.8	1
51	Thermal Simulations of Polymer Electrolyte 3D Li-Microbatteries. Electrochimica Acta, 2017, 244, 129-138.	2.6	11
52	A neural network modeling and sliding mode control of self-sensing ionic polymerâ€“metal composite actuator. Journal of Intelligent Material Systems and Structures, 2017, 28, 3163-3174.	1.4	3
53	Electrodynamicsâ€”molecular dynamics simulations of the stability of Cu nanotips under high electric field. Journal Physics D: Applied Physics, 2016, 49, 215301.	1.3	19
54	Multi-physical model of cation and water transport in ionic polymer-metal composite sensors. Journal of Applied Physics, 2016, 119, .	1.1	31

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55	Soft shape-adaptive gripping device made from artificial muscle. Proceedings of SPIE, 2016, , .	0.8	6
56	Polymeric actuators: Solvents tune reaction-driven cation to reaction-driven anion actuation. Sensors and Actuators B: Chemical, 2016, 233, 328-336.	4.0	46
57	Effect of ambient humidity on ionic electroactive polymer actuators. Smart Materials and Structures, 2016, 25, 055038.	1.8	14
58	Fish-skeleton visualization of bending actuators. Proceedings of SPIE, 2016, , .	0.8	0
59	A multi-physical model for charge and mass transport in a flexible ionic polymer sensor. Proceedings of SPIE, 2016, , .	0.8	1
60	Neural network modeling and model predictive control of ionic electroactive polymer actuators. Proceedings of SPIE, 2016, , .	0.8	0
61	Some electrochemical aspects of aqueous ionic polymer-composite actuators. , 2016, , .		2
62	Encapsulation of ionic electroactive polymers: reducing the interaction with environment. Proceedings of SPIE, 2016, , .	0.8	3
63	Impact of Short-Range Forces on Defect Production from High-Energy Collisions. Journal of Chemical Theory and Computation, 2016, 12, 2871-2879.	2.3	49
64	A new class of ionic electroactive polymers based on green synthesis. Sensors and Actuators A: Physical, 2016, 249, 32-44.	2.0	23
65	Electrochemically Driven Carbon-Based Materials as EAPs: Fundamentals and Device Configurations. , 2016, , 439-454.		0
66	Electrochemically and Electrothermally Driven Carbon-Based Materials as EAPs: How to Start Experimenting with Them. , 2016, , 471-486.		0
67	Electron-phonon interaction within classical molecular dynamics. Physical Review B, 2016, 94, .	1.1	14
68	Structural factor in bending testing of fivefold twinned nanowires revealed by finite element analysis. Physica Scripta, 2016, 91, 115701.	1.2	4
69	Laser-induced asymmetric faceting and growth of a nano-protrusion on a tungsten tip. APL Photonics, 2016, 1, 091305.	3.0	8
70	Embedded Carbide-derived Carbon (CDC) particles in polypyrrole (PPy) for linear actuator. Proceedings of SPIE, 2016, , .	0.8	1
71	Optimizing the design of 3D-pillar microbatteries using finite element modelling. Electrochimica Acta, 2016, 209, 138-148.	2.6	22
72	Carbide-derived carbon in polypyrrole changing the elastic modulus with a huge impact on actuation. RSC Advances, 2016, 6, 26380-26385.	1.7	25

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73	Electrochemically and Electrothermally Driven Carbon-Based Materials as EAPs: How to Start Experimenting with Them. , 2016, , 1-16.		0
74	Real-time, automatic shape-changing robot adjustment and gender classification. Signal, Image and Video Processing, 2016, 10, 753-760.	1.7	9
75	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
76	Electrochemically Driven Carbon-Based Materials as EAPs: Fundamentals and Device Configurations. , 2016, , 1-16.		0
77	Size-Dictionary Interpolation for RobotÃ¢â‚¬â„¢s Adjustment. Frontiers in Bioengineering and Biotechnology, 2015, 3, 63.	2.0	5
78	Self-Sensing Ionic Polymer Actuators: A Review. Actuators, 2015, 4, 17-38.	1.2	73
79	A power-autonomous self-rolling wheel using ionic and capacitive actuators. Proceedings of SPIE, 2015, , .	0.8	4
80	Semi-automatic deflection measurement using digital image correlation. , 2015, , .		2
81	Long-term behavior of ionic electroactive polymer actuators in variable humidity conditions. Proceedings of SPIE, 2015, , .	0.8	3
82	Molecular dynamics simulations of near-surface Fe precipitates in Cu under high electric fields. Modelling and Simulation in Materials Science and Engineering, 2015, 23, 025009.	0.8	10
83	Electrochemical actuation of multiwall carbon nanotube fiber with embedded carbide-derived carbon particles. Carbon, 2015, 94, 911-918.	5.4	23
84	Solvent and electrolyte effects in PPyDBS free standing films. , 2015, , .		1
85	Electrolyte and solvent effects in PPy/DBS linear actuators. Sensors and Actuators B: Chemical, 2015, 216, 24-32.	4.0	44
86	Application of multiphysics and multiscale simulations to optimize industrial wood drying kilns. Applied Mathematics and Computation, 2015, 267, 465-475.	1.4	15
87	Fabrication of ion-conducting carbon-polymer composite electrodes by spin-coating. , 2015, , .		1
88	Verification of a multiscale surface stress model near voids in copper under the load induced by external high electric field. Applied Mathematics and Computation, 2015, 267, 476-486.	1.4	5
89	A passive autofocus system by using standard deviation of the image on a liquid lens. , 2015, , .		4
90	Micro-mechanics of ionic electroactive polymer actuators. Proceedings of SPIE, 2015, , .	0.8	2

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91	Ionic and Capacitive Artificial Muscle for Biomimetic Soft Robotics. Advanced Engineering Materials, 2015, 17, 84-94.	1.6	141
92	Long-term degradation of the ionic electroactive polymer actuators. Proceedings of SPIE, 2015, , .	0.8	2
93	Atomic-scale properties of Ni-based FCC ternary, and quaternary alloys. Acta Materialia, 2015, 99, 307-312.	3.8	159
94	Application of the general thermal field model to simulate the behaviour of nanoscale Cu field emitters. Journal of Applied Physics, 2015, 118, .	1.1	18
95	Thermal behavior of ionic electroactive polymer actuators. , 2015, , .		3
96	Molecular Dynamics Modelling of Block-Copolymer Electrolytes with High t+ Values. Electrochimica Acta, 2015, 175, 47-54.	2.6	7
97	Chapter 6. Ionic Polymer Metal Composites with Electrochemically Active Electrodes. RSC Smart Materials, 2015, , 215-227.	0.1	3
98	Chapter 7. Electromechanical Distributed Modeling of Ionic Polymer Metal Composites. RSC Smart Materials, 2015, , 228-247.	0.1	1
99	Autofocus fluid lens device construction and implementation of modified ionic polymer metal composite (IPMC) membrane actuators. , 2014, , .		0
100	In situmeasurements with CPC micro-actuators using SEM. , 2014, , .		0
101	PEDOT-PSS/MWCNT coatings on PET for conducting polymer actuators. International Journal of Nanotechnology, 2014, 11, 477.	0.1	3
102	Electrochemomechanical deformation (ECMD) of PPyDBS in free standing film formation and trilayer designs. , 2014, , .		3
103	Carbide-derived carbon (CDC) linear actuator properties in combination with conducting polymers. Proceedings of SPIE, 2014, , .	0.8	0
104	Modified Back Projection Kernel Based Image Super Resolution. , 2014, , .		1
105	Chitosan Combined with Conducting Polymers for Novel Functionality: Antioxidant and Antibacterial Activity. Key Engineering Materials, 2014, 605, 428-431.	0.4	9
106	Electrostatic-elastoplastic simulations of copper surface under high electric fields. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	16
107	Force control of ionic polymer-metal composite actuators with carbon-based electrodes. Proceedings of SPIE, 2014, , .	0.8	2
108	Lifetime measurements of ionic electroactive polymer actuators. Journal of Intelligent Material Systems and Structures, 2014, 25, 2267-2275.	1.4	12

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109	Inversion-based control of ionic polymerâ€“metal composite actuators with nanoporous carbon-based electrodes. Smart Materials and Structures, 2014, 23, 025010.	1.8	17
110	Pulse-width-modulated charging of ionic and capacitive actuators. , 2014, , .		3
111	Novel actuators based on polypyrrole/carbide-derived carbon hybrid materials. Carbon, 2014, 80, 387-395.	5.4	40
112	Microporous and Mesoporous Carbide-Derived Carbons for Strain Modification of Electromechanical Actuators. Langmuir, 2014, 30, 2583-2587.	1.6	12
113	hp -FEM electromechanical transduction model of ionic polymerâ€“metal composites. Journal of Computational and Applied Mathematics, 2014, 260, 135-148.	1.1	7
114	Molecular dynamics modeling the Li-PolystyreneTFSI/PEO blend. Solid State Ionics, 2014, 262, 769-773.	1.3	22
115	Molecular dynamics study of xenon on an amorphous Al2O3 surface. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 759, 10-15.	0.7	4
116	Carbide-derived carbon as active interlayer of polypyrrole tri-layer linear actuator. Sensors and Actuators B: Chemical, 2014, 201, 100-106.	4.0	14
117	Electrochemistry of interlayer supported polypyrrole tri-layer linear actuators. Electrochimica Acta, 2014, 122, 322-328.	2.6	14
118	Ionic liquid-based actuators working in air: The effect of ambient humidity. Sensors and Actuators B: Chemical, 2014, 202, 114-122.	4.0	63
119	Ionic electroactive polymer artificial muscles in space applications. Scientific Reports, 2014, 4, 6913.	1.6	64
120	First-principles study of point defects at a semicoherent interface. Scientific Reports, 2014, 4, 7567.	1.6	11
121	Nanothorn electrodes for ionic polymer-metal composite artificial muscles. Scientific Reports, 2014, 4, 6176.	1.6	60
122	Conducting polymer actuators formed on MWCNT and PEDOT-PSS conductive coatings. Synthetic Metals, 2013, 171, 69-75.	2.1	27
123	Two formation mechanisms and renewable antioxidant properties of suspensible chitosanâ€“PPy and chitosanâ€“PPyâ€“BTDA composites. Synthetic Metals, 2013, 164, 6-11.	2.1	15
124	Anisometric charge dependent swelling of porous carbon in an ionic liquid. Electrochemistry Communications, 2013, 34, 196-199.	2.3	59
125	Direct chemical synthesis of pristine polypyrrole hydrogels and their derived aerogels for high power density energy storage applications. Journal of Materials Chemistry A, 2013, 1, 15216.	5.2	24
126	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

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127	Designing the 3D-microbattery geometry using the level-set method. Journal of Power Sources, 2013, 244, 417-428.	4.0	22
128	Dependence of polypyrrole bilayer deflection upon polymerization potential. Synthetic Metals, 2013, 172, 37-43.	2.1	18
129	Renewable antioxidant properties of suspensible chitosanâ€“polypyrrole composites. Reactive and Functional Polymers, 2013, 73, 1072-1077.	2.0	41
130	Viscoelastic model of IPMC actuators. Proceedings of SPIE, 2013, , .	0.8	1
131	Molecular Dynamics modelling a small-molecule crystalline electrolyte: LiBF4(CH3O(CH2CH2O)4CH3)0.5. Electrochimica Acta, 2013, 104, 33-40.	2.6	5
132	Self-sensing ionic electromechanically active actuator with patterned carbon electrodes. , 2013, , .		3
133	PEDOT/TBACF3SO3bending actuators based on a PEDOT-PEDOT sandwich complex. , 2013, , .		0
134	Mechanoelectrical impedance of a carbide-derived carbon-based laminate motion sensor at large bending deflections. Smart Materials and Structures, 2013, 22, 104015.	1.8	8
135	IPMC mechanoelectrical transduction: its scalability and optimization. Smart Materials and Structures, 2013, 22, 125029.	1.8	15
136	In search of better electroactive polymer actuator materials: PPy versus PEDOT versus PEDOTâ€“PPy composites. Smart Materials and Structures, 2013, 22, 104006.	1.8	76
137	Nanocarbon based ionic actuatorsâ€”a review. Smart Materials and Structures, 2013, 22, 104022.	1.8	108
138	An ionic liquid-based actuator as a humidity sensor. , 2013, , .		1
139	Ionic EAP transducers with amorphous nanoporous carbon electrodes. Proceedings of SPIE, 2012, , .	0.8	0
140	Electrical Model of a Carbon-Polymer Composite (CPC) Collision Detector. Sensors, 2012, 12, 1950-1966.	2.1	13
141	Carbon-polymer-ionic liquid composite as a motion sensor. Proceedings of SPIE, 2012, , .	0.8	1
142	Low-voltage bending actuators from carbide-derived carbon improved with gold foil. , 2012, , .		0
143	Mechanical interpretation of back-relaxation of ionic electroactive polymer actuators. Smart Materials and Structures, 2012, 21, 115023.	1.8	43
144	Physics-based electromechanical model of IPMC considering various underlying currents. , 2012, , .		0

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145	Modeling Ionic Polymer-Metal Composites with Space-Time Adaptive Multimeshhp-FEM. Communications in Computational Physics, 2012, 11, 249-270.	0.7	11
146	Back-Relaxation of Carbon-Based Ionic Electroactive Polymer Actuators. , 2012, , .		0
147	Molecular dynamics simulations of EMI-BF4 in nanoporous carbon actuators. Journal of Molecular Modeling, 2012, 18, 1541-1552.	0.8	13
148	A carbide-derived carbon laminate used as a mechanoelectrical sensor. Carbon, 2012, 50, 535-541.	5.4	35
149	Impact of carbon nanotube additives on carbide-derived carbon-based electroactive polymer actuators. Carbon, 2012, 50, 4351-4358.	5.4	38
150	Finite element simulations of 3D ionic transportation properties in Li-ion electrolytes. Electrochimica Acta, 2012, 65, 165-173.	2.6	12
151	Nanoporous carbide-derived carbon based actuators modified with gold foil: Prospect for fast response and low voltage applications. Sensors and Actuators B: Chemical, 2012, 161, 629-634.	4.0	46
152	Combined chemical and electrochemical synthesis methods for metal-free polypyrrole actuators. Sensors and Actuators B: Chemical, 2012, 166-167, 411-418.	4.0	54
153	Educational Robotics and Inquiry Learning: A Pilot Study in a Web-Based Learning Environment. , 2011, , .		4
154	Electroactive polymer actuators with carbon aerogel electrodes. Journal of Materials Chemistry, 2011, 21, 2577.	6.7	61
155	Branched polyethylene/poly(ethylene oxide) as a host matrix for Li-ion battery electrolytes: A molecular dynamics study. Electrochimica Acta, 2011, 57, 228-236.	2.6	29
156	Finite element modelling of ion transport in the electrolyte of a 3D-microbattery. Solid State Ionics, 2011, 192, 279-283.	1.3	43
157	Flexible supercapacitor-like actuator with carbide-derived carbon electrodes. Carbon, 2011, 49, 3113-3119.	5.4	125
158	An explicit physics-based model of ionic polymer-metal composite actuators. Journal of Applied Physics, 2011, 110, .	1.1	67
159	Variable-focal lens using electroactive polymer actuator. Proceedings of SPIE, 2011, , .	0.8	6
160	Self-sensing properties of carbon-polymer composite (CPC) actuators. , 2011, , .		3
161	Carbon aerogel based electrode material for EAP actuators. , 2011, , .		4
162	A novel hp-FEM model for IPMC actuation. Proceedings of SPIE, 2011, , .	0.8	2

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163	Electromechanical model for a self-sensing ionic polymerâ€“metal composite actuating device with patterned surface electrodes. Smart Materials and Structures, 2011, 20, 124001.	1.8	24
164	Selfâ€sensing ionic polymerâ€“metal composite actuating device with patterned surface electrodes. Polymer International, 2010, 59, 300-304.	1.6	49
165	Experiments with self-sensing IPMC actuating device. Proceedings of SPIE, 2010, , .	0.8	3
166	Poly(ethylene oxide)â€“poly(butadiene) interpenetrated networks as electroactive polymers for actuators: A molecular dynamics study. Electrochimica Acta, 2010, 55, 1333-1337.	2.6	6
167	Modelling electrode material utilization in the trench model 3D-microbattery by finite element analysis. Journal of Power Sources, 2010, 195, 6218-6224.	4.0	69
168	Force field generation and molecular dynamics simulations of Li+â€“Nafion. Electrochimica Acta, 2010, 55, 2587-2591.	2.6	5
169	Ionic polymerâ€“metal composite mechanoelectrical transduction: review and perspectives. Polymer International, 2010, 59, 279-289.	1.6	154
170	Electromechanical characteristics of actuators based on carbide-derived carbon. Proceedings of SPIE, 2010, , .	0.8	1
171	Nanoporous Carbide-Derived Carbon Material-Based Linear Actuators. Materials, 2010, 3, 9-25.	1.3	44
172	Modeling the transduction of IPMC in 3D configurations. Proceedings of SPIE, 2010, , .	0.8	4
173	Molecular Dynamics Modeling of Proton Transport in Nafion and Hyflon Nanostructures. Journal of Physical Chemistry B, 2010, 114, 6056-6064.	1.2	95
174	Ionic polymer metal composites with nanoporous carbon electrodes. , 2010, , .		3
175	Modeling IPMC Material With Dynamic Surface Characteristics. , 2009, , .		1
176	Linear modeling of elongated bending EAP actuator at large deformations. Proceedings of SPIE, 2009, , .	0.8	5
177	Dynamical variation of the impedances of IPMC. , 2009, , .		3
178	Dynamic surface resistance model of IPMC. , 2009, , .		1
179	Low voltage linear actuators based on carbide-derived carbon powder. Proceedings of SPIE, 2009, , .	0.8	1
180	A Distributed Model of Ionomeric Polymer Metal Composite. Journal of Intelligent Material Systems and Structures, 2009, 20, 1711-1724.	1.4	48

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181	Nanoporous carbon-based electrodes for high strain ionomeric bending actuators. Smart Materials and Structures, 2009, 18, 095028.	1.8	72
182	Electrode reactions in Cuâ€“Pt coated ionic polymer actuators. Sensors and Actuators B: Chemical, 2008, 131, 340-346.	4.0	40
183	An advanced finite element model of IPMC. , 2008, , .		9
184	A distributed model of IPMC. Proceedings of SPIE, 2008, , .	0.8	4
185	A mechanical model of a non-uniform ionomeric polymer metal composite actuator. Smart Materials and Structures, 2008, 17, 025004.	1.8	22
186	A linked manipulator with ion-polymer metal composite (IPMC) joints for soft- and micromanipulation. , 2008, , .		15
187	A new force field for molecular dynamics studies of Li⁺and Na⁺-nafion. Proceedings of SPIE, 2008, , .	0.8	0
188	Self healing properties of Cu-Pt coated ionic polymer actuators. , 2008, , .		0
189	A self-oscillating ionic polymer-metal composite bending actuator. Journal of Applied Physics, 2008, 103, .	1.1	50
190	A multilink manipulator with IPMC joints. Proceedings of SPIE, 2008, , .	0.8	4
191	Molecular dynamics studies of interpenetrating polymer networks for actuator devices. , 2008, , .		1
192	Finite element simulations of the bending of the IPMC sheet. , 2007, 6524, 109.		5
193	A molecular dynamics study of short-chain ordering inÂcrystallineÂLiPF6Â·PEO6. Polymer, 2007, 48, 6448-6456.	1.8	12
194	Surface resistance experiments with IPMC sensors and actuators. Sensors and Actuators A: Physical, 2007, 133, 200-209.	2.0	141
195	A self-sensing ion conducting polymer metal composite (IPMC) actuator. Sensors and Actuators A: Physical, 2007, 136, 656-664.	2.0	101
196	Application of the Monte Carlo method for creation of initial models of EAP molecules for molecular dynamics simulation. , 2006, , .		5
197	Empirical model of a bending IPMC actuator. , 2006, , .		3
198	Molecular dynamics simulations of Li- and Na-Nafion membranes. , 2006, 6168, 118.		1

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199	Validating Usability of Ionomeric Polymer-Metal Composite Actuators for Real World Applications. , 2006, , .		9
200	A molecular dynamics study of the effect of side-chains on mobility in a polymer host. Solid State Ionics, 2005, 176, 3041-3044.	1.3	10
201	Development of a force field for Li2SiF6. Journal of Computational Chemistry, 2005, 26, 716-724.	1.5	7
202	Learning Innovative Routes for Mobile Robots in Dynamic Partially Unknown Environments. International Journal of Advanced Robotic Systems, 2005, 2, 21.	1.3	1
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