Alvo Aabloo

List of Publications by Year
in descending order

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221	4,264	94269	149479
papers	citations	37 h-index	56 g-index

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

#	Article	IF	Citations
1	Atomic-scale properties of Ni-based FCC ternary, and quaternary alloys. Acta Materialia, 2015, 99, 307-312.	3.8	159
2	Ionic polymerâ€“metal composite mechanoelectrical transduction: review and perspectives. Polymer International, 2010, 59, 279-289.	1.6	154
3	Surface resistance experiments with IPMC sensors and actuators. Sensors and Actuators A: Physical, 2007, 133, 200-209.	2.0	141
4	Ionic and Capacitive Artificial Muscle for Biomimetic Soft Robotics. Advanced Engineering Materials, 2015, 17, 84-94.	1.6	141
5	Flexible supercapacitor-like actuator with carbide-derived carbon electrodes. Carbon, 2011, 49, 3113-3119.	5.4	125
6	Nanocarbon based ionic actuatorsâ€”a review. Smart Materials and Structures, 2013, 22, 104022.	1.8	108
7	A self-sensing ion conducting polymer metal composite (IPMC) actuator. Sensors and Actuators A: Physical, 2007, 136, 656-664.	2.0	101
8	Molecular Dynamics Modeling of Proton Transport in Nafion and Hyflon Nanostructures. Journal of Physical Chemistry B, 2010, 114, 6056-6064.	1.2	95
9	Miniature crystal models of cellulose polymorphs and other carbohydrates. International Journal of Biological Macromolecules, 1993, 15, 30-36.	3.6	83
10	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
11	Self-Sensing Ionic Polymer Actuators: A Review. Actuators, 2015, 4, 17-38.	1.2	73
12	Nanoporous carbon-based electrodes for high strain ionomeric bending actuators. Smart Materials and Structures, 2009, 18, 095028.	1.8	72
13	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
14	An explicit physics-based model of ionic polymer-metal composite actuators. Journal of Applied Physics, 2011, 110, .	1.1	67
15	Ionic electroactive polymer artificial muscles in space applications. Scientific Reports, 2014, 4, 6913.	1.6	64
16	Ionic liquid-based actuators working in air: The effect of ambient humidity. Sensors and Actuators B: Chemical, 2014, 202, 114-122.	4.0	63
17	Electroactive polymer actuators with carbon aerogel electrodes. Journal of Materials Chemistry, 2011, 21, 2577.	6.7	61
18	Nanothorn electrodes for ionic polymer-metal composite artificial muscles. Scientific Reports, 2014, 4, 6176.	1.6	60

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19	Anisometric charge dependent swelling of porous carbon in an ionic liquid. Electrochemistry Communications, 2013, 34, 196-199.	2.3	59
20	Molecular dynamics simulation of the crystalline short-chain polymer system LiPF6Â·PEO6(Mwâˆ¼ 1000). Journal of Materials Chemistry, 2005, 15, 4338.	6.7	55
21	Combined chemical and electrochemical synthesis methods for metal-free polypyrrole actuators. Sensors and Actuators B: Chemical, 2012, 166-167, 411-418.	4.0	54
22	A self-oscillating ionic polymer-metal composite bending actuator. Journal of Applied Physics, 2008, 103, .	1.1	50
23	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
24	Selfâ€sensing ionic polymerâ€“metal composite actuating device with patterned surface electrodes. Polymer International, 2010, 59, 300-304.	1.6	49
25	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
26	A Distributed Model of Ionomeric Polymer Metal Composite. Journal of Intelligent Material Systems and Structures, 2009, 20, 1711-1724.	1.4	48
27	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
28	Polymeric actuators: Solvents tune reaction-driven cation to reaction-driven anion actuation. Sensors and Actuators B: Chemical, 2016, 233, 328-336.	4.0	46
29	Nanoporous Carbide-Derived Carbon Material-Based Linear Actuators. Materials, 2010, 3, 9-25.	1.3	44
30	Electrolyte and solvent effects in PPy/DBS linear actuators. Sensors and Actuators B: Chemical, 2015, 216, 24-32.	4.0	44
31	Molecular dynamics simulation of the LiPF6Â·PEO6structure. Journal of Materials Chemistry, 2005, 15, 1422-1428.	6.7	43
32	Finite element modelling of ion transport in the electrolyte of a 3D-microbattery. Solid State Ionics, 2011, 192, 279-283.	1.3	43
33	Mechanical interpretation of back-relaxation of ionic electroactive polymer actuators. Smart Materials and Structures, 2012, 21, 115023.	1.8	43
34	Renewable antioxidant properties of suspensible chitosanâ€“polypyrrole composites. Reactive and Functional Polymers, 2013, 73, 1072-1077.	2.0	41
35	Electrode reactions in Cuâ€“Pt coated ionic polymer actuators. Sensors and Actuators B: Chemical, 2008, 131, 340-346.	4.0	40
36	Novel actuators based on polypyrrole/carbide-derived carbon hybrid materials. Carbon, 2014, 80, 387-395.	5.4	40

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37	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
38	Impact of carbon nanotube additives on carbide-derived carbon-based electroactive polymer actuators. Carbon, 2012, 50, 4351-4358.	5.4	38
39	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
40	Molecular dynamics simulation of the LiBF4â€“PEO system containing Al2O3 nanoparticles. Solid State Ionics, 2002, 147, 367-375.	1.3	35
41	A carbide-derived carbon laminate used as a mechanoelectrical sensor. Carbon, 2012, 50, 535-541.	5.4	35
42	Scalable fabrication of ionic and capacitive laminate actuators for soft robotics. Sensors and Actuators B: Chemical, 2017, 246, 154-163.	4.0	35
43	Molecular dynamics simulation of the effect of adding an Al2O3 nanoparticle to PEOâ€“LiCl/LiBr/LiI systems. Journal of Materials Chemistry, 2001, 11, 3191-3196.	6.7	34
44	Molecular dynamics simulation of the effect of a side chain on the dynamics of the amorphous LiPF6â€“PEO system. Journal of Materials Chemistry, 2003, 13, 214-218.	6.7	33
45	Preliminary potential energy calculations of cellulose iÎ± crystal structure. Macromolecular Theory and Simulations, 1994, 3, 185-191.	0.6	32
46	Multi-physical model of cation and water transport in ionic polymer-metal composite sensors. Journal of Applied Physics, 2016, 119, .	1.1	31
47	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
48	Molecular dynamics simulation of the effect of nanoparticle fillers on ion motion in a polymer host. Solid State Ionics, 2004, 168, 249-254.	1.3	27
49	Conducting polymer actuators formed on MWCNT and PEDOT-PSS conductive coatings. Synthetic Metals, 2013, 171, 69-75.	2.1	27
50	Au nanowire junction breakup through surface atom diffusion. Nanotechnology, 2018, 29, 015704.	1.3	27
51	Carbide-derived carbon in polypyrrole changing the elastic modulus with a huge impact on actuation. RSC Advances, 2016, 6, 26380-26385.	1.7	25
52	Natural cellulose ionogels for soft artificial muscles. Colloids and Surfaces B: Biointerfaces, 2018, 161, 244-251.	2.5	25
53	Studies of crystalline native celluloses using potential energy calculations. Cellulose, 1994, 1, 161-168.	2.4	24
54	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

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55	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
56	Conduction Mechanisms in Crystalline LiPF6Â·PEO6 Doped with SiF62- and SF6. Chemistry of Materials, 2005, 17, 3673-3680.	3.2	23
57	Electrochemical actuation of multiwall carbon nanotube fiber with embedded carbide-derived carbon particles. Carbon, 2015, 94, 911-918.	5.4	23
58	A new class of ionic electroactive polymers based on green synthesis. Sensors and Actuators A: Physical, 2016, 249, 32-44.	2.0	23
59	A mechanical model of a non-uniform ionomeric polymer metal composite actuator. Smart Materials and Structures, 2008, 17, 025004.	1.8	22
60	Designing the 3D-microbattery geometry using the level-set method. Journal of Power Sources, 2013, 244, 417-428.	4.0	22
61	Molecular dynamics modeling the Li-PolystyreneTFSI/PEO blend. Solid State Ionics, 2014, 262, 769-773.	1.3	22
62	Optimizing the design of 3D-pillar microbatteries using finite element modelling. Electrochimica Acta, 2016, 209, 138-148.	2.6	22
63	Molecular dynamics simulation of lithium ion mobility in a PEO surface. Solid State Ionics, 2001, 143, 83-87.	1.3	21
64	Molecular dynamics simulation of temperature and concentration dependence of the â€˜fillerâ€™ effect for the LiCl/PEO/Al2O3-nanoparticle system. Electrochimica Acta, 2003, 48, 2273-2278.	2.6	20
65	Dynamic coupling between particle-in-cell and atomistic simulations. Physical Review E, 2020, 101, 053307.	0.8	20
66	Design of a Semiautonomous Biomimetic Underwater Vehicle for Environmental Monitoring.. , 0, , .		19
67	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
68	Growth mechanism for nanotips in high electric fields. Nanotechnology, 2020, 31, 355301.	1.3	19
69	Molecular dynamics simulation of a polymerâ€“inorganic interface. Electrochimica Acta, 2000, 45, 1425-1429.	2.6	18
70	Dependence of polypyrrole bilayer deflection upon polymerization potential. Synthetic Metals, 2013, 172, 37-43.	2.1	18
71	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
72	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

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73	Dynamic coupling of a finite element solver to large-scale atomistic simulations. Journal of Computational Physics, 2018, 367, 279-294.	1.9	18
74	Inversion-based control of ionic polymerâ€“metal composite actuators with nanoporous carbon-based electrodes. Smart Materials and Structures, 2014, 23, 025010.	1.8	17
75	Electrostatic-elastoplastic simulations of copper surface under high electric fields. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	16
76	Electromechanically active polymer actuators based on biofriendly choline ionic liquids. Smart Materials and Structures, 2020, 29, 055021.	1.8	16
77	Molecular dynamics simulations of a poly(ethylene oxide) surface. Computational and Theoretical Polymer Science, 1997, 7, 47-51.	1.1	15
78	A linked manipulator with ion-polymer metal composite (IPMC) joints for soft- and micromanipulation. , 2008, , .		15
79	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
80	IPMC mechanoelectrical transduction: its scalability and optimization. Smart Materials and Structures, 2013, 22, 125029.	1.8	15
81	Application of multiphysics and multiscale simulations to optimize industrial wood drying kilns. Applied Mathematics and Computation, 2015, 267, 465-475.	1.4	15
82	Fractional-order modeling and control of ionic polymer-metal composite actuator. Smart Materials and Structures, 2019, 28, 084008.	1.8	15
83	Challenges and Perspectives in Control of Ionic Polymer-Metal Composite (IPMC) Actuators: A Survey. IEEE Access, 2020, 8, 121059-121073.	2.6	15
84	Carbide-derived carbon as active interlayer of polypyrrole tri-layer linear actuator. Sensors and Actuators B: Chemical, 2014, 201, 100-106.	4.0	14
85	Electrochemistry of interlayer supported polypyrrole tri-layer linear actuators. Electrochimica Acta, 2014, 122, 322-328.	2.6	14
86	Effect of ambient humidity on ionic electroactive polymer actuators. Smart Materials and Structures, 2016, 25, 055038.	1.8	14
87	Electron-phonon interaction within classical molecular dynamics. Physical Review B, 2016, 94, .	1.1	14
88	Electrical Model of a Carbon-Polymer Composite (CPC) Collision Detector. Sensors, 2012, 12, 1950-1966.	2.1	13
89	Molecular dynamics simulations of EMI-BF4 in nanoporous carbon actuators. Journal of Molecular Modeling, 2012, 18, 1541-1552.	0.8	13
90	A molecular dynamics study of short-chain ordering inÂcrystallineÂLiPF6Â·PEO6. Polymer, 2007, 48, 6448-6456.	1.8	12

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91	Finite element simulations of 3D ionic transportation properties in Li-ion electrolytes. Electrochimica Acta, 2012, 65, 165-173.	2.6	12
92	Lifetime measurements of ionic electroactive polymer actuators. Journal of Intelligent Material Systems and Structures, 2014, 25, 2267-2275.	1.4	12
93	Microporous and Mesoporous Carbide-Derived Carbons for Strain Modification of Electromechanical Actuators. Langmuir, 2014, 30, 2583-2587.	1.6	12
94	Modeling Ionic Polymer-Metal Composites with Space-Time Adaptive Multimeshhp-FEM. Communications in Computational Physics, 2012, 11, 249-270.	0.7	11
95	First-principles study of point defects at a semicoherent interface. Scientific Reports, 2014, 4, 7567.	1.6	11
96	Thermal Simulations of Polymer Electrolyte 3D Li-Microbatteries. Electrochimica Acta, 2017, 244, 129-138.	2.6	11
97	Availability and variations of cardiac activity in the case of measuring the bioimpedance of wrist. , 2018, , .		11
98	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
99	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
100	Encapsulation of ionic electromechanically active polymer actuators. Smart Materials and Structures, 2019, 28, 074002.	1.8	10
101	Soft parallel manipulator fabricated by additive manufacturing. Sensors and Actuators B: Chemical, 2020, 305, 127355.	4.0	10
102	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
103	Influence of Carboxylate Anions on Phase Behavior of Choline Ionic Liquid Mixtures. Molecules, 2020, 25, 1691.	1.7	10
104	The effect of polymer host on optical absorption spectra for Er(CF3SO3)3 in poly(ethylene oxide). Journal of Materials Chemistry, 2002, 12, 565-569.	6.7	9
105	Validating Usability of Ionomeric Polymer-Metal Composite Actuators for Real World Applications. , 2006, , .		9
106	An advanced finite element model of IPMC. , 2008, , .		9
107	Chitosan Combined with Conducting Polymers for Novel Functionality: Antioxidant and Antibacterial Activity. Key Engineering Materials, 2014, 605, 428-431.	0.4	9
108	Real-time, automatic shape-changing robot adjustment and gender classification. Signal, Image and Video Processing, 2016, 10, 753-760.	1.7	9

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109	Effect of porosity and tortuosity of electrodes on carbon polymer soft actuators. Journal of Applied Physics, 2018, 123, 014502.	1.1	9
110	Modelling and Control of Ionic Electroactive Polymer Actuators under Varying Humidity Conditions. Actuators, 2018, 7, 7.	1.2	9
111	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
112	Laser-induced asymmetric faceting and growth of a nano-protrusion on a tungsten tip. APL Photonics, 2016, 1, 091305.	3.0	8
113	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
114	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
115	Mechanical and electro-mechanical properties of EAP actuators with inkjet printed electrodes. Synthetic Metals, 2018, 246, 122-127.	2.1	8
116	An All-Textile Non-muscular Biomimetic Actuator Based on Electrohydrodynamic Swelling. Frontiers in Bioengineering and Biotechnology, 2020, 8, 408.	2.0	8
117	Molecular dynamics simulation of Nd3+ ions in a crystalline PEO surface. Electrochimica Acta, 1998, 43, 1361-1364.	2.6	7
118	Development of a force field for Li2SiF6. Journal of Computational Chemistry, 2005, 26, 716-724.	1.5	7
119	hp -FEM electromechanical transduction model of ionic polymerâ€“metal composites. Journal of Computational and Applied Mathematics, 2014, 260, 135-148.	1.1	7
120	Molecular Dynamics Modelling of Block-Copolymer Electrolytes with High t+ Values. Electrochimica Acta, 2015, 175, 47-54.	2.6	7
121	Carbon xerogel from 5-methylresorcinol-formaldehyde gel: The controllability of structural properties. Carbon Trends, 2021, 3, 100037.	1.4	7
122	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
123	Variable-focal lens using electroactive polymer actuator. Proceedings of SPIE, 2011, , .	0.8	6
124	Soft shape-adaptive gripping device made from artificial muscle. Proceedings of SPIE, 2016, , .	0.8	6
125	Low concentrated carbonaceous suspensions assisted with carboxymethyl cellulose as electrode for electrochemical flow capacitor. European Physical Journal E, 2019, 42, 8.	0.7	6
126	An engineering approach to reduced power consumption of IPMC (ion-polymer metal composite) actuators. , 0, , .		5

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127	Application of the Monte Carlo method for creation of initial models of EAP molecules for molecular dynamics simulation. , 2006, , .		5
128	Finite element simulations of the bending of the IPMC sheet. , 2007, 6524, 109.		5
129	Linear modeling of elongated bending EAP actuator at large deformations. Proceedings of SPIE, 2009, , .	0.8	5
130	Force field generation and molecular dynamics simulations of Li+â€“Nafion. Electrochimica Acta, 2010, 55, 2587-2591.	2.6	5
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	Size-Dictionary Interpolation for RobotÃ¢â‚¬â„¢s Adjustment. Frontiers in Bioengineering and Biotechnology, 2015, 3, 63.	2.0	5
133	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
134	Vacancies at the Cuâ€“Nb semicoherent interface. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 025012.	0.8	5
135	GPU Accelerated Convex Approximations for Fast Multi-Agent Trajectory Optimization. IEEE Robotics and Automation Letters, 2021, 6, 3303-3310.	3.3	5
136	Variation of Cardiac and Respiratory Waveform on Human Thoraxin the Case of Inductive Coupling. IFMBE Proceedings, 2018, , 671-674.	0.2	5
137	A distributed model of IPMC. Proceedings of SPIE, 2008, , .	0.8	4
138	A multilink manipulator with IPMC joints. Proceedings of SPIE, 2008, , .	0.8	4
139	Modeling the transduction of IPMC in 3D configurations. Proceedings of SPIE, 2010, , .	0.8	4
140	Educational Robotics and Inquiry Learning: A Pilot Study in a Web-Based Learning Environment. , 2011, , .		4
141	Carbon aerogel based electrode material for EAP actuators. , 2011, , .		4
142	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
143	A power-autonomous self-rolling wheel using ionic and capacitive actuators. Proceedings of SPIE, 2015, , .	0.8	4
144	A passive autofocus system by using standard deviation of the image on a liquid lens. , 2015, , .		4

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145	Structural factor in bending testing of fivefold twinned nanowires revealed by finite element analysis. Physica Scripta, 2016, 91, 115701.	1.2	4
146	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
147	Modeling 3D-microbatteries based on carbon foams. Electrochimica Acta, 2018, 281, 665-675.	2.6	4
148	Ionic Actuators as Manipulators for Microscopy. Frontiers in Robotics and AI, 2019, 6, 140.	2.0	4
149	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
150	Empirical model of a bending IPMC actuator. , 2006, , .		3
151	Dynamical variation of the impedances of IPMC. , 2009, , .		3
152	Experiments with self-sensing IPMC actuating device. Proceedings of SPIE, 2010, , .	0.8	3
153	Ionic polymer metal composites with nanoporous carbon electrodes. , 2010, , .		3
154	Self-sensing properties of carbon-polymer composite (CPC) actuators. , 2011, , .		3
155	Self-sensing ionic electromechanically active actuator with patterned carbon electrodes. , 2013, , .		3
156	PEDOT-PSS/MWCNT coatings on PET for conducting polymer actuators. International Journal of Nanotechnology, 2014, 11, 477.	0.1	3
157	Electrochemomechanical deformation (ECMD) of PPyDBS in free standing film formation and trilayer designs. , 2014, , .		3
158	Pulse-width-modulated charging of ionic and capacitive actuators. , 2014, , .		3
159	Long-term behavior of ionic electroactive polymer actuators in variable humidity conditions. Proceedings of SPIE, 2015, , .	0.8	3
160	Thermal behavior of ionic electroactive polymer actuators. , 2015, , .		3
161	Encapsulation of ionic electroactive polymers: reducing the interaction with environment. Proceedings of SPIE, 2016, , .	0.8	3
162	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

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163	Simulations of surface stress effects in nanoscale single crystals. Modelling and Simulation in Materials Science and Engineering, 2018, 26, 035006.	0.8	3
164	Fabrication of Carbon-Based Ionic Electromechanically Active Soft Actuators. Journal of Visualized Experiments, 2020, , .	0.2	3
165	A Green Deformation Sensor Based on Bacterial Cellulose and Bio-Derived Ionic Liquids. , 2021, , .		3
166	Chapter 6. Ionic Polymer Metal Composites with Electrochemically Active Electrodes. RSC Smart Materials, 2015, , 215-227.	0.1	3
167	TeMoto: A Software Framework for Adaptive and Dependable Robotic Autonomy With Dynamic Resource Management. IEEE Access, 2022, 10, 51889-51907.	2.6	3
168	Optical absorption spectra from rare-earth ions in polymers: the effect of the polymer host. Macromolecular Symposia, 2002, 186, 51-56.	0.4	2
169	A novel hp-FEM model for IPMC actuation. Proceedings of SPIE, 2011, , .	0.8	2
170	Force control of ionic polymer-metal composite actuators with carbon-based electrodes. Proceedings of SPIE, 2014, , .	0.8	2
171	Semi-automatic deflection measurement using digital image correlation. , 2015, , .		2
172	Micro-mechanics of ionic electroactive polymer actuators. Proceedings of SPIE, 2015, , .	0.8	2
173	Long-term degradation of the ionic electroactive polymer actuators. Proceedings of SPIE, 2015, , .	0.8	2
174	Some electrochemical aspects of aqueous ionic polymer-composite actuators. , 2016, , .		2
175	Optimization of Electrochemical Flow Capacitor (EFC) design via finite element modeling. Journal of Energy Storage, 2020, 29, 101304.	3.9	2
176	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
177	Multi-physical modeling and fabrication of high-performance IPMC actuators with serrated interface. Smart Materials and Structures, 2022, 31, 095023.	1.8	2
178	Learning Innovative Routes for Mobile Robots in Dynamic Partially Unknown Environments. International Journal of Advanced Robotic Systems, 2005, 2, 21.	1.3	1
179	Molecular dynamics simulations of Li- and Na-Nafion membranes. , 2006, 6168, 118.		1
180	Molecular dynamics studies of interpenetrating polymer networks for actuator devices. , 2008, , .		1

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181	Modeling IPMC Material With Dynamic Surface Characteristics. , 2009, , .		1
182	Dynamic surface resistance model of IPMC. , 2009, , .		1
183	Low voltage linear actuators based on carbide-derived carbon powder. Proceedings of SPIE, 2009, , .	0.8	1
184	Electromechanical characteristics of actuators based on carbide-derived carbon. Proceedings of SPIE, 2010, , .	0.8	1
185	Carbon-polymer-ionic liquid composite as a motion sensor. Proceedings of SPIE, 2012, , .	0.8	1
186	Viscoelastic model of IPMC actuators. Proceedings of SPIE, 2013, , .	0.8	1
187	An ionic liquid-based actuator as a humidity sensor. , 2013, , .		1
188	Modified Back Projection Kernel Based Image Super Resolution. , 2014, , .		1
189	Solvent and electrolyte effects in PPyDBS free standing films. , 2015, , .		1
190	Fabrication of ion-conducting carbon-polymer composite electrodes by spin-coating. , 2015, , .		1
191	A multi-physical model for charge and mass transport in a flexible ionic polymer sensor. Proceedings of SPIE, 2016, , .	0.8	1
192	Embedded Carbide-derived Carbon (CDC) particles in polypyrrole (PPy) for linear actuator. Proceedings of SPIE, 2016, , .	0.8	1
193	Effect of electrical terminals made of copper to the ionic electroactive polymer actuators. Proceedings of SPIE, 2017, , .	0.8	1
194	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
195	Mechanism of Spontaneous Surface Modifications on Polycrystalline Cu Due to Electric Fields. Micromachines, 2021, 12, 1178.	1.4	1
196	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
197	Chapter 7. Electromechanical Distributed Modeling of Ionic Polymer Metal Composites. RSC Smart Materials, 2015, , 228-247.	0.1	1
198	Modelling and control of self-sensing ionic electroactive polymer actuator. , 2019, , .		1

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199	Particle Dynamics-Based Stochastic Modeling of Carbon Particle Charging in the Flow Capacitor Systems. Applied Sciences (Switzerland), 2022, 12, 1887.	1.3	1
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