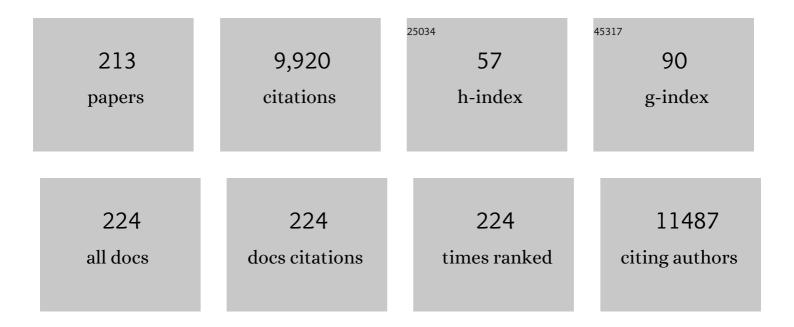
List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5604866/publications.pdf Version: 2024-02-01



LUNC-HWAN OH

#	Article	IF	CITATIONS
1	Graphene Oxide–Polyethylenimine Nanoconstruct as a Gene Delivery Vector and Bioimaging Tool. Bioconjugate Chemistry, 2011, 22, 2558-2567.	3.6	368
2	Recent advances in ionic polymer–metal composite actuators and their modeling and applications. Progress in Polymer Science, 2013, 38, 1037-1066.	24.7	336
3	Seamlessly Conductive 3D Nanoarchitecture of Core–Shell Ni o Nanowire Network for Highly Efficient Oxygen Evolution. Advanced Energy Materials, 2017, 7, 1601492.	19.5	260
4	A biomimetic jellyfish robot based on ionic polymer metal composite actuators. Smart Materials and Structures, 2009, 18, 085002.	3.5	259
5	Silk Nanofiberâ€Networked Bioâ€Triboelectric Generator: Silk Bioâ€TEG. Advanced Energy Materials, 2016, 6, 1502329.	19.5	222
6	Bacterial Nano ellulose Triboelectric Nanogenerator. Nano Energy, 2017, 33, 130-137.	16.0	214
7	Multilayered graphene-carbon nanotube-iron oxide three-dimensional heterostructure for flexible electromagnetic interference shielding film. Carbon, 2017, 111, 248-257.	10.3	203
8	Durable and Water-Floatable Ionic Polymer Actuator with Hydrophobic and Asymmetrically Laser-Scribed Reduced Graphene Oxide Paper Electrodes. ACS Nano, 2014, 8, 2986-2997.	14.6	199
9	Graphene–Nanotube–Iron Hierarchical Nanostructure as Lithium Ion Battery Anode. ACS Nano, 2013, 7, 4242-4251.	14.6	192
10	Electro-active graphene–Nafion actuators. Carbon, 2011, 49, 1279-1289.	10.3	187
11	<b>Sulfur and Nitrogen Coâ€Doped Graphene Electrodes for Highâ€Performance Ionic Artificial Muscles</b> . Advanced Materials, 2016, 28, 1610-1615.	21.0	177
12	MXene artificial muscles based on ionically cross-linked Ti <sub>3</sub> C <sub>2</sub> T <sub> <i>x</i> </sub> electrode for kinetic soft robotics. Science Robotics, 2019, 4, .	17.6	169
13	Graphene-wrapped and cobalt oxide-intercalated hybrid for extremely durable super-capacitor with ultrahigh energy and power densities. Carbon, 2014, 79, 192-202.	10.3	166
14	Piezoelectric thin films: an integrated review of transducers and energy harvesting. Smart Materials and Structures, 2016, 25, 053002.	3.5	163
15	Microwave-Assisted Synthesis of Boron and Nitrogen co-doped Reduced Graphene Oxide for the Protection of Electromagnetic Radiation in Ku-Band. ACS Applied Materials & Interfaces, 2015, 7, 19831-19842.	8.0	145
16	Defect-Engineered Three-Dimensional Graphene–Nanotube–Palladium Nanostructures with Ultrahigh Capacitance. ACS Nano, 2012, 6, 10562-10570.	14.6	141
17	POSTBUCKLING AND VIBRATION CHARACTERISTICS OF PIEZOLAMINATED COMPOSITE PLATE SUBJECT TO THERMO-PIEZOELECTRIC LOADS. Journal of Sound and Vibration, 2000, 233, 19-40.	3.9	129
18	A Biomimetic Actuator Based on an Ionic Networking Membrane of Poly(styreneâ€ <i>alt</i> â€maleimide)â€Incorporated Poly(vinylidene fluoride). Advanced Functional Materials, 2008, 18, 1290-1298.	14.9	126

#	Article	IF	CITATIONS
19	Stimuliâ€Responsive MXeneâ€Based Actuators. Advanced Functional Materials, 2020, 30, 1909504.	14.9	126
20	Nanohole-Structured and Palladium-Embedded 3D Porous Graphene for Ultrahigh Hydrogen Storage and CO Oxidation Multifunctionalities. ACS Nano, 2015, 9, 7343-7351.	14.6	122
21	Highâ€Fidelity Bioelectronic Muscular Actuator Based on Grapheneâ€Mediated and TEMPOâ€Oxidized Bacterial Cellulose. Advanced Functional Materials, 2015, 25, 3560-3570.	14.9	107
22	Bendable and flexible supercapacitor based on polypyrrole-coated bacterial cellulose core-shell composite network. Composites Science and Technology, 2016, 128, 33-40.	7.8	105
23	Skin-attachable and biofriendly chitosan-diatom triboelectric nanogenerator. Nano Energy, 2020, 75, 104904.	16.0	105
24	Dryâ€Type Artificial Muscles Based on Pendent Sulfonated Chitosan and Functionalized Graphene Oxide for Greatly Enhanced Ionic Interactions and Mechanical Stiffness. Advanced Functional Materials, 2013, 23, 6007-6018.	14.9	104
25	Synthesis of graphene nano-sheets using eco-friendly chemicals and microwave radiation. Carbon, 2010, 48, 2953-2957.	10.3	101
26	A multiple-shape memory polymer-metal composite actuator capable of programmable control, creating complex 3D motion of bending, twisting, and oscillation. Scientific Reports, 2016, 6, 24462.	3.3	98
27	Wettingâ€Transparent Graphene Films for Hydrophobic Waterâ€Harvesting Surfaces. Advanced Materials, 2014, 26, 5166-5172.	21.0	97
28	Stretchable and self-healable catechol-chitosan-diatom hydrogel for triboelectric generator and self-powered tremor sensor targeting at Parkinson disease. Nano Energy, 2021, 82, 105705.	16.0	97
29	Microwave self-assembly of 3D graphene-carbon nanotube-nickel nanostructure for high capacity anode material in lithium ion battery. Carbon, 2013, 64, 527-536.	10.3	94
30	Microwave bottom-up route for size-tunable and switchable photoluminescent graphene quantum dots using acetylacetone: New platform for enzyme-free detection of hydrogen peroxide. Carbon, 2015, 81, 514-524.	10.3	93
31	Microwaveâ€Accelerated Rapid, Chemical Oxidantâ€Free, Materialâ€Independent Surface Chemistry of Poly(dopamine). Small, 2017, 13, 1600443.	10.0	92
32	Novel biomimetic actuator based on SPEEK and PVDF. Sensors and Actuators B: Chemical, 2009, 143, 357-364.	7.8	90
33	Bacterial cellulose actuator with electrically driven bending deformation in hydrated condition. Sensors and Actuators B: Chemical, 2010, 146, 307-313.	7.8	88
34	Electro-active nano-composite actuator based on fullerene-reinforced Nafion. Composites Science and Technology, 2010, 70, 584-592.	7.8	85
35	Fullerenol-Based Electroactive Artificial Muscles Utilizing Biocompatible Polyetherimide. ACS Nano, 2011, 5, 2248-2256.	14.6	84
36	Fabrication and actuation of ionic polymer metal composites patterned by combining electroplating with electroless plating. Composites Part A: Applied Science and Manufacturing, 2008, 39, 588-596.	7.6	82

#	Article	IF	CITATIONS
37	Directionally Antagonistic Graphene Oxide-Polyurethane Hybrid Aerogel as a Sound Absorber. ACS Applied Materials & Interfaces, 2018, 10, 22650-22660.	8.0	81
38	Arsenic Removal from Contaminated Water Using Three-Dimensional Graphene-Carbon Nanotube-Iron Oxide Nanostructures. Environmental Science & Technology, 2013, 47, 130904083814004.	10.0	79
39	Bioâ€Inspired Allâ€Organic Soft Actuator Based on a π–π Stacked 3D Ionic Network Membrane and Ultraâ€Fast Solution Processing. Advanced Functional Materials, 2014, 24, 6005-6015.	14.9	78
40	Biomimetic electro-active polymer based on sulfonated poly (styrene-b-ethylene-co-butylene-b-styrene). Materials Letters, 2007, 61, 5117-5120.	2.6	77
41	Synthesis and electrochemical performance characterization of Ce-doped Li 3 V 2 (PO 4 ) 3 /C as cathode materials for lithium-ion batteries. Journal of Power Sources, 2013, 243, 33-39.	7.8	74
42	3D Networked Grapheneâ€Ferromagnetic Hybrids for Fast Shape Memory Polymers with Enhanced Mechanical Stiffness and Thermal Conductivity. Small, 2014, 10, 3880-3886.	10.0	72
43	Electric-stimuli-responsive bending actuator based on sulfonated polyetherimide. Sensors and Actuators B: Chemical, 2010, 151, 198-204.	7.8	69
44	Self-assembly and morphological control of three-dimensional macroporous architectures built of two-dimensional materials. Nano Today, 2017, 14, 100-123.	11.9	69
45	Auxetic graphene oxide-porous foam for acoustic wave and shock energy dissipation. Composites Part B: Engineering, 2020, 186, 107817.	12.0	69
46	Sulfur and nitrogen co-doped holey graphene aerogel for structurally resilient solid-state supercapacitors under high compressions. Journal of Materials Chemistry A, 2017, 5, 17253-17266.	10.3	68
47	Diatom Bio-Silica and Cellulose Nanofibril for Bio-Triboelectric Nanogenerators and Self-Powered Breath Monitoring Masks. ACS Applied Materials & Interfaces, 2021, 13, 219-232.	8.0	68
48	A soft biomolecule actuator based on a highly functionalized bacterial cellulose nano-fiber network with carboxylic acid groups. Soft Matter, 2016, 12, 246-254.	2.7	67
49	Ferroceneâ€Incorporated Cobalt Sulfide Nanoarchitecture for Superior Oxygen Evolution Reaction. Small, 2020, 16, e2001665.	10.0	67
50	An ionic liquid-assisted method for splitting carbon nanotubes to produce graphene nano-ribbons by microwave radiation. Carbon, 2013, 53, 391-398.	10.3	65
51	Active Disturbance Rejection Control for Precise Position Tracking of Ionic Polymer–Metal Composite Actuators. IEEE/ASME Transactions on Mechatronics, 2013, 18, 86-95.	5.8	63
52	Thermopiezoelastic Snapping of Piezolaminated Plates Using Layerwise Nonlinear Finite Elements. AIAA Journal, 2001, 39, 1188-1197.	2.6	62
53	Thermal post-buckling analysis of shape memory alloy hybrid composite shell panels. Smart Materials and Structures, 2004, 13, 1337-1344.	3.5	61
54	Electro-active hybrid actuators based on freeze-dried bacterial cellulose and PEDOT:PSS. Smart Materials and Structures, 2013, 22, 085026.	3.5	61

#	Article	IF	CITATIONS
55	A Pair of NiCo <sub>2</sub> O <sub>4</sub> and V <sub>2</sub> O <sub>5</sub> Nanowires Directly Grown on Carbon Fabric for Highly Bendable Lithiumâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1900477.	19.5	61
56	Soft but Powerful Artificial Muscles Based on 3D Graphene–CNT–Ni Heteronanostructures. Small, 2017, 13, 1701314.	10.0	60
57	Electrospun Fullerenol-Cellulose Biocompatible Actuators. Biomacromolecules, 2011, 12, 2048-2054.	5.4	59
58	Microwave syntheses of graphene and graphene decorated with metal nanoparticles. Carbon, 2011, 49, 4449-4457.	10.3	59
59	Treefrog Toe Padâ€Inspired Micropatterning for Highâ€Power Triboelectric Nanogenerator. Advanced Functional Materials, 2019, 29, 1901638.	14.9	56
60	Collectively Exhaustive Electrodes Based on Covalent Organic Framework and Antagonistic Coâ€Doping for Electroactive Ionic Artificial Muscles. Advanced Functional Materials, 2019, 29, 1900161.	14.9	56
61	Aeroelastic characteristics of cylindrical hybrid composite panels with viscoelastic damping treatments. Journal of Sound and Vibration, 2006, 296, 99-116.	3.9	55
62	Electroactive bio-composite actuators based on cellulose acetate nanofibers with specially chopped polyaniline nanoparticles through electrospinning. Composites Science and Technology, 2013, 87, 135-141.	7.8	55
63	Pressure-dependent synthesis of high-quality few-layer graphene by plasma-enhanced arc discharge and their thermal stability. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	55
64	CTF-based soft touch actuator for playing electronic piano. Nature Communications, 2020, 11, 5358.	12.8	54
65	Thermal snapping and vibration characteristics of cylindrical composite panels using layerwise theory. Composite Structures, 2001, 51, 49-61.	5.8	52
66	Functionally Antagonistic Hybrid Electrode with Hollow Tubular Graphene Mesh and Nitrogenâ€Doped Crumpled Graphene for Highâ€Performance Ionic Soft Actuators. Advanced Functional Materials, 2018, 28, 1705714.	14.9	51
67	Highly Bendable Ionic Soft Actuator Based on Nitrogenâ€Enriched 3D Heteroâ€Nanostructure Electrode. Advanced Functional Materials, 2018, 28, 1802464.	14.9	51
68	A composite layer of atomic-layer-deposited Al2O3 and graphene for flexible moisture barrier. Carbon, 2017, 116, 553-561.	10.3	45
69	Self-aligned and hierarchically porous graphene-polyurethane foams for acoustic wave absorption. Carbon, 2019, 147, 510-518.	10.3	45
70	Supersonic Flutter Analysis of Stiffened Laminated Plates Subject to Thermal Load. Journal of Sound and Vibration, 1999, 224, 49-67.	3.9	44
71	Electroactive artificial muscle based on crosslinked PVA/SPTES. Sensors and Actuators B: Chemical, 2010, 150, 57-64.	7.8	43
72	A coagulation technique for purification of graphene sheets with graphene–reinforced PVA hydrogel as byproduct. Journal of Colloid and Interface Science, 2010, 348, 384-387.	9.4	42

#	Article	IF	CITATIONS
73	A current-flowing electromagnetic shunt damper for multi-mode vibration control of cantilever beams. Smart Materials and Structures, 2009, 18, 095036.	3.5	41
74	Sonochemical self-growth of functionalized titanium carbide nanorods on Ti3C2 nanosheets for high capacity anode for lithium-ion batteries. Composites Part B: Engineering, 2020, 181, 107583.	12.0	41
75	Rose-like MoS2 nanostructures with a large interlayer spacing of â^1⁄49.9ÂÃ and exfoliated WS2 nanosheets supported on carbon nanotubes for hydrogen evolution reaction. Carbon, 2020, 158, 216-225.	10.3	41
76	Enhanced electromechanical performance of carbon nano-fiber reinforced sulfonated poly(styrene-b-[ethylene/butylene]-b-styrene) actuator. Composites Science and Technology, 2009, 69, 2098-2101.	7.8	40
77	Vibration Suppression of Flexible Beam Using Electromagnetic Shunt Damper. IEEE Transactions on Magnetics, 2009, 45, 2758-2761.	2.1	39
78	Fabrication and actuation of electro-active polymer actuator based on PSMI-incorporated PVDF. Smart Materials and Structures, 2008, 17, 045002.	3.5	38
79	Selective growth of platinum electrodes for MDOF IPMC actuators. Thin Solid Films, 2009, 517, 5288-5292.	1.8	38
80	Electroâ€active polymer actuators employing sulfonated poly(styreneâ€ <i>ran</i> â€ethylene) as ionic membranes. Polymer International, 2010, 59, 305-312.	3.1	38
81	Defect-engineered mesoporous ternary nanoarchitecture of zinc-cobalt-oxide/nitrogen-doped graphene as anode material in lithium ion batteries. Carbon, 2015, 94, 455-463.	10.3	38
82	Flow-induced snap-through triboelectric nanogenerator. Nano Energy, 2020, 68, 104379.	16.0	38
83	Integrated dielectric-electrode layer for triboelectric nanogenerator based on Cu nanowire-Mesh hybrid electrode. Nano Energy, 2019, 59, 120-128.	16.0	37
84	Dynamic characteristics of cylindrical hybrid panels containing viscoelastic layer based on layerwise mechanics. Composites Part B: Engineering, 2007, 38, 159-171.	12.0	36
85	Graphene-coated meshes for electroactive flow control devices utilizing two antagonistic functions of repellency and permeability. Nature Communications, 2016, 7, 13345.	12.8	36
86	Defect engineering route to boron nitride quantum dots and edge-hydroxylated functionalization for bio-imaging. RSC Advances, 2016, 6, 73939-73946.	3.6	34
87	An Electroactive and Transparent Haptic Interface Utilizing Soft Elastomer Actuators with Silver Nanowire Electrodes. Small, 2018, 14, e1801603.	10.0	34
88	Load-bearing supercapacitor based on bicontinuous PEO-b-P(S-co-DVB) structural electrolyte integrated with conductive nanowire-carbon fiber electrodes. Carbon, 2018, 139, 10-20.	10.3	34
89	Microwave extraction of graphene from carbon fibers. Carbon, 2011, 49, 222-226.	10.3	33
90	Supersonic flutter suppression of piezolaminated cylindrical panels based on multifield layerwise theory. Journal of Sound and Vibration, 2006, 291, 1186-1201.	3.9	32

#	Article	IF	CITATIONS
91	Novel Nanocomposite Actuator Based on Sulfonated Poly(styrene-b-ethylene-co-butylene-b-styrene) Polymer. Journal of Nanoscience and Nanotechnology, 2007, 7, 3740-3743.	0.9	32
92	Adaptive neuro-fuzzy control of ionic polymer metal composite actuators. Smart Materials and Structures, 2009, 18, 065016.	3.5	32
93	Far-infrared reduced graphene oxide as high performance electrodes for supercapacitors. Carbon, 2014, 75, 201-208.	10.3	32
94	Design of a Fuel-Cell-Powered Catamaran-Type Unmanned Surface Vehicle. IEEE Journal of Oceanic Engineering, 2015, 40, 388-396.	3.8	31
95	Electro-active artificial muscle based on irradiation-crosslinked sulfonated poly(styrene-ran-ethylene). Sensors and Actuators B: Chemical, 2010, 145, 635-642.	7.8	30
96	A helical ionic polymer–metal composite actuator for radius control of biomedical active stents. Smart Materials and Structures, 2011, 20, 035008.	3.5	30
97	Electroionic Antagonistic Muscles Based on Nitrogenâ€Doped Carbons Derived from Poly(Triazineâ€Triptycene). Advanced Science, 2017, 4, 1700410.	11.2	30
98	Mutually Exclusive pâ€Type and nâ€Type Hybrid Electrode of MoS <sub>2</sub> and Graphene for Artificial Soft Touch Fingers. Advanced Functional Materials, 2019, 29, 1905454.	14.9	30
99	Sulfur―and Nitrogenâ€Rich Porous Ï€â€Conjugated COFs as Stable Electrode Materials for Electroâ€ŀonic Soft Actuators. Advanced Functional Materials, 2020, 30, 2003863.	14.9	30
100	Ti3C2Tx MXene for wearable energy devices: Supercapacitors and triboelectric nanogenerators. APL Materials, 2020, 8, .	5.1	30
101	Snap-through dynamics of buckled IPMC actuator. Sensors and Actuators A: Physical, 2010, 158, 300-305.	4.1	29
102	Graphene Mesh for Selfâ€ <b>5</b> ensing Ionic Soft Actuator Inspired from Mechanoreceptors in Human Body. Advanced Science, 2019, 6, 1901711.	11.2	29
103	Electroactive Artificial Muscles Based on Functionally Antagonistic Core–Shell Polymer Electrolyte Derived from PSâ€≺i>bâ€PSS Block Copolymer. Advanced Science, 2019, 6, 1801196.	11.2	29
104	Nest-inspired nanosponge-Cu woven mesh hybrid for ultrastable and high-power triboelectric nanogenerator. Nano Energy, 2020, 71, 104561.	16.0	29
105	Nonlinear flutter of aerothermally buckled composite shells with damping treatments. Journal of Sound and Vibration, 2009, 324, 556-569.	3.9	28
106	Determination of the stoichiometry and critical oxygen tension in the production culture of bacterial cellulose using saccharified food wastes. Korean Journal of Chemical Engineering, 2011, 28, 2306-2311.	2.7	28
107	Recent Progress in Multifunctional Graphene Aerogels. Frontiers in Materials, 2016, 3, .	2.4	28
108	CNT branching of three-dimensional steam-activated graphene hybrid frameworks for excellent rate and cyclic capabilities to store lithium ions. Carbon, 2017, 116, 500-509.	10.3	27

#	Article	IF	CITATIONS
109	Longâ€Lasting and Steady Triboelectric Energy Harvesting from Lowâ€Frequency Irregular Motions Using Escapement Mechanism. Advanced Energy Materials, 2021, 11, 2002929.	19.5	27
110	Metal–Organic Frameworkâ€Derived Graphitic Nanoribbons Anchored on Graphene for Electroionic Artificial Muscles. Advanced Functional Materials, 2020, 30, 1910326.	14.9	27
111	Nanohole-structured, iron oxide-decorated and gelatin-functionalized graphene for high rate and high capacity Li-Ion anode. Carbon, 2017, 119, 355-364.	10.3	26
112	Surface Modification of Anisotropic Dielectric Elastomer Actuators with Uni- and Bi-axially Wrinkled Carbon Electrodes for Wettability Control. Scientific Reports, 2017, 7, 6091.	3.3	26
113	An Electroactive, Tunable, and Frequency Selective Surface Utilizing Highly Stretchable Dielectric Elastomer Actuators Based on Functionally Antagonistic Aperture Control. Small, 2016, 12, 1840-1846.	10.0	25
114	Basic design of a biomimetic underwater soft robot with switchable swimming modes and programmable artificial muscles. Smart Materials and Structures, 2020, 29, 035038.	3.5	25
115	AEROTHERMOELASTIC PHENOMENA OF AEROSPACE AND COMPOSITE STRUCTURES. Journal of Thermal Stresses, 2003, 26, 525-546.	2.0	24
116	Electro-chemo-mechanical characteristics of fullerene-reinforced ionic polymer–metal composite transducers. Smart Materials and Structures, 2010, 19, 075009.	3.5	24
117	Highly conducting multilayer films from graphene nanosheets by a spin self-assembly method. Journal of Materials Chemistry, 2011, 21, 5378.	6.7	24
118	Electronically Conjugated Multifunctional Covalent Triazine Framework for Unprecedented CO <sub>2</sub> Selectivity and Highâ€₽ower Flexible Supercapacitor. Advanced Functional Materials, 2022, 32, 2107442.	14.9	24
119	Thermopiezoelastic nonlinear dynamics of active piezolaminated plates. Smart Materials and Structures, 2005, 14, 823-834.	3.5	23
120	Electroâ€active Polymer Actuator Based on Sulfonated Polyimide with Highly Conductive Silver Electrodes Via Selfâ€metallization. Macromolecular Rapid Communications, 2011, 32, 1583-1587.	3.9	23
121	Novel electroactive PVA-TOCN actuator that is extremely sensitive to low electrical inputs. Smart Materials and Structures, 2014, 23, 074006.	3.5	23
122	Vibration characteristics and supersonic flutter of cylindrical composite panels with large thermoelastic deflections. Composite Structures, 2009, 90, 208-216.	5.8	22
123	Electromagnetic Synchronized Switch Damping for Vibration Control of Flexible Beams. IEEE/ASME Transactions on Mechatronics, 2012, 17, 1031-1038.	5.8	22
124	Low voltage actuator using ionic polymer metal nanocomposites based on a miscible polymer blend. Journal of Materials Chemistry A, 2015, 3, 19718-19727.	10.3	22
125	Intertwined Nanosponge Solid-State Polymer Electrolyte for Rollable and Foldable Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 11657-11668.	8.0	22
126	Crumpled Quaternary Nanoarchitecture of Sulfur-Doped Nickel Cobalt Selenide Directly Grown on Carbon Cloth for Making Stronger Ionic Soft Actuators. ACS Applied Materials & Interfaces, 2019, 11, 40451-40460.	8.0	21

#	Article	IF	CITATIONS
127	Collectively Exhaustive Hybrid Triboelectric Nanogenerator Based on Flowâ€Induced Impactingâ€Sliding Cylinder for Ocean Energy Harvesting. Advanced Energy Materials, 2022, 12, 2103076.	19.5	21
128	Effect of viscosity-inducing factors on oxygen transfer in production culture of bacterial cellulose. Korean Journal of Chemical Engineering, 2012, 29, 792-797.	2.7	20
129	NON-LINEAR TRANSIENT RESPONSE OF FLUTTERING STIFFENED COMPOSITE PLATES SUBJECT TO THERMAL LOAD. Journal of Sound and Vibration, 2001, 245, 715-736.	3.9	18
130	Melt Crystallization and Morphology of Poly(p-phenylene sulfide) under High Pressure. Macromolecular Chemistry and Physics, 2007, 208, 405-414.	2.2	18
131	Modified transfer path analysis considering transmissibility functions for accurate estimation of vibration source. Journal of Sound and Vibration, 2017, 398, 70-83.	3.9	18
132	Wellâ€aligned Nanoâ€fiberous Membranes Based on Threeâ€pole Electrospinning with Channel Electrode. Macromolecular Rapid Communications, 2011, 32, 921-926.	3.9	17
133	Compact piezoelectric tripod manipulator based on a reverse bridge-type amplification mechanism. Smart Materials and Structures, 2016, 25, 095028.	3.5	17
134	Two-Dimensional rGO-MoS2 Hybrid Additives for High-Performance Magnetorheological Fluid. Scientific Reports, 2018, 8, 12672.	3.3	17
135	A robotic multiple-shape-memory ionic polymer–metal composite (IPMC) actuator: modeling approach. Smart Materials and Structures, 2019, 28, 015009.	3.5	16
136	Phenolâ€Derived Carbon Sealant Inspired by a Coalification Process. Angewandte Chemie - International Edition, 2020, 59, 3864-3870.	13.8	15
137	Non-linear static and dynamic instability of complete spherical shells using mixed finite element formulation. International Journal of Non-Linear Mechanics, 2003, 38, 923-934.	2.6	14
138	Collectively Exhaustive MXene and Graphene Oxide Multilayer for Suppressing Shuttling Effect in Flexible Lithium Sulfur Battery. Advanced Materials Technologies, 2022, 7, 2101025.	5.8	14
139	Micro-structured porous electrolytes for highly responsive ionic soft actuators. Sensors and Actuators B: Chemical, 2022, 352, 131006.	7.8	14
140	Thermal post-buckling behavior of patched laminated panels under uniform and non-uniform temperature distributions. Composite Structures, 2002, 55, 137-145.	5.8	13
141	Palladium-catalyzed Mizoroki–Heck coupling reactions using sterically bulky phosphite ligand. Inorganic Chemistry Communication, 2010, 13, 1329-1331.	3.9	13
142	How does clamping pressure influence actuation performance of soft ionic polymer–metal composites?. Smart Materials and Structures, 2013, 22, 025014.	3.5	13
143	Wrinkled Graphene–AgNWs Hybrid Electrodes for Smart Window. Micromachines, 2017, 8, 43.	2.9	13
144	Anticarcinogenic activity of blue fluorescent hexagonal boron nitride quantum dots: as an effective enhancer for DNA cleavage activity of anticancer drug doxorubicin. Materials Today Bio, 2019, 1, 100001.	5.5	13

#	Article	IF	CITATIONS
145	Synthesis of Phosphinodiselenoic Acid Ester Derivatives and their Application in the Controlled Radical Polymerization of Styrene. Bulletin of the Korean Chemical Society, 2009, 30, 2129-2131.	1.9	13
146	Coolingâ€Accelerated Nanowireâ€Nitinol Hybrid Muscle for Versatile Prosthetic Hand and Biomimetic Retractable Claw. Advanced Functional Materials, 2022, 32, .	14.9	13
147	Spherical Micro/Nano Hierarchical Structures for Energy and Water Harvesting Devices. Small Methods, 2022, 6, e2200248.	8.6	13
148	Highly Conductive, Capacitive, Flexible and Soft Electrodes Based on a 3D Graphene–Nanotube–Palladium Hybrid and Conducting Polymer. Small, 2014, 10, 5023-5029.	10.0	12
149	Tunable acoustic waveguide based on vibro-acoustic metamaterials with shunted piezoelectric unit cells. Smart Materials and Structures, 2015, 24, 105018.	3.5	12
150	Boosting Oxygen Evolution Reaction on Metalloceneâ€based Transition Metal Sulfides Integrated with Nâ€doped Carbon Nanostructures. ChemSusChem, 2021, 14, 5004-5020.	6.8	12
151	Micro/nano-heater integrated cantilevers for micro/nano-lithography applications. Microelectronic Engineering, 2007, 84, 1041-1044.	2.4	11
152	Morphology investigation on highâ€pressure crystallized bisphenolâ€A polycarbonate/dioctyl phthalate blends. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 2715-2728.	2.1	11
153	Antagonistically Functionalized Diatom Biosilica for Bioâ€īriboelectric Generators. Small, 2022, 18, e2107638.	10.0	11
154	Dynamic Characteristics of Cylindrical Composite Panels with Co-cured and Constrained Viscoelastic Layers JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing, 2002, 45, 16-25.	0.3	10
155	Piezoelectric suppression of thermoelastic snap-through in active piezolaminated curved shells. Smart Materials and Structures, 2006, 15, 1616-1626.	3.5	10
156	Biomimetic Nano-composite Actuators Based on Carbon Nanotubes and Ionic Polymers. Journal of Intelligent Material Systems and Structures, 2008, 19, 305-311.	2.5	10
157	Damping Characteristics of Cylindrical Laminates with Viscoelastic Layer Considering Temperature- and Frequency-Dependence. Journal of Thermal Stresses, 2008, 32, 1-20.	2.0	10
158	Coil-based Electromagnetic Damper and Actuator for Vibration Suppression of Cantilever Beams. Journal of Intelligent Material Systems and Structures, 2009, 20, 2237-2247.	2.5	10
159	Ionic liquid template assisted synthesis of porous nano-silica nails. RSC Advances, 2014, 4, 39978-39983.	3.6	10
160	A dual-ion accepting vanadium carbide nanowire cathode integrated with carbon cloths for high cycling stability. Nanoscale, 2020, 12, 20868-20874.	5.6	10
161	Ligand-Free Palladium Catalytic System Supported by CNT and its Application to the Mizoroki Heck Reactions. Bulletin of the Korean Chemical Society, 2010, 31, 1735-1738.	1.9	10
162	Electroâ€Active and Photoâ€Active Vanadium Oxide Nanowire Thermoâ€Hygroscopic Actuators for Kirigami Popâ€up. Advanced Science, 2021, 8, e2102064.	11.2	10

#	Article	IF	CITATIONS
163	Mutually exclusive ytterbium and nitrogen co-doping of mesoporous titania-carbon for self-cleanable and sustainable triboelectric nanogenerators. Nano Energy, 2021, 90, 106615.	16.0	10
164	Actuation of Electroâ€Active Artificial Muscle at Ultralow Frequency. Macromolecular Chemistry and Physics, 2011, 212, 635-642.	2.2	9
165	Fabrication and characterizations of electro-mechanical actuators based on fullerene-reinforced biocompatible polymer. Sensors and Actuators A: Physical, 2022, 339, 113510.	4.1	9
166	A revisit to imperfect acoustic cloak of multi-layered shell structures considering sound speed and impedance matching. Journal of Sound and Vibration, 2014, 333, 4637-4652.	3.9	8
167	Bio-Inspired Dielectric Elastomer Actuator with AgNWs Coated on Carbon Black Electrode. Journal of Nanoscience and Nanotechnology, 2014, 14, 7483-7487.	0.9	8
168	Resonant frequency and instability of multi-layered micro-resonators with initial imperfection subject to piezoelectric loads. Microelectronic Engineering, 2007, 84, 1388-1392.	2.4	7
169	Thermal post-buckled behaviors of cylindrical composite shells with viscoelastic damping treatments. Journal of Sound and Vibration, 2009, 323, 93-111.	3.9	7
170	Sulfonated Poly(styrene-b-ethylene-co-butylene-b-styrene) and Fullerene Composites for Ionic Polymer Actuators. Journal of Nanoscience and Nanotechnology, 2010, 10, 3203-3206.	0.9	7
171	Linear-to-rotary motion converter using asymmetric compliant mechanics and single-crystal PMN-PT stack actuator. Journal of Intelligent Material Systems and Structures, 2014, 25, 2221-2227.	2.5	7
172	Omnidirectional two-dimensional acoustic cloak by axisymmetric cylindrical lattices. Wave Motion, 2015, 54, 157-169.	2.0	7
173	Elastic valley Hall edge wave in a hierarchical hexagonal lattice. Journal of Sound and Vibration, 2022, 526, 116817.	3.9	7
174	Ultrasonic Active Fiber Sensor based on Pulse-echo Method. Journal of Intelligent Material Systems and Structures, 2009, 20, 1035-1043.	2.5	6
175	Motion Control of Piezoelectric Tripod Platform via Feedforward Hysteresis Compensation. Advanced Materials Technologies, 2018, 3, 1800298.	5.8	5
176	Ligand-free Palladium-Catalyzed Mizoroki-Heck-type Reaction of Arylboronic Acids and Alkenes Using Silver Cation. Bulletin of the Korean Chemical Society, 2010, 31, 1789-1792.	1.9	5
177	Fiber Sensor Based on Piezoelectric Ultrasonic Wave. Journal of Intelligent Material Systems and Structures, 2008, 19, 299-304.	2.5	4
178	Durability studies shed light on the design of novel self-healing artificial muscles by employing ionic network polymers. Journal of Controlled Release, 2011, 152, e229-e230.	9.9	4
179	Theoretical and experimental investigation of the shape memory properties of an ionic polymer–metal composite. Smart Materials and Structures, 2017, 26, 045020.	3.5	4
180	Phenolâ€Derived Carbon Sealant Inspired by a Coalification Process. Angewandte Chemie, 2020, 132, 3892-3898.	2.0	4

#	Article	IF	CITATIONS
181	Electroionic Artificial Muscles: Metal–Organic Frameworkâ€Derived Graphitic Nanoribbons Anchored on Graphene for Electroionic Artificial Muscles (Adv. Funct. Mater. 29/2020). Advanced Functional Materials, 2020, 30, 2070195.	14.9	4
182	Thermopiezoelastic snapping of piezolaminated plates using layerwise nonlinear finite elements. AIAA Journal, 2001, 39, 1188-1197.	2.6	4
183	Dynamic Characteristics of Novel Ionic-Polymer-Metal-Composites. Key Engineering Materials, 2006, 321-323, 208-211.	0.4	3
184	Growth of Spatial Dendrites in Bisphenol-A Polycarbonate Induced by Dioctyl Phthalate at High Pressure. Molecular Crystals and Liquid Crystals, 2009, 511, 327/[1797]-336/[1806].	0.9	3
185	Accurate Dynamic Modeling of Helical Ionic Polymer-Metal Composite Actuator Based on Intrinsic Equations. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1680-1688.	5.8	3
186	Plasma Surface Modification of Graphene and Combination with Bacteria Cellulose. Korean Chemical Engineering Research, 2013, 51, 388-393.	0.2	3
187	Robust separation of topological in-plane and out-of-plane waves in a phononic crystal. Communications Physics, 2022, 5, .	5.3	3
188	Electron microscopy of high pressure crystallised poly ( <i>p</i> -phenylene sulfide). Plastics, Rubber and Composites, 2008, 37, 263-267.	2.0	2
189	Suzuki-Miyaura Coupling Reactions Using Phosphite Ligands. Synthesis, 2009, 2009, 2073-2075.	2.3	2
190	Nonlinear dynamics of curved IPMC actuators undergoing electrically driven large deformations. International Journal of Smart and Nano Materials, 2012, 3, 214-225.	4.2	2
191	Graphene Films: Wettingâ€Transparent Graphene Films for Hydrophobic Waterâ€Harvesting Surfaces (Adv.) Tj E	TQq1_1 0. 21.0	784314 rg8
192	Artificial Muscles: Electroionic Antagonistic Muscles Based on Nitrogenâ€Doped Carbons Derived from Poly(Triazineâ€Triptycene) (Adv. Sci. 12/2017). Advanced Science, 2017, 4, 1770062.	11.2	2
193	Actuators: Functionally Antagonistic Hybrid Electrode with Hollow Tubular Graphene Mesh and Nitrogenâ€Doped Crumpled Graphene for Highâ€Performance Ionic Soft Actuators (Adv. Funct. Mater.) Tj ETQqI	11 <b>0.9</b> 843	31 <b>⊉</b> rgBT /Ov
194	Novel nanocomposite actuator based on sulfonated poly(styrene-b-ethylene-co-butylene-b-styrene) polymer. Journal of Nanoscience and Nanotechnology, 2007, 7, 3740-3.	0.9	2
195	Design of multi-auxetic microstructures for sound absorbing applications. Advanced Composite Materials, 2023, 32, 225-236.	1.9	2
196	Mechanical model and analysis of ionic polymer metal composites biomimetic actuators. , 2008, , .		1
197	<i>A Special Section on</i> Nanotechnology for Biomimetics and Nano-Biomaterials. Journal of Nanoscience and Nanotechnology, 2014, 14, 7361-7362.	0.9	1
198	Bio-Inspired Bending Actuator for Controlling Conical Nose Shape Using Piezoelectric Patches. Journal of Nanoscience and Nanotechnology, 2014, 14, 7463-7468.	0.9	1

#	Article	IF	CITATIONS
199	Hybrid Carbon Nanomaterials for Electromagnetic Interference Shielding. Composites Research, 2016, 29, 138-144.	0.1	1
200	Film Properties of Al Thin Films Depending on Process Parameters and Film Thickness Grown by Sputter. Korean Journal of Materials Research, 2016, 26, 438-443.	0.2	1
201	Collectively Exhaustive Hybrid Triboelectric Nanogenerator Based on Flowâ€Induced Impactingâ€Sliding Cylinder for Ocean Energy Harvesting (Adv. Energy Mater. 3/2022). Advanced Energy Materials, 2022, 12,	19.5	1
202	Snap-through dynamics of bi-stable IPMC actuator considering beam configuration. Proceedings of SPIE, 2009, , .	0.8	0
203	Nano for Biomimetics and Biomaterials. Journal of Nanomaterials, 2014, 2014, 1-1.	2.7	0
204	Selected papers from the 7th International Conference on Biomimetics, Artificial Muscles and Nano-bio (BAMN2013). Smart Materials and Structures, 2014, 23, 070301.	3.5	0
205	BIOINSPIRED ARTIFICIAL MUSCLES AND ROBOTS. World Scientific Series in Nanoscience and Nanotechnology, 2014, , 443-474.	0.1	0
206	Green luminescence of quasi-molecular level in graphene quantum dots fabricated by microwave bottom-up strategy. , 2015, , .		0
207	IPMCs as EAPs: Materials. , 2016, , 151-170.		0
208	IPMCs as EAPs: Materials. , 2016, , 1-20.		0
209	Reply to "Comment on â€~Nanohole-Structured and Palladium-Embedded 3D Porous Graphene for Ultrahigh Hydrogen Storage and CO Oxidation Multifunctionalities'― ACS Nano, 2016, 10, 9057-9060.	14.6	0
210	Piezoelectric Actuators: Motion Control of Piezoelectric Tripod Platform via Feedforward Hysteresis Compensation (Adv. Mater. Technol. 12/2018). Advanced Materials Technologies, 2018, 3, 1870049.	5.8	0
211	P-58 Static Deformation Analyses of Composite Rotor Blades Based On Fluid-Structure Coupling. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2007, 2007.6, _P-58-1P-58-5	0.0	0
212	Surface morphology control of elastomeric actuator and their application for haptic device. , 2018, , .		0
213	Coolingâ€Accelerated Nanowireâ€Nitinol Hybrid Muscle for Versatile Prosthetic Hand and Biomimetic Retractable Claw (Adv. Funct. Mater. 18/2022). Advanced Functional Materials, 2022, 32	14.9	Ο