

Jung-Hwan Oh

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5604866/publications.pdf>

Version: 2024-02-01

213
papers

9,920
citations

24978

57
h-index

45213

90
g-index

224
all docs

224
docs citations

224
times ranked

11487
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene Oxideâ€“Polyethylenimine Nanoconstruct as a Gene Delivery Vector and Bioimaging Tool. <i>Bioconjugate Chemistry</i> , 2011, 22, 2558-2567.	1.8	368
2	Recent advances in ionic polymerâ€“metal composite actuators and their modeling and applications. <i>Progress in Polymer Science</i> , 2013, 38, 1037-1066.	11.8	336
3	Seamlessly Conductive 3D Nanoarchitecture of Coreâ€“Shell Niâ€“Co Nanowire Network for Highly Efficient Oxygen Evolution. <i>Advanced Energy Materials</i> , 2017, 7, 1601492.	10.2	260
4	A biomimetic jellyfish robot based on ionic polymer metal composite actuators. <i>Smart Materials and Structures</i> , 2009, 18, 085002.	1.8	259
5	Silk Nanofiberâ€“Networked Bioâ€“Triboelectric Generator: Silk Bioâ€“TEG. <i>Advanced Energy Materials</i> , 2016, 6, 1502329.	10.2	222
6	Bacterial Nanoâ€“Cellulose Triboelectric Nanogenerator. <i>Nano Energy</i> , 2017, 33, 130-137.	8.2	214
7	Multilayered graphene-carbon nanotube-iron oxide three-dimensional heterostructure for flexible electromagnetic interference shielding film. <i>Carbon</i> , 2017, 111, 248-257.	5.4	203
8	Durable and Water-Floatable Ionic Polymer Actuator with Hydrophobic and Asymmetrically Laser-Scribed Reduced Graphene Oxide Paper Electrodes. <i>ACS Nano</i> , 2014, 8, 2986-2997.	7.3	199
9	Grapheneâ€“Nanotubeâ€“Iron Hierarchical Nanostructure as Lithium Ion Battery Anode. <i>ACS Nano</i> , 2013, 7, 4242-4251.	7.3	192
10	Electro-active grapheneâ€“Nafion actuators. <i>Carbon</i> , 2011, 49, 1279-1289.	5.4	187
11	Sulfur and Nitrogen Coâ€“Doped Graphene Electrodes for Highâ€“Performance Ionic Artificial Muscles. <i>Advanced Materials</i> , 2016, 28, 1610-1615.	11.1	177
12	MXene artificial muscles based on ionically cross-linked Ti ₃ C ₂ T ₂ electrode for kinetic soft robotics. <i>Science Robotics</i> , 2019, 4, .	9.9	169
13	Graphene-wrapped and cobalt oxide-intercalated hybrid for extremely durable super-capacitor with ultrahigh energy and power densities. <i>Carbon</i> , 2014, 79, 192-202.	5.4	166
14	Piezoelectric thin films: an integrated review of transducers and energy harvesting. <i>Smart Materials and Structures</i> , 2016, 25, 053002.	1.8	163
15	Microwave-Assisted Synthesis of Boron and Nitrogen co-doped Reduced Graphene Oxide for the Protection of Electromagnetic Radiation in Ku-Band. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 19831-19842.	4.0	145
16	Defect-Engineered Three-Dimensional Grapheneâ€“Nanotubeâ€“Palladium Nanostructures with Ultrahigh Capacitance. <i>ACS Nano</i> , 2012, 6, 10562-10570.	7.3	141
17	POSTBUCKLING AND VIBRATION CHARACTERISTICS OF PIEZOLAMINATED COMPOSITE PLATE SUBJECT TO THERMO-PIEZOELECTRIC LOADS. <i>Journal of Sound and Vibration</i> , 2000, 233, 19-40.	2.1	129
18	A Biomimetic Actuator Based on an Ionic Networking Membrane of Poly(styreneâ€“maleimide)â€“Incorporated Poly(vinylidene fluoride). <i>Advanced Functional Materials</i> , 2008, 18, 1290-1298.	7.8	126

#	ARTICLE	IF	CITATIONS
19	Stimuli-Responsive MXene-Based Actuators. <i>Advanced Functional Materials</i> , 2020, 30, 1909504.	7.8	126
20	Nanohole-Structured and Palladium-Embedded 3D Porous Graphene for Ultrahigh Hydrogen Storage and CO Oxidation Multifunctionalities. <i>ACS Nano</i> , 2015, 9, 7343-7351.	7.3	122
21	High-Fidelity Bioelectronic Muscular Actuator Based on Graphene-Mediated and TEMPO-Oxidized Bacterial Cellulose. <i>Advanced Functional Materials</i> , 2015, 25, 3560-3570.	7.8	107
22	Bendable and flexible supercapacitor based on polypyrrole-coated bacterial cellulose core-shell composite network. <i>Composites Science and Technology</i> , 2016, 128, 33-40.	3.8	105
23	Skin-attachable and biofriendly chitosan-diatom triboelectric nanogenerator. <i>Nano Energy</i> , 2020, 75, 104904.	8.2	105
24	Dry-Type Artificial Muscles Based on Pendent Sulfonated Chitosan and Functionalized Graphene Oxide for Greatly Enhanced Ionic Interactions and Mechanical Stiffness. <i>Advanced Functional Materials</i> , 2013, 23, 6007-6018.	7.8	104
25	Synthesis of graphene nano-sheets using eco-friendly chemicals and microwave radiation. <i>Carbon</i> , 2010, 48, 2953-2957.	5.4	101
26	A multiple-shape memory polymer-metal composite actuator capable of programmable control, creating complex 3D motion of bending, twisting, and oscillation. <i>Scientific Reports</i> , 2016, 6, 24462.	1.6	98
27	Wetting-Transparent Graphene Films for Hydrophobic Water-Harvesting Surfaces. <i>Advanced Materials</i> , 2014, 26, 5166-5172.	11.1	97
28	Stretchable and self-healable catechol-chitosan-diatom hydrogel for triboelectric generator and self-powered tremor sensor targeting at Parkinson disease. <i>Nano Energy</i> , 2021, 82, 105705.	8.2	97
29	Microwave self-assembly of 3D graphene-carbon nanotube-nickel nanostructure for high capacity anode material in lithium ion battery. <i>Carbon</i> , 2013, 64, 527-536.	5.4	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. <i>Carbon</i> , 2015, 81, 514-524.	5.4	93
31	Microwave-Accelerated Rapid, Chemical Oxidant-Free, Material-Independent Surface Chemistry of Poly(dopamine). <i>Small</i> , 2017, 13, 1600443.	5.2	92
32	Novel biomimetic actuator based on SPEEK and PVDF. <i>Sensors and Actuators B: Chemical</i> , 2009, 143, 357-364.	4.0	90
33	Bacterial cellulose actuator with electrically driven bending deformation in hydrated condition. <i>Sensors and Actuators B: Chemical</i> , 2010, 146, 307-313.	4.0	88
34	Electro-active nano-composite actuator based on fullerene-reinforced Nafion. <i>Composites Science and Technology</i> , 2010, 70, 584-592.	3.8	85
35	Fullerenol-Based Electroactive Artificial Muscles Utilizing Biocompatible Polyetherimide. <i>ACS Nano</i> , 2011, 5, 2248-2256.	7.3	84
36	Fabrication and actuation of ionic polymer metal composites patterned by combining electroplating with electroless plating. <i>Composites Part A: Applied Science and Manufacturing</i> , 2008, 39, 588-596.	3.8	82

#	ARTICLE	IF	CITATIONS
37	Directionally Antagonistic Graphene Oxide-Polyurethane Hybrid Aerogel as a Sound Absorber. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 22650-22660.	4.0	81
38	Arsenic Removal from Contaminated Water Using Three-Dimensional Graphene-Carbon Nanotube-Iron Oxide Nanostructures. <i>Environmental Science & Technology</i> , 2013, 47, 130904083814004.	4.6	79
39	Bio-Inspired All-Organic Soft Actuator Based on a Stacked 3D Ionic Network Membrane and Ultra-Fast Solution Processing. <i>Advanced Functional Materials</i> , 2014, 24, 6005-6015.	7.8	78
40	Biomimetic electro-active polymer based on sulfonated poly (styrene-b-ethylene-co-butylene-b-styrene). <i>Materials Letters</i> , 2007, 61, 5117-5120.	1.3	77
41	Synthesis and electrochemical performance characterization of Ce-doped $\text{Li}_3\text{V}_2(\text{PO}_4)_3/\text{C}$ as cathode materials for lithium-ion batteries. <i>Journal of Power Sources</i> , 2013, 243, 33-39.	4.0	74
42	3D Networked Graphene-Ferromagnetic Hybrids for Fast Shape Memory Polymers with Enhanced Mechanical Stiffness and Thermal Conductivity. <i>Small</i> , 2014, 10, 3880-3886.	5.2	72
43	Electric-stimuli-responsive bending actuator based on sulfonated polyetherimide. <i>Sensors and Actuators B: Chemical</i> , 2010, 151, 198-204.	4.0	69
44	Self-assembly and morphological control of three-dimensional macroporous architectures built of two-dimensional materials. <i>Nano Today</i> , 2017, 14, 100-123.	6.2	69
45	Auxetic graphene oxide-porous foam for acoustic wave and shock energy dissipation. <i>Composites Part B: Engineering</i> , 2020, 186, 107817.	5.9	69
46	Sulfur and nitrogen co-doped holey graphene aerogel for structurally resilient solid-state supercapacitors under high compressions. <i>Journal of Materials Chemistry A</i> , 2017, 5, 17253-17266.	5.2	68
47	Diatom Bio-Silica and Cellulose Nanofibril for Bio-Triboelectric Nanogenerators and Self-Powered Breath Monitoring Masks. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 219-232.	4.0	68
48	A soft biomolecule actuator based on a highly functionalized bacterial cellulose nano-fiber network with carboxylic acid groups. <i>Soft Matter</i> , 2016, 12, 246-254.	1.2	67
49	Ferrocene-Incorporated Cobalt Sulfide Nanoarchitecture for Superior Oxygen Evolution Reaction. <i>Small</i> , 2020, 16, e2001665.	5.2	67
50	An ionic liquid-assisted method for splitting carbon nanotubes to produce graphene nano-ribbons by microwave radiation. <i>Carbon</i> , 2013, 53, 391-398.	5.4	65
51	Active Disturbance Rejection Control for Precise Position Tracking of Ionic Polymer-Metal Composite Actuators. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013, 18, 86-95.	3.7	63
52	Thermopiezoelectric Snapping of Piezolaminated Plates Using Layerwise Nonlinear Finite Elements. <i>AIAA Journal</i> , 2001, 39, 1188-1197.	1.5	62
53	Thermal post-buckling analysis of shape memory alloy hybrid composite shell panels. <i>Smart Materials and Structures</i> , 2004, 13, 1337-1344.	1.8	61
54	Electro-active hybrid actuators based on freeze-dried bacterial cellulose and PEDOT:PSS. <i>Smart Materials and Structures</i> , 2013, 22, 085026.	1.8	61

#	ARTICLE	IF	CITATIONS
55	A Pair of NiCo ₂ O ₄ and V ₂ O ₅ Nanowires Directly Grown on Carbon Fabric for Highly Bendable Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1900477.	10.2	61
56	Soft but Powerful Artificial Muscles Based on 3D Graphene-CNT-Ni Heteronanostructures. <i>Small</i> , 2017, 13, 1701314.	5.2	60
57	Electrospun Fullerenol-Cellulose Biocompatible Actuators. <i>Biomacromolecules</i> , 2011, 12, 2048-2054.	2.6	59
58	Microwave syntheses of graphene and graphene decorated with metal nanoparticles. <i>Carbon</i> , 2011, 49, 4449-4457.	5.4	59
59	Treefrog Toe Pad-Inspired Micropatterning for High-Power Triboelectric Nanogenerator. <i>Advanced Functional Materials</i> , 2019, 29, 1901638.	7.8	56
60	Collectively Exhaustive Electrodes Based on Covalent Organic Framework and Antagonistic Co-Doping for Electroactive Ionic Artificial Muscles. <i>Advanced Functional Materials</i> , 2019, 29, 1900161.	7.8	56
61	Aeroelastic characteristics of cylindrical hybrid composite panels with viscoelastic damping treatments. <i>Journal of Sound and Vibration</i> , 2006, 296, 99-116.	2.1	55
62	Electroactive bio-composite actuators based on cellulose acetate nanofibers with specially chopped polyaniline nanoparticles through electrospinning. <i>Composites Science and Technology</i> , 2013, 87, 135-141.	3.8	55
63	Pressure-dependent synthesis of high-quality few-layer graphene by plasma-enhanced arc discharge and their thermal stability. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	0.8	55
64	CTF-based soft touch actuator for playing electronic piano. <i>Nature Communications</i> , 2020, 11, 5358.	5.8	54
65	Thermal snapping and vibration characteristics of cylindrical composite panels using layerwise theory. <i>Composite Structures</i> , 2001, 51, 49-61.	3.1	52
66	Functionally Antagonistic Hybrid Electrode with Hollow Tubular Graphene Mesh and Nitrogen-Doped Crumpled Graphene for High-Performance Ionic Soft Actuators. <i>Advanced Functional Materials</i> , 2018, 28, 1705714.	7.8	51
67	Highly Bendable Ionic Soft Actuator Based on Nitrogen-Enriched 3D Hetero-Nanostructure Electrode. <i>Advanced Functional Materials</i> , 2018, 28, 1802464.	7.8	51
68	A composite layer of atomic-layer-deposited Al ₂ O ₃ and graphene for flexible moisture barrier. <i>Carbon</i> , 2017, 116, 553-561.	5.4	45
69	Self-aligned and hierarchically porous graphene-polyurethane foams for acoustic wave absorption. <i>Carbon</i> , 2019, 147, 510-518.	5.4	45
70	Supersonic Flutter Analysis of Stiffened Laminated Plates Subject to Thermal Load. <i>Journal of Sound and Vibration</i> , 1999, 224, 49-67.	2.1	44
71	Electroactive artificial muscle based on crosslinked PVA/SPTES. <i>Sensors and Actuators B: Chemical</i> , 2010, 150, 57-64.	4.0	43
72	A coagulation technique for purification of graphene sheets with graphene-reinforced PVA hydrogel as byproduct. <i>Journal of Colloid and Interface Science</i> , 2010, 348, 384-387.	5.0	42

#	ARTICLE	IF	CITATIONS
73	A current-flowing electromagnetic shunt damper for multi-mode vibration control of cantilever beams. <i>Smart Materials and Structures</i> , 2009, 18, 095036.	1.8	41
74	Sonochemical self-growth of functionalized titanium carbide nanorods on Ti ₃ C ₂ nanosheets for high capacity anode for lithium-ion batteries. <i>Composites Part B: Engineering</i> , 2020, 181, 107583.	5.9	41
75	Rose-like MoS ₂ nanostructures with a large interlayer spacing of ~ 1.9 Å... and exfoliated WS ₂ nanosheets supported on carbon nanotubes for hydrogen evolution reaction. <i>Carbon</i> , 2020, 158, 216-225.	5.4	41
76	Enhanced electromechanical performance of carbon nano-fiber reinforced sulfonated poly(styrene- <i>b</i> -[ethylene/butylene]- <i>b</i> -styrene) actuator. <i>Composites Science and Technology</i> , 2009, 69, 2098-2101.	3.8	40
77	Vibration Suppression of Flexible Beam Using Electromagnetic Shunt Damper. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 2758-2761.	1.2	39
78	Fabrication and actuation of electro-active polymer actuator based on PSMI-incorporated PVDF. <i>Smart Materials and Structures</i> , 2008, 17, 045002.	1.8	38
79	Selective growth of platinum electrodes for MDOF IPMC actuators. <i>Thin Solid Films</i> , 2009, 517, 5288-5292.	0.8	38
80	Electro-active polymer actuators employing sulfonated poly(styrene- <i>b</i> -ethylene) as ionic membranes. <i>Polymer International</i> , 2010, 59, 305-312.	1.6	38
81	Defect-engineered mesoporous ternary nanoarchitecture of zinc-cobalt-oxide/nitrogen-doped graphene as anode material in lithium ion batteries. <i>Carbon</i> , 2015, 94, 455-463.	5.4	38
82	Flow-induced snap-through triboelectric nanogenerator. <i>Nano Energy</i> , 2020, 68, 104379.	8.2	38
83	Integrated dielectric-electrode layer for triboelectric nanogenerator based on Cu nanowire-Mesh hybrid electrode. <i>Nano Energy</i> , 2019, 59, 120-128.	8.2	37
84	Dynamic characteristics of cylindrical hybrid panels containing viscoelastic layer based on layerwise mechanics. <i>Composites Part B: Engineering</i> , 2007, 38, 159-171.	5.9	36
85	Graphene-coated meshes for electroactive flow control devices utilizing two antagonistic functions of repellency and permeability. <i>Nature Communications</i> , 2016, 7, 13345.	5.8	36
86	Defect engineering route to boron nitride quantum dots and edge-hydroxylated functionalization for bio-imaging. <i>RSC Advances</i> , 2016, 6, 73939-73946.	1.7	34
87	An Electroactive and Transparent Haptic Interface Utilizing Soft Elastomer Actuators with Silver Nanowire Electrodes. <i>Small</i> , 2018, 14, e1801603.	5.2	34
88	Load-bearing supercapacitor based on bicontinuous PEO- <i>b</i> -P(S-co-DVB) structural electrolyte integrated with conductive nanowire-carbon fiber electrodes. <i>Carbon</i> , 2018, 139, 10-20.	5.4	34
89	Microwave extraction of graphene from carbon fibers. <i>Carbon</i> , 2011, 49, 222-226.	5.4	33
90	Supersonic flutter suppression of piezolaminated cylindrical panels based on multifield layerwise theory. <i>Journal of Sound and Vibration</i> , 2006, 291, 1186-1201.	2.1	32

#	ARTICLE	IF	CITATIONS
91	Novel Nanocomposite Actuator Based on Sulfonated Poly(styrene-b-ethylene-co-butylene-b-styrene) Polymer. <i>Journal of Nanoscience and Nanotechnology</i> , 2007, 7, 3740-3743.	0.9	32
92	Adaptive neuro-fuzzy control of ionic polymer metal composite actuators. <i>Smart Materials and Structures</i> , 2009, 18, 065016.	1.8	32
93	Far-infrared reduced graphene oxide as high performance electrodes for supercapacitors. <i>Carbon</i> , 2014, 75, 201-208.	5.4	32
94	Design of a Fuel-Cell-Powered Catamaran-Type Unmanned Surface Vehicle. <i>IEEE Journal of Oceanic Engineering</i> , 2015, 40, 388-396.	2.1	31
95	Electro-active artificial muscle based on irradiation-crosslinked sulfonated poly(styrene-ran-ethylene). <i>Sensors and Actuators B: Chemical</i> , 2010, 145, 635-642.	4.0	30
96	A helical ionic polymer-metal composite actuator for radius control of biomedical active stents. <i>Smart Materials and Structures</i> , 2011, 20, 035008.	1.8	30
97	Electroionic Antagonistic Muscles Based on Nitrogen-Doped Carbons Derived from Poly(Triazine-Triptycene). <i>Advanced Science</i> , 2017, 4, 1700410.	5.6	30
98	Mutually Exclusive p-Type and n-Type Hybrid Electrode of MoS ₂ and Graphene for Artificial Soft Touch Fingers. <i>Advanced Functional Materials</i> , 2019, 29, 1905454.	7.8	30
99	Sulfur- and Nitrogen-Rich Porous Conjugated COFs as Stable Electrode Materials for Electroionic Soft Actuators. <i>Advanced Functional Materials</i> , 2020, 30, 2003863.	7.8	30
100	Ti ₃ C ₂ T _x MXene for wearable energy devices: Supercapacitors and triboelectric nanogenerators. <i>APL Materials</i> , 2020, 8, .	2.2	30
101	Snap-through dynamics of buckled IPMC actuator. <i>Sensors and Actuators A: Physical</i> , 2010, 158, 300-305.	2.0	29
102	Graphene Mesh for Self-Sensing Ionic Soft Actuator Inspired from Mechanoreceptors in Human Body. <i>Advanced Science</i> , 2019, 6, 1901711.	5.6	29
103	Electroactive Artificial Muscles Based on Functionally Antagonistic Core-Shell Polymer Electrolyte Derived from PS- <i>b</i> -PSS Block Copolymer. <i>Advanced Science</i> , 2019, 6, 1801196.	5.6	29
104	Nest-inspired nanosponge-Cu woven mesh hybrid for ultrastable and high-power triboelectric nanogenerator. <i>Nano Energy</i> , 2020, 71, 104561.	8.2	29
105	Nonlinear flutter of aerothermally buckled composite shells with damping treatments. <i>Journal of Sound and Vibration</i> , 2009, 324, 556-569.	2.1	28
106	Determination of the stoichiometry and critical oxygen tension in the production culture of bacterial cellulose using saccharified food wastes. <i>Korean Journal of Chemical Engineering</i> , 2011, 28, 2306-2311.	1.2	28
107	Recent Progress in Multifunctional Graphene Aerogels. <i>Frontiers in Materials</i> , 2016, 3, .	1.2	28
108	CNT branching of three-dimensional steam-activated graphene hybrid frameworks for excellent rate and cyclic capabilities to store lithium ions. <i>Carbon</i> , 2017, 116, 500-509.	5.4	27

#	ARTICLE	IF	CITATIONS
109	Long-Lasting and Steady Triboelectric Energy Harvesting from Low-Frequency Irregular Motions Using Escapement Mechanism. <i>Advanced Energy Materials</i> , 2021, 11, 2002929.	10.2	27
110	Metal-Organic Framework-Derived Graphitic Nanoribbons Anchored on Graphene for Electroionic Artificial Muscles. <i>Advanced Functional Materials</i> , 2020, 30, 1910326.	7.8	27
111	Nanohole-structured, iron oxide-decorated and gelatin-functionalized graphene for high rate and high capacity Li-Ion anode. <i>Carbon</i> , 2017, 119, 355-364.	5.4	26
112	Surface Modification of Anisotropic Dielectric Elastomer Actuators with Uni- and Bi-axially Wrinkled Carbon Electrodes for Wettability Control. <i>Scientific Reports</i> , 2017, 7, 6091.	1.6	26
113	An Electroactive, Tunable, and Frequency Selective Surface Utilizing Highly Stretchable Dielectric Elastomer Actuators Based on Functionally Antagonistic Aperture Control. <i>Small</i> , 2016, 12, 1840-1846.	5.2	25
114	Basic design of a biomimetic underwater soft robot with switchable swimming modes and programmable artificial muscles. <i>Smart Materials and Structures</i> , 2020, 29, 035038.	1.8	25
115	AEROTHERMOELASTIC PHENOMENA OF AEROSPACE AND COMPOSITE STRUCTURES. <i>Journal of Thermal Stresses</i> , 2003, 26, 525-546.	1.1	24
116	Electro-chemo-mechanical characteristics of fullerene-reinforced ionic polymer-metal composite transducers. <i>Smart Materials and Structures</i> , 2010, 19, 075009.	1.8	24
117	Highly conducting multilayer films from graphene nanosheets by a spin self-assembly method. <i>Journal of Materials Chemistry</i> , 2011, 21, 5378.	6.7	24
118	Electronically Conjugated Multifunctional Covalent Triazine Framework for Unprecedented CO ₂ Selectivity and High-Power Flexible Supercapacitor. <i>Advanced Functional Materials</i> , 2022, 32, 2107442.	7.8	24
119	Thermopiezoelectric nonlinear dynamics of active piezolaminated plates. <i>Smart Materials and Structures</i> , 2005, 14, 823-834.	1.8	23
120	Electroactive Polymer Actuator Based on Sulfonated Polyimide with Highly Conductive Silver Electrodes Via Self-metallization. <i>Macromolecular Rapid Communications</i> , 2011, 32, 1583-1587.	2.0	23
121	Novel electroactive PVA-TOCN actuator that is extremely sensitive to low electrical inputs. <i>Smart Materials and Structures</i> , 2014, 23, 074006.	1.8	23
122	Vibration characteristics and supersonic flutter of cylindrical composite panels with large thermoelastic deflections. <i>Composite Structures</i> , 2009, 90, 208-216.	3.1	22
123	Electromagnetic Synchronized Switch Damping for Vibration Control of Flexible Beams. <i>IEEE/ASME Transactions on Mechatronics</i> , 2012, 17, 1031-1038.	3.7	22
124	Low voltage actuator using ionic polymer metal nanocomposites based on a miscible polymer blend. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19718-19727.	5.2	22
125	Intertwined Nanosponge Solid-State Polymer Electrolyte for Rollable and Foldable Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 11657-11668.	4.0	22
126	Crumpled Quaternary Nanoarchitecture of Sulfur-Doped Nickel Cobalt Selenide Directly Grown on Carbon Cloth for Making Stronger Ionic Soft Actuators. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 40451-40460.	4.0	21

#	ARTICLE	IF	CITATIONS
127	Collectively Exhaustive Hybrid Triboelectric Nanogenerator Based on Flow-Induced Impacting Sliding Cylinder for Ocean Energy Harvesting. <i>Advanced Energy Materials</i> , 2022, 12, 2103076.	10.2	21
128	Effect of viscosity-inducing factors on oxygen transfer in production culture of bacterial cellulose. <i>Korean Journal of Chemical Engineering</i> , 2012, 29, 792-797.	1.2	20
129	NON-LINEAR TRANSIENT RESPONSE OF FLUTTERING STIFFENED COMPOSITE PLATES SUBJECT TO THERMAL LOAD. <i>Journal of Sound and Vibration</i> , 2001, 245, 715-736.	2.1	18
130	Melt Crystallization and Morphology of Poly(p-phenylene sulfide) under High Pressure. <i>Macromolecular Chemistry and Physics</i> , 2007, 208, 405-414.	1.1	18
131	Modified transfer path analysis considering transmissibility functions for accurate estimation of vibration source. <i>Journal of Sound and Vibration</i> , 2017, 398, 70-83.	2.1	18
132	Well-aligned Nano-fiberous Membranes Based on Three-pole Electrospinning with Channel Electrode. <i>Macromolecular Rapid Communications</i> , 2011, 32, 921-926.	2.0	17
133	Compact piezoelectric tripod manipulator based on a reverse bridge-type amplification mechanism. <i>Smart Materials and Structures</i> , 2016, 25, 095028.	1.8	17
134	Two-Dimensional rGO-MoS2 Hybrid Additives for High-Performance Magnetorheological Fluid. <i>Scientific Reports</i> , 2018, 8, 12672.	1.6	17
135	A robotic multiple-shape-memory ionic polymer-metal composite (IPMC) actuator: modeling approach. <i>Smart Materials and Structures</i> , 2019, 28, 015009.	1.8	16
136	Phenol-Derived Carbon Sealant Inspired by a Coalification Process. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3864-3870.	7.2	15
137	Non-linear static and dynamic instability of complete spherical shells using mixed finite element formulation. <i>International Journal of Non-Linear Mechanics</i> , 2003, 38, 923-934.	1.4	14
138	Collectively Exhaustive MXene and Graphene Oxide Multilayer for Suppressing Shuttling Effect in Flexible Lithium Sulfur Battery. <i>Advanced Materials Technologies</i> , 2022, 7, 2101025.	3.0	14
139	Micro-structured porous electrolytes for highly responsive ionic soft actuators. <i>Sensors and Actuators B: Chemical</i> , 2022, 352, 131006.	4.0	14
140	Thermal post-buckling behavior of patched laminated panels under uniform and non-uniform temperature distributions. <i>Composite Structures</i> , 2002, 55, 137-145.	3.1	13
141	Palladium-catalyzed Mizoroki-Heck coupling reactions using sterically bulky phosphite ligand. <i>Inorganic Chemistry Communication</i> , 2010, 13, 1329-1331.	1.8	13
142	How does clamping pressure influence actuation performance of soft ionic polymer-metal composites?. <i>Smart Materials and Structures</i> , 2013, 22, 025014.	1.8	13
143	Wrinkled Graphene-AgNWs Hybrid Electrodes for Smart Window. <i>Micromachines</i> , 2017, 8, 43.	1.4	13
144	Anticarcinogenic activity of blue fluorescent hexagonal boron nitride quantum dots: as an effective enhancer for DNA cleavage activity of anticancer drug doxorubicin. <i>Materials Today Bio</i> , 2019, 1, 100001.	2.6	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.	1.0	13
146	Coolingâ€Accelerated Nanowireâ€Nitinol Hybrid Muscle for Versatile Prosthetic Hand and Biomimetic Retractable Claw. Advanced Functional Materials, 2022, 32, .	7.8	13
147	Spherical Micro/Nano Hierarchical Structures for Energy and Water Harvesting Devices. Small Methods, 2022, 6, e2200248.	4.6	13
148	Highly Conductive, Capacitive, Flexible and Soft Electrodes Based on a 3D Grapheneâ€Nanotubeâ€Palladium Hybrid and Conducting Polymer. Small, 2014, 10, 5023-5029.	5.2	12
149	Tunable acoustic waveguide based on vibro-acoustic metamaterials with shunted piezoelectric unit cells. Smart Materials and Structures, 2015, 24, 105018.	1.8	12
150	Boosting Oxygen Evolution Reaction on Metalloceneâ€based Transition Metal Sulfides Integrated with Nâ€doped Carbon Nanostructures. ChemSusChem, 2021, 14, 5004-5020.	3.6	12
151	Micro/nano-heater integrated cantilevers for micro/nano-lithography applications. Microelectronic Engineering, 2007, 84, 1041-1044.	1.1	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.	2.4	11
153	Antagonistically Functionalized Diatom Biosilica for Bioâ€Trielectric Generators. Small, 2022, 18, e2107638.	5.2	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.	1.8	10
156	Biomimetic Nano-composite Actuators Based on Carbon Nanotubes and Ionic Polymers. Journal of Intelligent Material Systems and Structures, 2008, 19, 305-311.	1.4	10
157	Damping Characteristics of Cylindrical Laminates with Viscoelastic Layer Considering Temperature- and Frequency-Dependence. Journal of Thermal Stresses, 2008, 32, 1-20.	1.1	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.	1.4	10
159	Ionic liquid template assisted synthesis of porous nano-silica nails. RSC Advances, 2014, 4, 39978-39983.	1.7	10
160	A dual-ion accepting vanadium carbide nanowire cathode integrated with carbon cloths for high cycling stability. Nanoscale, 2020, 12, 20868-20874.	2.8	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.	1.0	10
162	Electroâ€Active and Photoâ€Active Vanadium Oxide Nanowire Thermoâ€Hygroscopic Actuators for Kirigami Popâ€up. Advanced Science, 2021, 8, e2102064.	5.6	10

#	ARTICLE	IF	CITATIONS
163	Mutually exclusive ytterbium and nitrogen co-doping of mesoporous titania-carbon for self-cleanable and sustainable triboelectric nanogenerators. <i>Nano Energy</i> , 2021, 90, 106615.	8.2	10
164	Actuation of Electro-Active Artificial Muscle at Ultralow Frequency. <i>Macromolecular Chemistry and Physics</i> , 2011, 212, 635-642.	1.1	9
165	Fabrication and characterizations of electro-mechanical actuators based on fullerene-reinforced biocompatible polymer. <i>Sensors and Actuators A: Physical</i> , 2022, 339, 113510.	2.0	9
166	A revisit to imperfect acoustic cloak of multi-layered shell structures considering sound speed and impedance matching. <i>Journal of Sound and Vibration</i> , 2014, 333, 4637-4652.	2.1	8
167	Bio-Inspired Dielectric Elastomer Actuator with AgNWs Coated on Carbon Black Electrode. <i>Journal of Nanoscience and Nanotechnology</i> , 2014, 14, 7483-7487.	0.9	8
168	Resonant frequency and instability of multi-layered micro-resonators with initial imperfection subject to piezoelectric loads. <i>Microelectronic Engineering</i> , 2007, 84, 1388-1392.	1.1	7
169	Thermal post-buckled behaviors of cylindrical composite shells with viscoelastic damping treatments. <i>Journal of Sound and Vibration</i> , 2009, 323, 93-111.	2.1	7
170	Sulfonated Poly(styrene-b-ethylene-co-butylene-b-styrene) and Fullerene Composites for Ionic Polymer Actuators. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 3203-3206.	0.9	7
171	Linear-to-rotary motion converter using asymmetric compliant mechanics and single-crystal PMN-PT stack actuator. <i>Journal of Intelligent Material Systems and Structures</i> , 2014, 25, 2221-2227.	1.4	7
172	Omnidirectional two-dimensional acoustic cloak by axisymmetric cylindrical lattices. <i>Wave Motion</i> , 2015, 54, 157-169.	1.0	7
173	Elastic valley Hall edge wave in a hierarchical hexagonal lattice. <i>Journal of Sound and Vibration</i> , 2022, 526, 116817.	2.1	7
174	Ultrasonic Active Fiber Sensor based on Pulse-echo Method. <i>Journal of Intelligent Material Systems and Structures</i> , 2009, 20, 1035-1043.	1.4	6
175	Motion Control of Piezoelectric Tripod Platform via Feedforward Hysteresis Compensation. <i>Advanced Materials Technologies</i> , 2018, 3, 1800298.	3.0	5
176	Ligand-free Palladium-Catalyzed Mizoroki-Heck-type Reaction of Arylboronic Acids and Alkenes Using Silver Cation. <i>Bulletin of the Korean Chemical Society</i> , 2010, 31, 1789-1792.	1.0	5
177	Fiber Sensor Based on Piezoelectric Ultrasonic Wave. <i>Journal of Intelligent Material Systems and Structures</i> , 2008, 19, 299-304.	1.4	4
178	Durability studies shed light on the design of novel self-healing artificial muscles by employing ionic network polymers. <i>Journal of Controlled Release</i> , 2011, 152, e229-e230.	4.8	4
179	Theoretical and experimental investigation of the shape memory properties of an ionic polymer-metal composite. <i>Smart Materials and Structures</i> , 2017, 26, 045020.	1.8	4
180	Phenol-Derived Carbon Sealant Inspired by a Coalification Process. <i>Angewandte Chemie</i> , 2020, 132, 3892-3898.	1.6	4

#	ARTICLE	IF	CITATIONS
181	Electroionic Artificial Muscles: Metal-Organic Framework-Derived Graphitic Nanoribbons Anchored on Graphene for Electroionic Artificial Muscles (Adv. Funct. Mater. 29/2020). Advanced Functional Materials, 2020, 30, 2070195.	7.8	4
182	Thermopiezoelectric snapping of piezolaminated plates using layerwise nonlinear finite elements. AIAA Journal, 2001, 39, 1188-1197.	1.5	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].	0.4	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.	3.7	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, .	2.0	3
188	Electron microscopy of high pressure crystallised poly(<i>p</i> -phenylene sulfide). Plastics, Rubber and Composites, 2008, 37, 263-267.	0.9	2
189	Suzuki-Miyaura Coupling Reactions Using Phosphite Ligands. Synthesis, 2009, 2009, 2073-2075.	1.2	2
190	Nonlinear dynamics of curved IPMC actuators undergoing electrically driven large deformations. International Journal of Smart and Nano Materials, 2012, 3, 214-225.	2.0	2
191	Graphene Films: Wetting-Transparent Graphene Films for Hydrophobic Water-Harvesting Surfaces (Adv. Tj ETQq1 1 0.784314 rgBT /O	11.1	2
192	Artificial Muscles: Electroionic Antagonistic Muscles Based on Nitrogen-Doped Carbons Derived from Poly(Triazine-Triptycene) (Adv. Sci. 12/2017). Advanced Science, 2017, 4, 1770062.	5.6	2
193	Actuators: Functionally Antagonistic Hybrid Electrode with Hollow Tubular Graphene Mesh and Nitrogen-Doped Crumpled Graphene for High-Performance Ionic Soft Actuators (Adv. Funct. Mater.) Tj ETQq1 1708784314 rgBT /O	11.1	2
194	Novel nanocomposite actuator based on sulfonated poly(styrene- <i>b</i> -ethylene-co-butylene- <i>b</i> -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.	1.0	2
196	Mechanical model and analysis of ionic polymer metal composites biomimetic actuators. , 2008, , .		1
197	<l>A Special Section on</l> 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.	0.1	1
201	Collectively Exhaustive Hybrid Triboelectric Nanogenerator Based on Flow-Induced Impacting-Sliding Cylinder for Ocean Energy Harvesting (Adv. Energy Mater. 3/2022). Advanced Energy Materials, 2022, 12, .	10.2	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.	1.5	0
204	Selected papers from the 7th International Conference on Biomimetics, Artificial Muscles and Nano-bio (BAMN2013). Smart Materials and Structures, 2014, 23, 070301.	1.8	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 "Nanohole-Structured and Palladium-Embedded 3D Porous Graphene for Ultrahigh Hydrogen Storage and CO Oxidation Multifunctionalities" ACS Nano, 2016, 10, 9057-9060.	7.3	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.	3.0	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-58-1_-_P-58-5_.	0.0	0
212	Surface morphology control of elastomeric actuator and their application for haptic device. , 2018, , .		0
213	Cooling-Accelerated Nanowire-Nitinol Hybrid Muscle for Versatile Prosthetic Hand and Biomimetic Retractable Claw (Adv. Funct. Mater. 18/2022). Advanced Functional Materials, 2022, 32, .	7.8	0