Ying Hu

List of Publications by Year
in descending order

52 papers	3,490 citations	172386 29 h-index	197736 49 g-index
53 all docs	53 docs citations	53 times ranked	5174 citing authors

#	Article	IF	Citations
1	Single-Layer Single-Crystalline SnSe Nanosheets. Journal of the American Chemical Society, 2013, 135, 1213-1216.	6.6	433
2	High-performance graphdiyne-based electrochemical actuators. Nature Communications, 2018, 9, 752.	5.8	268
3	A Grapheneâ€Based Bimorph Structure for Design of High Performance Photoactuators. Advanced Materials, 2015, 27, 7867-7873.	11.1	219
4	Graphitic carbon nitride nanosheet electrode-based high-performance ionic actuator. Nature Communications, 2015, 6, 7258.	5.8	211
5	Electrically and Sunlightâ€Driven Actuator with Versatile Biomimetic Motions Based on Rolled Carbon Nanotube Bilayer Composite. Advanced Functional Materials, 2017, 27, 1704388.	7.8	211
6	Microfluidic-spinning construction of black-phosphorus-hybrid microfibres for non-woven fabrics toward a high energy density flexible supercapacitor. Nature Communications, 2018, 9, 4573.	5.8	181
7	Grapheneâ€Stabilized Silver Nanoparticle Electrochemical Electrode for Actuator Design. Advanced Materials, 2013, 25, 1270-1274.	11.1	130
8	Photoactuators for Direct Opticalâ€toâ€Mechanical Energy Conversion: From Nanocomponent Assembly to Macroscopic Deformation. Advanced Materials, 2016, 28, 10548-10556.	11.1	129
9	Highly Stable Air Working Bimorph Actuator Based on a Graphene Nanosheet/Carbon Nanotube Hybrid Electrode. Advanced Materials, 2012, 24, 4317-4321.	11.1	125
10	Holey reduced graphene oxide nanosheets for high performance room temperature gas sensing. Journal of Materials Chemistry A, 2014, 2, 17415-17420.	5.2	124
11	High-performance Supercapacitors Based on Electrochemical-induced Vertical-aligned Carbon Nanotubes and Polyaniline Nanocomposite Electrodes. Scientific Reports, 2017, 7, 43676.	1.6	120
12	Selfâ€Powered Piezoionic Strain Sensor toward the Monitoring of Human Activities. Small, 2016, 12, 5074-5080.	5.2	105
13	Self-Locomotive Soft Actuator Based on Asymmetric Microstructural Ti₃C₂T_x MXene Film Driven by Natural Sunlight Fluctuation. ACS Nano, 2021, 15, 5294-5306.	7.3	103
14	An Autonomous Soft Actuator with Lightâ€Driven Selfâ€Sustained Wavelike Oscillation for Phototactic Selfâ€Locomotion and Power Generation. Advanced Functional Materials, 2020, 30, 1908842.	7.8	100
15	Electromechanical Actuation with Controllable Motion Based on a Single-Walled Carbon Nanotube and Natural Biopolymer Composite. ACS Nano, 2010, 4, 3498-3502.	7.3	98
16	A spongy graphene based bimorph actuator with ultra-large displacement towards biomimetic application. Nanoscale, 2014, 6, 12703-12709.	2.8	87
17	Lightâ€Driven Selfâ€Oscillating Actuators with Phototactic Locomotion Based on Black Phosphorus Heterostructure. Angewandte Chemie - International Edition, 2021, 60, 20511-20517.	7.2	82
18	Two-Dimensional Nanosheets-Based Soft Electro-Chemo-Mechanical Actuators: Recent Advances in Design, Construction, and Applications. ACS Nano, 2021, 15, 9273-9298.	7.3	55

#	Article	IF	Citations
19	An interface nanostructured array guided high performance electrochemical actuator. Journal of Materials Chemistry A, 2014, 2, 16836-16841.	5.2	50
20	Novel C-rich carbon nitride for room temperature NO₂ gas sensors. RSC Advances, 2014, 4, 18003-18006.	1.7	48
21	Large volume variation of an anisotropic graphene nanosheet electrochemicalâ€“mechanical actuator under low voltage stimulation. Chemical Communications, 2012, 48, 3978.	2.2	43
22	Ordered and Active Nanochannel Electrode Design for Highâ€Performance Electrochemical Actuator. Small, 2016, 12, 4986-4992.	5.2	42
23	A powerful dual-responsive soft actuator and photo-to-electric generator based on graphene micro-gasbags for bioinspired applications. Journal of Materials Chemistry B, 2018, 6, 5031-5038.	2.9	42
24	A bioinspired multi-functional wearable sensor with an integrated light-induced actuator based on an asymmetric graphene composite film. Journal of Materials Chemistry C, 2019, 7, 6879-6888.	2.7	42
25	Ionic Electroactive Polymers Used in Bionic Robots: A Review. Journal of Bionic Engineering, 2018, 15, 765-782.	2.7	41
26	Multifunctional Soft Actuators Based on Anisotropic Paper/Polymer Bilayer Toward Bioinspired Applications. Advanced Materials Technologies, 2019, 4, 1800674.	3.0	37
27	Direct growth of size-controlled gold nanoparticles on reduced graphene oxide film from bulk gold by tuning electric field: effective methodology and substrate for surface enhanced Raman scattering study. Journal of Materials Chemistry, 2012, 22, 11994.	6.7	34
28	A wearable and highly sensitive CO sensor with a macroscopic polyaniline nanofiber membrane. Journal of Materials Chemistry A, 2015, 3, 24333-24337.	5.2	30
29	Electrochemical hydrogenation of mixed-phase TiO2 nanotube arrays enables remarkably enhanced photoelectrochemical water splitting performance. Science Bulletin, 2018, 63, 194-202.	4.3	30
30	An ultra-broad-range pressure sensor based on a gradient stiffness design. Materials Horizons, 2021, 8, 2260-2272.	6.4	24
31	Grapheneâ€Based Bimorph Actuators with Dualâ€Response and Largeâ€Deformation by a Simple Method. Macromolecular Materials and Engineering, 2019, 304, 1800688.	1.7	22
32	Novel electromechanical actuation based on a spongy graphene paper. Chemical Communications, 2014, 50, 4951.	2.2	21
33	Wavelength-selective and rebound-able bimorph photoactuator driven by a dynamic mass transport process. Journal of Materials Chemistry C, 2015, 3, 1888-1892.	2.7	21
34	Progress of low-frequency sound absorption research utilizing intelligent materials and acoustic metamaterials. RSC Advances, 2021, 11, 37784-37800.	1.7	20
35	Lowâ€Voltageâ€Driven Sustainable Weightlifting Actuator Based on Polymerâ€“Nanotube Composite. Macromolecular Chemistry and Physics, 2011, 212, 1671-1676.	1.1	19
36	Fabrication of dendriteâ€like Au nanostructures and their enhanced photoluminescence emission. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 3398-3404.	0.8	16

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37	Externally Induced Thermal Actuation of Polymer Nanocomposites. Macromolecular Chemistry and Physics, 2011, 212, 992-998.	1.1	16
38	Structural Color Surface on Transparent PDMS Fabricated by Carbon-Assisted Laser Interference Lithography for Real-Time Quantification of Soft Actuators Motion. ACS Applied Materials & Interfaces, 2020, 12, 45641-45647.	4.0	15
39	Dualâ€Responsive Soft Actuators with Integrated Sensing Function Based on 1Tâ€MoS₂ Composite. Advanced Intelligent Systems, 2021, 3, 2000240.	3.3	15
40	Ionic polymer with single-layered electrodes: a novel strategy for ionic actuator design. Smart Materials and Structures, 2018, 27, 105046.	1.8	13
41	High-performance ionic polymerâ€“metal composite actuators fabricated with microneedle roughening. Smart Materials and Structures, 2019, 28, 015007.	1.8	13
42	Soft Actuators Based On Carbon Nanomaterials. ChemPlusChem, 2022, 87, e202100437.	1.3	13
43	Rough interface in IPMC: modeling and its influence analysis. Smart Materials and Structures, 2018, 27, 075055.	1.8	12
44	Photo-assisted synthesis of coaxial-structured polypyrrole/electrochemically hydrogenated TiO2 nanotube arrays as a high performance supercapacitor electrode. RSC Advances, 2018, 8, 13393-13400.	1.7	10
45	Dualâ€Responsive Soft Actuator Based on Aligned Carbon Nanotube Composite/Graphene Bimorph for Bioinspired Applications. Macromolecular Materials and Engineering, 2021, 306, 2100166.	1.7	7
46	Actuators: Electrically and Sunlightâ€Driven Actuator with Versatile Biomimetic Motions Based on Rolled Carbon Nanotube Bilayer Composite (Adv. Funct. Mater. 44/2017). Advanced Functional Materials, 2017, 27, .	7.8	3
47	Lightâ€Driven Selfâ€Oscillating Actuators with Phototactic Locomotion Based on Black Phosphorus Heterostructure. Angewandte Chemie, 2021, 133, 20674-20680.	1.6	3
48	Hierarchical Structure Fabrication of IPMC Strain Sensor With High Sensitivity. Frontiers in Materials, 2021, 8, .	1.2	3
49	Progress in carbon nanotube and graphene based artificial muscles. Chinese Science Bulletin, 2014, 59, 2240-2252.	0.4	3
50	A Bioinspired Programmable Soft Bilayer Actuator Based on Aluminum Exoskeleton. Advanced Materials Technologies, 0, , 2200036.	3.0	1
51	Carbon Nanotubes Engineering Assisted by Natural Biopolymers. , 0, , .		0
52	Actuators: Highly Stable Air Working Bimorph Actuator Based on a Graphene Nanosheet/Carbon Nanotube Hybrid Electrode (Adv. Mater. 31/2012). Advanced Materials, 2012, 24, 4222-4222.	11.1	0