Huhu Cheng

List of Publications by Year in Descending Order

81 papers	9,857 citations	44 h-index	90 g-index
90 ext. papers	11,379 ext. citations	15.6 avg, IF	6.35 L-index

#	Paper	IF	Citations
81	Textile-based moisture power generator with dual asymmetric structure and high flexibility for wearable applications. *Nano Energy*, **2022**, 107017	17.1	4
80	Graphene Ionogel Ultra-Fast Filter Supercapacitor with 4 V Workable Window and 150 °C Operable Temperature.. *Small*, **2022**, e2200916	11	2
79	Enabling fast-charging selenium-based aqueous batteries via conversion reaction with copper ions.. *Nature Communications*, **2022**, 13, 1863	17.4	6
78	Moisture adsorption-desorption full cycle power generation.. *Nature Communications*, **2022**, 13, 2524	17.4	9
77	Sunlight-coordinated high-performance Moisture Power in Natural Condition.. *Advanced Materials*, **2021**, e2103897	24	9
76	Bilayer of polyelectrolyte films for spontaneous power generation in air up to an integrated 1,000 V output. *Nature Nanotechnology*, **2021**, 16, 811-819	28.7	44
75	Highly defective, doping-free graphene framework: A rapid one-step formation avenue. *Journal of Power Sources*, **2021**, 497, 229881	8.9	2
74	Custom-Built Graphene Acoustic-Absorbing Aerogel for Audio Signal Recognition. *Advanced Materials Interfaces*, **2021**, 8, 2100227	4.6	2
73	Progress in 3D-Graphene Assemblies Preparation for Solar-Thermal Steam Generation and Water Treatment. *Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica*, **2021**, 2101020-0	3.8	2
72	An all-in-one and scalable carbon fibre-based evaporator by using the weaving craft for high-efficiency and stable solar desalination. *Journal of Materials Chemistry A*, **2021**, 9, 10945-10952	13	15
71	Emerging Materials for Water-Enabled Electricity Generation **2021**, 3, 193-209		18
70	Graphene Oxide Assemblies for Sustainable Clean-Water Harvesting and Green-Electricity Generation. *Accounts of Materials Research*, **2021**, 2, 97-107	7.5	10
69	A Cascade Battery: Coupling Two Sequential Electrochemical Reactions in a Single Battery. *Advanced Materials*, **2021**, 33, e2105480	24	7
68	Mechanism of Nitrogen-Doped TiC Quantum Dots for Free-Radical Scavenging and the Ultrasensitive HO Detection Performance. *ACS Applied Materials & Interfaces*, **2021**, 13, 42442-42450	8.5	5
67	An intelligent film actuator with multi-level deformation behaviour. *Nanoscale Horizons*, **2020**, 5, 1226-1232	8.8	5
66	Maximization of Spatial Charge Density: An Approach to Ultrahigh Energy Density of Capacitive Charge Storage. *Angewandte Chemie*, **2020**, 132, 14649-14657	3.6	14
65	Maximization of Spatial Charge Density: An Approach to Ultrahigh Energy Density of Capacitive Charge Storage. *Angewandte Chemie - International Edition*, **2020**, 59, 14541-14549	16.4	34

64	Reduced Graphene Oxide-Based Spectrally Selective Absorber with an Extremely Low Thermal Emittance and High Solar Absorptance. *Advanced Science*, **2020**, 7, 1903125	13.6	21
63	Transparent, self-healing, arbitrary tailorable moist-electric film generator. *Nano Energy*, **2020**, 67, 104238	17.1	24
62	Highly Efficient Clean Water Production from Contaminated Air with a Wide Humidity Range. *Advanced Materials*, **2020**, 32, e1905875	24	58
61	Interface-enhanced distillation beyond tradition based on well-arranged graphene membrane. *Science China Materials*, **2020**, 63, 1948-1956	7.1	5
60	All-region-applicable, continuous power supply of graphene oxide composite. *Energy and Environmental Science*, **2019**, 12, 1848-1856	35.4	53
59	Moist-electric generation. *Nanoscale*, **2019**, 11, 23083-23091	7.7	35
58	Intelligent multiple-liquid evaporation power generation platform using distinctive Jaboticaba-like carbon nanosphere@TiO2 nanowires. *Journal of Materials Chemistry A*, **2019**, 7, 6766-6772	13	40
57	Rollable, Stretchable, and Reconfigurable Graphene Hygroelectric Generators. *Advanced Materials*, **2019**, 31, e1805705	24	57
56	Hygroelectric Generators: Rollable, Stretchable, and Reconfigurable Graphene Hygroelectric Generators (Adv. Mater. 2/2019). *Advanced Materials*, **2019**, 31, 1970013	24	1
55	Direct solar steam generation system for clean water production. *Energy Storage Materials*, **2019**, 18, 429-446	19.4	151
54	Electric power generation via asymmetric moisturizing of graphene oxide for flexible, printable and portable electronics. *Energy and Environmental Science*, **2018**, 11, 1730-1735	35.4	115
53	High throughput of clean water excluding ions, organic media, and bacteria from defect-abundant graphene aerogel under sunlight. *Nano Energy*, **2018**, 46, 415-422	17.1	111
52	Flexible in-plane graphene oxide moisture-electric converter for touchless interactive panel. *Nano Energy*, **2018**, 45, 37-43	17.1	53
51	Spontaneous power source in ambient air of a well-directionally reduced graphene oxide bulk. *Energy and Environmental Science*, **2018**, 11, 2839-2845	35.4	58
50	Three-dimensional water evaporation on a macroporous vertically aligned graphene pillar array under one sun. *Journal of Materials Chemistry A*, **2018**, 6, 15303-15309	13	95
49	Titelbild: A Microstructured Graphene/Poly(N-isopropylacrylamide) Membrane for Intelligent Solar Water Evaporation (Angew. Chem. 50/2018). *Angewandte Chemie*, **2018**, 130, 16471-16471	3.6	
48	Interface-mediated hygroelectric generator with an output voltage approaching 1.5 volts. *Nature Communications*, **2018**, 9, 4166	17.4	90
47	A Microstructured Graphene/Poly(N-isopropylacrylamide) Membrane for Intelligent Solar Water Evaporation. *Angewandte Chemie - International Edition*, **2018**, 57, 16343-16347	16.4	80

46	A Microstructured Graphene/Poly(N-isopropylacrylamide) Membrane for Intelligent Solar Water Evaporation. *Angewandte Chemie*, **2018**, 130, 16581-16585	3.6	5
45	Highly Efficient Moisture-Triggered Nanogenerator Based on Graphene Quantum Dots. *ACS Applied Materials & Interfaces*, **2017**, 9, 38170-38175	9.5	54
44	Self-Healing Graphene Oxide Based Functional Architectures Triggered by Moisture. *Advanced Functional Materials*, **2017**, 27, 1703096	15.6	66
43	Graphene-based smart materials. *Nature Reviews Materials*, **2017**, 2,	73.3	391
42	Graphene-Based Functional Architectures: Sheets Regulation and Macrostructure Construction toward Actuators and Power Generators. *Accounts of Chemical Research*, **2017**, 50, 1663-1671	24.3	79
41	One Single Graphene Oxide Film for Responsive Actuation. *ACS Nano*, **2016**, 10, 9529-9535	16.7	115
40	A respiration-detective graphene oxide/lithium battery. *Journal of Materials Chemistry A*, **2016**, 4, 19154-19159	13	16
39	A versatile, superelastic polystyrene/graphene capsule-like framework. *Journal of Materials Chemistry A*, **2016**, 4, 10118-10123	13	24
38	Solution-Processed Ultraelastic and Strong Air-Bubbled Graphene Foams. *Small*, **2016**, 12, 3229-34	11	71
37	Spontaneous, Straightforward Fabrication of Partially Reduced Graphene Oxide-Polypyrrole Composite Films for Versatile Actuators. *ACS Nano*, **2016**, 10, 4735-41	16.7	101
36	Highly efficient moisture-enabled electricity generation from graphene oxide frameworks. *Energy and Environmental Science*, **2016**, 9, 912-916	35.4	181
35	A General and Extremely Simple Remote Approach toward Graphene Bulks with In Situ Multifunctionalization. *Advanced Materials*, **2016**, 28, 3305-12	24	67
34	A Graphene Fibriform Responsor for Sensing Heat, Humidity, and Mechanical Changes. *Angewandte Chemie - International Edition*, **2015**, 54, 14951-5	16.4	70
33	Direct Power Generation from a Graphene Oxide Film under Moisture. *Advanced Materials*, **2015**, 27, 4351-7	24	256
32	A Graphene Fibriform Responsor for Sensing Heat, Humidity, and Mechanical Changes. *Angewandte Chemie*, **2015**, 127, 15164-15168	3.6	9
31	Series of in-fiber graphene supercapacitors for flexible wearable devices. *Journal of Materials Chemistry A*, **2015**, 3, 2547-2551	13	86
30	All-in-one graphene fiber supercapacitor. *Nanoscale*, **2014**, 6, 6448-51	7.7	174
29	Moisture-activated torsional graphene-fiber motor. *Advanced Materials*, **2014**, 26, 2909-13	24	237

28	Uniquely arranged graphene-on-graphene structure as a binder-free anode for high-performance lithium-ion batteries. *Small*, **2014**, 10, 5035-41	11	30
27	Functional graphene springs for responsive actuation. *Nanoscale*, **2014**, 6, 11052-6	7.7	22
26	Preparation of multifunctional microchannel-network graphene foams. *Journal of Materials Chemistry A*, **2014**, 2, 16786-16792	13	27
25	Graphene fiber: a new material platform for unique applications. *NPG Asia Materials*, **2014**, 6, e113-e113	10.3	158
24	Graphene quantum dots-three-dimensional graphene composites for high-performance supercapacitors. *Physical Chemistry Chemical Physics*, **2014**, 16, 19307-13	3.6	135
23	Functionalized graphitic carbon nitride for metal-free, flexible and rewritable nonvolatile memory device via direct laser-writing. *Scientific Reports*, **2014**, 4, 5882	4.9	80
22	Graphene fibers with predetermined deformation as moisture-triggered actuators and robots. *Angewandte Chemie - International Edition*, **2013**, 52, 10482-6	16.4	238
21	Carbon nanotube–nanopipe composite vertical arrays for enhanced electrochemical capacitance. *Carbon*, **2013**, 64, 507-515	10.4	13
20	An all-cotton-derived, arbitrarily foldable, high-rate, electrochemical supercapacitor. *Physical Chemistry Chemical Physics*, **2013**, 15, 8042-5	3.6	91
19	Textile electrodes woven by carbon nanotube-graphene hybrid fibers for flexible electrochemical capacitors. *Nanoscale*, **2013**, 5, 3428-34	7.7	274
18	All-graphene core-sheath microfibers for all-solid-state, stretchable fibriform supercapacitors and wearable electronic textiles. *Advanced Materials*, **2013**, 25, 2326-31	24	912
17	Highly compression-tolerant supercapacitor based on polypyrrole-mediated graphene foam electrodes. *Advanced Materials*, **2013**, 25, 591-5	24	676
16	Graphene Fibers with Predetermined Deformation as Moisture-Triggered Actuators and Robots. *Angewandte Chemie*, **2013**, 125, 10676-10680	3.6	21
15	Direct electrochemistry and electrocatalysis of horseradish peroxidase immobilized in graphene oxide–Nafion nanocomposite film. *Electrochimica Acta*, **2012**, 65, 122-126	6.7	39
14	Facile fabrication of light, flexible and multifunctional graphene fibers. *Advanced Materials*, **2012**, 24, 1856-61	24	464
13	A Versatile, Ultralight, Nitrogen-Doped Graphene Framework. *Angewandte Chemie*, **2012**, 124, 11533-11537	3.6	262
12	Innentitelbild: A Versatile, Ultralight, Nitrogen-Doped Graphene Framework (Angew. Chem. 45/2012). *Angewandte Chemie*, **2012**, 124, 11336-11336	3.6	1
11	A versatile, ultralight, nitrogen-doped graphene framework. *Angewandte Chemie - International Edition*, **2012**, 51, 11371-5	16.4	663

10	A rationally-designed synergetic polypyrrole/graphene bilayer actuator. *Journal of Materials Chemistry*, **2012**, 22, 4015		62
9	Nitrogen-doped graphene quantum dots with oxygen-rich functional groups. *Journal of the American Chemical Society*, **2012**, 134, 15-8	16.4	1623
8	Newly-designed complex ternary Pt/PdCu nanoboxes anchored on three-dimensional graphene framework for highly efficient ethanol oxidation. *Advanced Materials*, **2012**, 24, 5493-8	24	287
7	Graphene microtubings: controlled fabrication and site-specific functionalization. *Nano Letters*, **2012**, 12, 5879-84	11.5	104
6	Functional microspheres of graphene quantum dots. *Nanotechnology*, **2012**, 23, 255605	3.4	33
5	Ternary Pd2/PtFe networks supported by 3D graphene for efficient and durable electrooxidation of formic acid. *Chemical Communications*, **2012**, 48, 11865-7	5.8	47
4	Three-dimensional graphene-polypyrrole hybrid electrochemical actuator. *Nanoscale*, **2012**, 4, 7563-8	7.7	79
3	Graphene-quantum-dot assembled nanotubes: a new platform for efficient Raman enhancement. *ACS Nano*, **2012**, 6, 2237-44	16.7	149
2	Janus-interface engineering boosting solar steam towards high-efficiency water collection. *Energy and Environmental Science*,	35.4	21
1	The promising solar-powered water purification based on graphene functional architectures. *EcoMat*,	9.4	1