Chuangang Hu

List of Publications by Year in Descending Order

101 papers	10,901 citations	54 h-index	104 g-index
107 ext. papers	12,296 ext. citations	12.5 avg, IF	6.86 L-index

#	Paper	IF	Citations
101	Boosting Li-CO2 battery performances by creating holey structure on CNT cathodes. *Electrochimica Acta*, **2022**, 417, 140310	6.7	1
100	Understanding of catalytic ROS generation from defect-rich graphene quantum-dots for therapeutic effects in tumor microenvironment. *Journal of Nanobiotechnology*, **2021**, 19, 340	9.4	2
99	Topological Defect-Rich Carbon as a Metal-Free Cathode Catalyst for High-Performance Li-CO2 Batteries. *Advanced Energy Materials*, **2021**, 11, 2101390	21.8	17
98	N, P, and S tri-doped holey carbon as an efficient electrocatalyst for oxygen reduction in whole pH range for fuel cell and zinc-air batteries. *Carbon*, **2021**, 179, 365-376	10.4	11
97	Carbon-based metal-free electrocatalysts: from oxygen reduction to multifunctional electrocatalysis. *Chemical Society Reviews*, **2021**, 50, 11785-11843	58.5	24
96	Multifunctional carbon-based metal-free catalysts for advanced energy conversion and storage. *Cell Reports Physical Science*, **2021**, 2, 100328	6.1	24
95	Earth-abundant metal-free carbon-based electrocatalysts for Zn-air batteries to power electrochemical generation of H2O2 for in-situ wastewater treatment. *Chemical Engineering Journal*, **2021**, 416, 128338	14.7	8
94	Topological Defect-Rich Carbon as a Metal-Free Cathode Catalyst for High-Performance Li-CO2 Batteries (Adv. Energy Mater. 30/2021). *Advanced Energy Materials*, **2021**, 11, 2170120	21.8	
93	Boron, nitrogen co-doped carbon with abundant mesopores for efficient CO2 electroreduction. *Applied Catalysis B: Environmental*, **2021**, 298, 120543	21.8	13
92	High-Performance, Long-Life, Rechargeable Li-CO Batteries based on a 3D Holey Graphene Cathode Implanted with Single Iron Atoms. *Advanced Materials*, **2020**, 32, e1907436	24	71
91	High-Performance Li-CO2 Batteries from Free-Standing, Binder-Free, Bifunctional Three-Dimensional Carbon Catalysts. *ACS Energy Letters*, **2020**, 5, 916-921	20.1	43
90	Carbon-Defect-Driven Electroless Deposition of Pt Atomic Clusters for Highly Efficient Hydrogen Evolution. *Journal of the American Chemical Society*, **2020**, 142, 5594-5601	16.4	87
89	An ultra-long life, high-performance, flexible Li□O2 battery based on multifunctional carbon electrocatalysts. *Nano Energy*, **2020**, 71, 104595	17.1	41
88	High-Performance K□O2 Batteries Based on Metal-Free Carbon Electrocatalysts. *Angewandte Chemie*, **2020**, 132, 3498-3502	3.6	5
87	High-Performance K-CO Batteries Based on Metal-Free Carbon Electrocatalysts. *Angewandte Chemie - International Edition*, **2020**, 59, 3470-3474	16.4	47
86	Heteroatom-doped carbon catalysts for zinc□air batteries: progress, mechanism, and opportunities. *Energy and Environmental Science*, **2020**, 13, 4536-4563	35.4	83
85	Carbon-Based Metal-Free Catalysts for Energy Storage and Environmental Remediation. *Advanced Materials*, **2019**, 31, e1806128	24	118

84	Carbon Nanomaterials for Energy and Biorelated Catalysis: Recent Advances and Looking Forward. *ACS Central Science*, **2019**, 5, 389-408	16.8	50
83	Graphdiyne with tunable activity towards hydrogen evolution reaction. *Nano Energy*, **2019**, 63, 103874	17.1	29
82	Ten years of carbon-based metal-free electrocatalysts **2019**, 1, 19-31		76
81	Doping of Carbon Materials for Metal-Free Electrocatalysis. *Advanced Materials*, **2019**, 31, e1804672	24	223
80	Functionalization of graphene materials by heteroatom-doping for energy conversion and storage. *Progress in Natural Science: Materials International*, **2018**, 28, 121-132	3.6	100
79	Carbon-Based Metal-Free Electrocatalysis for Energy Conversion, Energy Storage, and Environmental Protection. *Electrochemical Energy Reviews*, **2018**, 1, 84-112	29.3	109
78	Microporous N,P-Codoped Graphitic Nanosheets as an Efficient Electrocatalyst for Oxygen Reduction in Whole pH Range for Energy Conversion and Biosensing Dissolved Oxygen. *Chemistry - A European Journal*, **2018**, 24, 18487-18493	4.8	23
77	High-Performance Li-CO2 Batteries Based on Metal-Free Carbon Quantum Dot/Holey Graphene Composite Catalysts. *Advanced Functional Materials*, **2018**, 28, 1804630	15.6	91
76	Carbon-Based, Metal-Free Catalysts for Metal–Air Batteries **2018**, 555-596		0
75	Multifunctional Carbon-Based Metal-Free Electrocatalysts for Simultaneous Oxygen Reduction, Oxygen Evolution, and Hydrogen Evolution. *Advanced Materials*, **2017**, 29, 1604942	24	510
74	Earth-abundant carbon catalysts for renewable generation of clean energy from sunlight and water. *Nano Energy*, **2017**, 41, 367-376	17.1	69
73	Chronic interfacing with the autonomic nervous system using carbon nanotube (CNT) yarn electrodes. *Scientific Reports*, **2017**, 7, 11723	4.9	53
72	Carbon-Based Metal-Free Catalysts for Electrocatalysis beyond the ORR. *Angewandte Chemie - International Edition*, **2016**, 55, 11736-58	16.4	458
71	Vapor-Activated Power Generation on Conductive Polymer. *Advanced Functional Materials*, **2016**, 26, 8784-8792	15.6	64
70	A Large-Area, Flexible, and Flame-Retardant Graphene Paper. *Advanced Functional Materials*, **2016**, 26, 1470-1476	15.6	105
69	Graphene-winged carbon nanotubes as high-performance lithium-ion batteries anode with super-long cycle life. *Journal of Power Sources*, **2016**, 305, 106-114	8.9	41
68	Spontaneous, Straightforward Fabrication of Partially Reduced Graphene Oxide-Polypyrrole Composite Films for Versatile Actuators. *ACS Nano*, **2016**, 10, 4735-41	16.7	101
67	Scalable Preparation of Multifunctional Fire-Retardant Ultralight Graphene Foams. *ACS Nano*, **2016**, 10, 1325-32	16.7	105

66	A General and Extremely Simple Remote Approach toward Graphene Bulks with In Situ Multifunctionalization. *Advanced Materials*, **2016**, 28, 3305-12	24	67
65	High-Density Monolith of N-Doped Holey Graphene for Ultrahigh Volumetric Capacity of Li-Ion Batteries. *Advanced Energy Materials*, **2016**, 6, 1502100	21.8	142
64	Kohlenstoffbasierte Metallfreie Katalysatoren f□ die Elektrokatalyse jenseits der ORR. *Angewandte Chemie*, **2016**, 128, 11910-11933	3.6	47
63	Functionalized carbon nanotubes and graphene-based materials for energy storage. *Chemical Communications*, **2016**, 52, 14350-14360	5.8	41
62	Separation performance of graphene oxide as stationary phase for capillary gas chromatography. *Chinese Chemical Letters*, **2015**, 26, 47-49	8.1	7
61	Graphitic C3N4-Pt nanohybrids supported on a graphene network for highly efficient methanol oxidation. *Science China Materials*, **2015**, 58, 21-27	7.1	30
60	Supramolecular quantum dots as biodegradable nano-probes for upconversion-enabled bioimaging. *Chemical Communications*, **2015**, 51, 13201-4	5.8	23
59	Branched Graphene Nanocapsules for Anode Material of Lithium-Ion Batteries. *Chemistry of Materials*, **2015**, 27, 5253-5260	9.6	67
58	Re-shaping graphene hydrogels for effectively enhancing actuation responses. *Nanoscale*, **2015**, 7, 12372-8	7.7	11
57	Spontaneous formation of Cu2O-g-C3N4 core-shell nanowires for photocurrent and humidity responses. *Nanoscale*, **2015**, 7, 9694-702	7.7	44
56	An Imperata Cylindrical Flowers-Shaped Porous Graphene Microelectrode for Direct Electrochemistry of Glucose Oxidase. *Journal of the Electrochemical Society*, **2015**, 162, B138-B144	3.9	11
55	Tailored graphene systems for unconventional applications in energy conversion and storage devices. *Energy and Environmental Science*, **2015**, 8, 31-54	35.4	211
54	One-pot Synthesis of Nitrogen and Phosphorus Co-doped Graphene and Its Use as High-performance Electrocatalyst for Oxygen Reduction Reaction. *Chemistry - an Asian Journal*, **2015**, 10, 2609-14	4.5	32
53	A Graphitic-C3N4 "Seaweed" Architecture for Enhanced Hydrogen Evolution. *Angewandte Chemie - International Edition*, **2015**, 54, 11433-7	16.4	365
52	A Graphitic-C3N4 Seaweed□Architecture for Enhanced Hydrogen Evolution. *Angewandte Chemie*, **2015**, 127, 11595-11599	3.6	73
51	Monoatomic-thick graphitic carbon nitride dots on graphene sheets as an efficient catalyst in the oxygen reduction reaction. *Nanoscale*, **2015**, 7, 3035-42	7.7	74
50	One-step preparation of iodine-doped graphitic carbon nitride nanosheets as efficient photocatalysts for visible light water splitting. *Journal of Materials Chemistry A*, **2015**, 3, 4612-4619	13	182
49	Facile production of ultrathin graphitic carbon nitride nanoplatelets for efficient visible-light water splitting. *Nano Research*, **2015**, 8, 1718-1728	10	131

48	MnO 2 -modified hierarchical graphene fiber electrochemical supercapacitor. *Journal of Power Sources*, **2014**, 247, 32-39	8.9	184
47	Large scale production of biomass-derived N-doped porous carbon spheres for oxygen reduction and supercapacitors. *Journal of Materials Chemistry A*, **2014**, 2, 3317	13	179
46	Uniquely arranged graphene-on-graphene structure as a binder-free anode for high-performance lithium-ion batteries. *Small*, **2014**, 10, 5035-41	11	30
45	Spinning fabrication of graphene/polypyrrole composite fibers for all-solid-state, flexible fibriform supercapacitors. *Journal of Materials Chemistry A*, **2014**, 2, 12355	13	172
44	Preparation of multifunctional microchannel-network graphene foams. *Journal of Materials Chemistry A*, **2014**, 2, 16786-16792	13	27
43	A powerful approach to functional graphene hybrids for high performance energy-related applications. *Energy and Environmental Science*, **2014**, 7, 3699-3708	35.4	68
42	Graphene fiber: a new material platform for unique applications. *NPG Asia Materials*, **2014**, 6, e113-e113	10.3	158
41	Decoration of graphene network with metal–organic frameworks for enhanced electrochemical capacitive behavior. *Carbon*, **2014**, 78, 231-242	10.4	103
40	A green one-arrow-two-hawks strategy for nitrogen-doped carbon dots as fluorescent ink and oxygen reduction electrocatalysts. *Journal of Materials Chemistry A*, **2014**, 2, 6320	13	118
39	Small-sized PdCu nanocapsules on 3D graphene for high-performance ethanol oxidation. *Nanoscale* , **2014**, 6, 2768-75	7.7	118
38	Graphene quantum dots-three-dimensional graphene composites for high-performance supercapacitors. *Physical Chemistry Chemical Physics*, **2014**, 16, 19307-13	3.6	135
37	Functional graphene nanomesh foam. *Energy and Environmental Science*, **2014**, 7, 1913	35.4	192
36	Designing nitrogen-enriched echinus-like carbon capsules for highly efficient oxygen reduction reaction and lithium ion storage. *Nanoscale*, **2014**, 6, 8002-9	7.7	74
35	A dually spontaneous reduction and assembly strategy for hybrid capsules of graphene quantum dots with platinum–copper nanoparticles for enhanced oxygen reduction reaction. *Carbon*, **2014**, 74, 170-179	10.4	20
34	Direct electrochemistry and electrocatalysis of glucose oxidase on three-dimensional interpenetrating, porous graphene modified electrode. *Electrochimica Acta*, **2013**, 98, 48-53	6.7	54
33	Flexible and wearable graphene/polypyrrole fibers towards multifunctional actuator applications. *Electrochemistry Communications*, **2013**, 35, 49-52	5.1	52
32	3D graphene-Fe3O4 nanocomposites with high-performance microwave absorption. *Physical Chemistry Chemical Physics*, **2013**, 15, 13038-43	3.6	281
31	Graphene fibers with predetermined deformation as moisture-triggered actuators and robots. *Angewandte Chemie - International Edition*, **2013**, 52, 10482-6	16.4	238

30	High efficiency palladium catalysts supported on multi-wall carbon nanotubes synthesized with 1,3-bis(diphenylphosphino) propane for ethanol oxidation. *Russian Journal of Electrochemistry*, **2013**, 49, 1181-1187	1.2	0
29	Synthesis and characterization of Pd catalysts supported on carbon microspheres for formic acid oxidation. *Russian Journal of Electrochemistry*, **2013**, 49, 577-582	1.2	3
28	Carbon nanotube–nanopipe composite vertical arrays for enhanced electrochemical capacitance. *Carbon*, **2013**, 64, 507-515	10.4	13
27	Three-dimensional macroporous NiCo(2)O(4) sheets as a non-noble catalyst for efficient oxygen reduction reactions. *Chemistry - A European Journal*, **2013**, 19, 14271-8	4.8	90
26	An all-cotton-derived, arbitrarily foldable, high-rate, electrochemical supercapacitor. *Physical Chemistry Chemical Physics*, **2013**, 15, 8042-5	3.6	91
25	Highly nitrogen-doped carbon capsules: scalable preparation and high-performance applications in fuel cells and lithium ion batteries. *Nanoscale*, **2013**, 5, 2726-33	7.7	158
24	Textile electrodes woven by carbon nanotube-graphene hybrid fibers for flexible electrochemical capacitors. *Nanoscale*, **2013**, 5, 3428-34	7.7	274
23	All-graphene core-sheath microfibers for all-solid-state, stretchable fibriform supercapacitors and wearable electronic textiles. *Advanced Materials*, **2013**, 25, 2326-31	24	912
22	Highly compression-tolerant supercapacitor based on polypyrrole-mediated graphene foam electrodes. *Advanced Materials*, **2013**, 25, 591-5	24	676
21	Large-scale spinning assembly of neat, morphology-defined, graphene-based hollow fibers. *ACS Nano*, **2013**, 7, 2406-12	16.7	119
20	Spontaneous reduction and assembly of graphene oxide into three-dimensional graphene network on arbitrary conductive substrates. *Scientific Reports*, **2013**, 3, 2065	4.9	140
19	Graphene Fibers with Predetermined Deformation as Moisture-Triggered Actuators and Robots. *Angewandte Chemie*, **2013**, 125, 10676-10680	3.6	21
18	A Versatile, Ultralight, Nitrogen-Doped Graphene Framework. *Angewandte Chemie*, **2012**, 124, 11533-11537	3.6	262
17	Innentitelbild: A Versatile, Ultralight, Nitrogen-Doped Graphene Framework (Angew. Chem. 45/2012). *Angewandte Chemie*, **2012**, 124, 11336-11336	3.6	1
16	A versatile, ultralight, nitrogen-doped graphene framework. *Angewandte Chemie - International Edition*, **2012**, 51, 11371-5	16.4	663
15	Additive-free fabrication of spherical hollow palladium/copper alloyed nanostructures for fuel cell application. *ACS Applied Materials & Interfaces*, **2012**, 4, 4461-4	9.5	30
14	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
13	Graphene microtubings: controlled fabrication and site-specific functionalization. *Nano Letters*, **2012**, 12, 5879-84	11.5	104

12	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
11	Three-dimensional graphene-polypyrrole hybrid electrochemical actuator. *Nanoscale*, **2012**, 4, 7563-8	7.7	79
10	Facile synthesis of hollow palladium/copper alloyed nanocubes for formic acid oxidation. *Chemical Communications*, **2011**, 47, 8581-3	5.8	59
9	A facile method for preparation of high performance Pt catalyst supported on multi-wall carbon nanotubes for methanol electrooxidation. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2011**, 176, 1467-1473	3.1	15
8	Pt1-Pd3Co1 nanoparticles supported on multi-walled carbon nanotubes as a high performance electrocatalyst for methanol oxidation. *Electrochemistry Communications*, **2011**, 13, 886-889	5.1	10
7	Preparation of highly dispersed Pt-SnOx nanoparticles supported on multi-walled carbon nanotubes for methanol oxidation. *Applied Surface Science*, **2011**, 257, 7968-7974	6.7	35
6	Highly dispersed Pd nanoparticles supported on 1,10-phenanthroline-functionalized multi-walled carbon nanotubes for electrooxidation of formic acid. *Journal of Power Sources*, **2011**, 196, 6232-6237	8.9	38
5	High-efficiency palladium catalysts supported on ppy-modified C60 for formic acid oxidation. *Chemical Communications*, **2011**, 47, 1752-4	5.8	51
4	Solvothermal synthesis and characterization of PdRh alloy hollow nanosphere catalysts for formic acid oxidation. *Catalysis Communications*, **2010**, 11, 919-922	3.2	39
3	High-efficiency carbon-supported platinum catalysts stabilized with sodium citrate for methanol oxidation. *Journal of Power Sources*, **2010**, 195, 2653-2658	8.9	25
2	Preparation of high performance Pd catalysts supported on untreated multi-walled carbon nanotubes for formic acid oxidation. *Electrochimica Acta*, **2010**, 55, 6036-6041	6.7	68
1	Large-scale production of holey carbon nanosheets implanted with atomically dispersed Fe sites for boosting oxygen reduction electrocatalysis. *Nano Research*,1	10	2