Chong Liu

List of Publications by Year in Descending Order

98 papers	14,305 citations	54 h-index	107 g-index
107 ext. papers	16,466 ext. citations	15.5 avg, IF	6.69 L-index

#	Paper	IF	Citations
98	A generalized kinetic model for compartmentalization of organometallic catalysis.. *Chemical Science*, **2022**, 13, 1101-1110	9.4	2
97	Surface Valence State Effect of MoO on Electrochemical Nitrogen Reduction.. *Advanced Science*, **2022**, e2104857	13.6	3
96	Tuning transport in graphene oxide membrane with single-site copper (II) cations.. *IScience*, **2022**, 25, 104044	6.1	
95	ABC and ABAB Block Copolymers by Electrochemically Controlled Ring-Opening Polymerization. *Journal of the American Chemical Society*, **2021**, 143, 19802-19808	16.4	2
94	Electrocatalytic Methane Functionalization with d Early Transition Metals Under Ambient Conditions. *Angewandte Chemie - International Edition*, **2021**, 60, 26630-26638	16.4	0
93	Electrocatalytic Methane Functionalization with d0 Early Transition Metals Under Ambient Conditions. *Angewandte Chemie*, **2021**, 133, 26834	3.6	
92	Ag -Mediated Electrocatalytic Ambient CH Functionalization Inspired by HSAB Theory. *Angewandte Chemie - International Edition*, **2021**, 60, 18152-18161	16.4	1
91	AgII-Mediated Electrocatalytic Ambient CH4 Functionalization Inspired by HSAB Theory. *Angewandte Chemie*, **2021**, 133, 18300-18309	3.6	0
90	De Novo Approach to Encapsulating Biocatalysts into Synthetic Matrixes: From Enzymes to Microbial Electrocatalysts. *ACS Applied Materials & Interfaces*, **2021**,	9.5	3
89	Perfluorocarbon Nanoemulsions Create a Beneficial O Microenvironment in N-fixing Biological | Inorganic Hybrid. *Chem Catalysis*, **2021**, 1, 704-720		5
88	Silver nanoparticles boost charge-extraction efficiency in microbial fuel cells. *Science*, **2021**, 373, 1336-1340	3.3	38
87	Electrochemically mediated deionization: a review. *Molecular Systems Design and Engineering*, **2021**, 6, 25-51	4.6	2
86	Machine-Learning-Enabled Exploration of Morphology Influence on Wire-Array Electrodes for Electrochemical Nitrogen Fixation. *Journal of Physical Chemistry Letters*, **2020**, 11, 4625-4630	6.4	11
85	Electricity-powered artificial root nodule. *Nature Communications*, **2020**, 11, 1505	17.4	6
84	Nitrogen-Defective Polymeric Carbon Nitride Nanolayer Enabled Efficient Electrocatalytic Nitrogen Reduction with High Faradaic Efficiency. *Nano Letters*, **2020**, 20, 2879-2885	11.5	48
83	Close-Packed Nanowire-Bacteria Hybrids for Efficient Solar-Driven CO2 Fixation. *Joule*, **2020**, 4, 800-811	27.8	60
82	Controlling the Structure of MoS Membranes via Covalent Functionalization with Molecular Spacers. *Nano Letters*, **2020**, 20, 7844-7851	11.5	5

81	Ambient methane functionalization initiated by electrochemical oxidation of a vanadium (V)-oxo dimer. *Nature Communications*, **2020**, 11, 3686	17.4	20
80	Efficacy analysis of compartmentalization for ambient CH activation mediated by a Rh metalloradical in a nanowire array electrode. *Chemical Science*, **2020**, 12, 1818-1825	9.4	4
79	Remediation of heavy metal contaminated soil by asymmetrical alternating current electrochemistry. *Nature Communications*, **2019**, 10, 2440	17.4	85
78	Direct/Alternating Current Electrochemical Method for Removing and Recovering Heavy Metal from Water Using Graphene Oxide Electrode. *ACS Nano*, **2019**, 13, 6431-6437	16.7	103
77	Graphene oxide in carbon nitride: from easily processed precursors to a composite material with enhanced photoelectrochemical activity and long-term stability. *Journal of Materials Chemistry A*, **2019**, 7, 11718-11723	13	25
76	Amidoxime-Functionalized Macroporous Carbon Self-Refreshed Electrode Materials for Rapid and High-Capacity Removal of Heavy Metal from Water. *ACS Central Science*, **2019**, 5, 719-726	16.8	47
75	Perfluorocarbon nanoemulsion promotes the delivery of reducing equivalents for electricity-driven microbial CO2 reduction. *Nature Catalysis*, **2019**, 2, 407-414	36.5	44
74	Solution Catalytic Cycle of Incompatible Steps for Ambient Air Oxidation of Methane to Methanol. *ACS Central Science*, **2019**, 5, 1584-1590	16.8	15
73	Charge-Free Mixing Entropy Battery Enabled by Low-Cost Electrode Materials. *ACS Omega*, **2019**, 4, 11785-11790	3.9	20
72	Nanowire Photoelectrochemistry. *Chemical Reviews*, **2019**, 119, 9221-9259	68.1	92
71	Two are better than one. *Nature Chemistry*, **2019**, 11, 200-201	17.6	6
70	Cluster Size Control toward High Performance Solution Processed InGaZnO Thin Film Transistors. *ACS Applied Electronic Materials*, **2019**, 1, 2483-2488	4	5
69	Modeling of Electrocatalytic Dinitrogen Reduction on Microstructured Electrodes. *Small Methods*, **2019**, 3, 1800332	12.8	16
68	Favoring the unfavored: Selective electrochemical nitrogen fixation using a reticular chemistry approach. *Science Advances*, **2018**, 4, eaar3208	14.3	237
67	Physical Biology of the Materials-Microorganism Interface. *Journal of the American Chemical Society* , **2018**, 140, 1978-1985	16.4	79
66	In Situ Investigation on the Nanoscale Capture and Evolution of Aerosols on Nanofibers. *Nano Letters*, **2018**, 18, 1130-1138	11.5	41
65	Solar-powered CO2 reduction by a hybrid biological | inorganic system. *Journal of Photochemistry and Photobiology A: Chemistry*, **2018**, 358, 411-415	4.7	17
64	Electrocatalytic Nitrogen Reduction at Low Temperature. *Joule*, **2018**, 2, 846-856	27.8	292

63	Boron-Doped Graphene Catalyzes Dinitrogen Fixation with Electricity. *CheM*, **2018**, 4, 1773-1774	16.2	13
62	Morphology and property investigation of primary particulate matter particles from different sources. *Nano Research*, **2018**, 11, 3182-3192	10	33
61	Core-Shell Nanofibrous Materials with High Particulate Matter Removal Efficiencies and Thermally Triggered Flame Retardant Properties. *ACS Central Science*, **2018**, 4, 894-898	16.8	44
60	A half-wave rectified alternating current electrochemical method for uranium extraction from seawater. *Nature Energy*, **2017**, 2,	62.3	216
59	Design of template-stabilized active and earth-abundant oxygen evolution catalysts in acid. *Chemical Science*, **2017**, 8, 4779-4794	9.4	103
58	Ambient nitrogen reduction cycle using a hybrid inorganic-biological system. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 6450-6455	11.5	121
57	C-Labeling the carbon-fixation pathway of a highly efficient artificial photosynthetic system. *Faraday Discussions*, **2017**, 198, 529-537	3.6	8
56	Surface Fluorination of Reactive Battery Anode Materials for Enhanced Stability. *Journal of the American Chemical Society*, **2017**, 139, 11550-11558	16.4	270
55	Warming up human body by nanoporous metallized polyethylene textile. *Nature Communications*, **2017**, 8, 496	17.4	162
54	Engineering the surface of LiCoO2 electrodes using atomic layer deposition for stable high-voltage lithium ion batteries. *Nano Research*, **2017**, 10, 3754-3764	10	51
53	A dual-mode textile for human body radiative heating and cooling. *Science Advances*, **2017**, 3, e1700895	14.3	222
52	Excitation-wavelength-dependent small polaron trapping of photoexcited carriers in □FeO. *Nature Materials*, **2017**, 16, 819-825	27	125
51	A Prussian blue route to nitrogen-doped graphene aerogels as efficient electrocatalysts for oxygen reduction with enhanced active site accessibility. *Nano Research*, **2017**, 10, 1213-1222	10	66
50	Radiative human body cooling by nanoporous polyethylene textile. *Science*, **2016**, 353, 1019-1023	33.3	464
49	Rapid water disinfection using vertically aligned MoS nanofilms and visible light. *Nature Nanotechnology*, **2016**, 11, 1098-1104	28.7	514
48	In Situ Electrochemically Derived Nanoporous Oxides from Transition Metal Dichalcogenides for Active Oxygen Evolution Catalysts. *Nano Letters*, **2016**, 16, 7588-7596	11.5	152
47	Balancing surface adsorption and diffusion of lithium-polysulfides on nonconductive oxides for lithium-sulfur battery design. *Nature Communications*, **2016**, 7, 11203	17.4	866
46	3D Porous Sponge-Inspired Electrode for Stretchable Lithium-Ion Batteries. *Advanced Materials*, **2016**, 28, 3578-83	24	199

45	Water splitting-biosynthetic system with CO reduction efficiencies exceeding photosynthesis. *Science*, **2016**, 352, 1210-3	33.3	569
44	Roll-to-Roll Transfer of Electrospun Nanofiber Film for High-Efficiency Transparent Air Filter. *Nano Letters*, **2016**, 16, 1270-5	11.5	241
43	Single-nanowire photoelectrochemistry. *Nature Nanotechnology*, **2016**, 11, 609-12	28.7	88
42	Composite lithium metal anode by melt infusion of lithium into a 3D conducting scaffold with lithiophilic coating. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 2862-7	11.5	643
41	Development of an Activated Carbon-Based Electrode for the Capture and Rapid Electrolytic Reductive Debromination of Methyl Bromide from Postharvest Fumigations. *Environmental Science & Technology*, **2016**, 50, 11200-11208	10.3	6
40	Directed Assembly of Nanoparticle Catalysts on Nanowire Photoelectrodes for Photoelectrochemical CO2 Reduction. *Nano Letters*, **2016**, 16, 5675-80	11.5	105
39	MoS2-wrapped silicon nanowires for photoelectrochemical water reduction. *Nano Research*, **2015**, 8, 281-287	10	70
38	A high tap density secondary silicon particle anode fabricated by scalable mechanical pressing for lithium-ion batteries. *Energy and Environmental Science*, **2015**, 8, 2371-2376	35.4	339
37	Electrochemical tuning of olivine-type lithium transition-metal phosphates as efficient water oxidation catalysts. *Energy and Environmental Science*, **2015**, 8, 1719-1724	35.4	142
36	Temperature nanotracers for fractured reservoirs characterization. *Journal of Petroleum Science and Engineering*, **2015**, 127, 212-228	4.4	8
35	Nanowire-bacteria hybrids for unassisted solar carbon dioxide fixation to value-added chemicals. *Nano Letters*, **2015**, 15, 3634-9	11.5	269
34	Hybrid bioinorganic approach to solar-to-chemical conversion. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 11461-6	11.5	174
33	Use of low cost and easily regenerated Prussian Blue cathodes for efficient electrical energy recovery in a microbial battery. *Energy and Environmental Science*, **2015**, 8, 546-551	35.4	58
32	Transparent air filter for high-efficiency PM2.5 capture. *Nature Communications*, **2015**, 6, 6205	17.4	525
31	Simultaneously efficient light absorption and charge separation in WO3/BiVO4 core/shell nanowire photoanode for photoelectrochemical water oxidation. *Nano Letters*, **2014**, 14, 1099-105	11.5	580
30	25th anniversary article: semiconductor nanowires--synthesis, characterization, and applications. *Advanced Materials*, **2014**, 26, 2137-84	24	649
29	Semiconductor Nanowires for Artificial Photosynthesis. *Chemistry of Materials*, **2014**, 26, 415-422	9.6	277
28	Three-dimensional spirals of atomic layered MoS2. *Nano Letters*, **2014**, 14, 6418-23	11.5	136

27	Salt-induced self-assembly of bacteria on nanowire arrays. *Nano Letters*, **2014**, 14, 5471-6	11.5	42
26	Static electricity powered copper oxide nanowire microbicidal electroporation for water disinfection. *Nano Letters*, **2014**, 14, 5603-8	11.5	91
25	Introductory lecture: systems materials engineering approach for solar-to-chemical conversion. *Faraday Discussions*, **2014**, 176, 9-16	3.6	
24	Chapter 6:Nanowires for Photovoltaics and Artificial Photosynthesis. *RSC Smart Materials*, **2014**, 277-311	0.6	2
23	Alumina-coated Ag nanocrystal monolayers as surfaceenhanced Raman spectroscopy platforms for the direct spectroscopic detection of water splitting reaction intermediates. *Nano Research*, **2014**, 7, 132-143	10	33
22	Atomic layer deposition of platinum catalysts on nanowire surfaces for photoelectrochemical water reduction. *Journal of the American Chemical Society*, **2013**, 135, 12932-5	16.4	240
21	Conducting nanosponge electroporation for affordable and high-efficiency disinfection of bacteria and viruses in water. *Nano Letters*, **2013**, 13, 4288-93	11.5	130
20	Large-scale synthesis of transition-metal-doped TiO2 nanowires with controllable overpotential. *Journal of the American Chemical Society*, **2013**, 135, 9995-8	16.4	289
19	Electrodeposited cobalt-sulfide catalyst for electrochemical and photoelectrochemical hydrogen generation from water. *Journal of the American Chemical Society*, **2013**, 135, 17699-702	16.4	463
18	Femtosecond M2,3-Edge Spectroscopy of Transition-Metal Oxides: Photoinduced Oxidation State Change in □Fe2O3. *Journal of Physical Chemistry Letters*, **2013**, 4, 3667-3671	6.4	89
17	A fully integrated nanosystem of semiconductor nanowires for direct solar water splitting. *Nano Letters*, **2013**, 13, 2989-92	11.5	453
16	Zn-doped p-type gallium phosphide nanowire photocathodes from a surfactant-free solution synthesis. *Nano Letters*, **2012**, 12, 5407-11	11.5	96
15	Plasmon-enhanced photocatalytic activity of iron oxide on gold nanopillars. *ACS Nano*, **2012**, 6, 234-40	16.7	255
14	Surfactant-free, large-scale, solution-liquid-solid growth of gallium phosphide nanowires and their use for visible-light-driven hydrogen production from water reduction. *Journal of the American Chemical Society*, **2011**, 133, 19306-9	16.4	141
13	Light-induced charge transport within a single asymmetric nanowire. *Nano Letters*, **2011**, 11, 3755-8	11.5	51
12	Nanoparticle and Microparticle Flow in Porous and Fractured Media: An Experimental Study **2011**,		8
11	Multifunctional mesoporous composite microspheres with well-designed nanostructure: a highly integrated catalyst system. *Journal of the American Chemical Society*, **2010**, 132, 8466-73	16.4	827
10	Synthesis of Core/Shell Colloidal Magnetic Zeolite Microspheres for the Immobilization of Trypsin. *Advanced Materials*, **2009**, 21, 1377-1382	24	259

9	A simple approach to the synthesis of hollow microspheres with magnetite/silica hybrid walls. *Journal of Colloid and Interface Science*, **2009**, 333, 329-34	9.3	28
8	Design of Amphiphilic ABC Triblock Copolymer for Templating Synthesis of Large-Pore Ordered Mesoporous Carbons with Tunable Pore Wall Thickness. *Chemistry of Materials*, **2009**, 21, 3996-4005	9.6	93
7	Mesoporous Monocrystalline TiO2 and Its Solid-State Electrochemical Properties. *Chemistry of Materials*, **2009**, 21, 2540-2546	9.6	107
6	A novel approach to the construction of 3-D ordered macrostructures with polyhedral particles. *Journal of Materials Chemistry*, **2008**, 18, 408-415		17
5	Ultra-Large-Pore Mesoporous Carbons Templated from Poly(ethylene oxide)-b-Polystyrene Diblock Copolymer by Adding Polystyrene Homopolymer as a Pore Expander. *Chemistry of Materials*, **2008**, 20, 7281-7286	9.6	108
4	Thick wall mesoporous carbons with a large pore structure templated from a weakly hydrophobic PEOBMMA diblock copolymer. *Journal of Materials Chemistry*, **2008**, 18, 91-97		89
3	Homopolymer induced phase evolution in mesoporous silica from evaporation induced self-assembly process. *Microporous and Mesoporous Materials*, **2008**, 116, 633-640	5.3	14
2	Ordered mesoporous silicas and carbons with large accessible pores templated from amphiphilic diblock copolymer poly(ethylene oxide)-b-polystyrene. *Journal of the American Chemical Society*, **2007**, 129, 1690-7	16.4	354
1	Facile Synthesis of Hierarchically Porous Carbons from Dual Colloidal Crystal/Block Copolymer Template Approach. *Chemistry of Materials*, **2007**, 19, 3271-3277	9.6	193