Hongtao Liu

List of Publications by Year in descending order

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		61945	53190
115	7,515	43	85
papers	citations	h-index	g-index
118	118	118	12098
110	110	110	
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Chemical doping of graphene. Journal of Materials Chemistry, 2011, 21, 3335-3345.	6.7	1,433
2	Scalable Production of a Few-Layer MoS ₂ /WS ₂ Vertical Heterojunction Array and Its Application for Photodetectors. ACS Nano, 2016, 10, 573-580.	7.3	362
3	Ionic liquids in surface electrochemistry. Physical Chemistry Chemical Physics, 2010, 12, 1685.	1.3	327
4	A Ferroelectric/Electrochemical Modulated Organic Synapse for Ultraflexible, Artificial Visualâ€Perception System. Advanced Materials, 2018, 30, e1803961.	11.1	292
5	Carboxyl-functionalized graphene oxide–polyaniline composite as a promising supercapacitor material. Journal of Materials Chemistry, 2012, 22, 13619.	6.7	244
6	An ionic liquid-type carbon paste electrode and its polyoxometalate-modified properties. Electrochemistry Communications, 2005, 7, 1357-1363.	2.3	229
7	Electrochemical Deposition of Silver in Room-Temperature Ionic Liquids and Its Surface-Enhanced Raman Scattering Effect. Langmuir, 2004, 20, 10260-10267.	1.6	225
8	Ethylene glycol reduced graphene oxide/polypyrrole composite for supercapacitor. Electrochimica Acta, 2013, 88, 519-525.	2.6	183
9	Reduction of graphene oxide to highly conductive graphene by Lawesson's reagent and its electrical applications. Journal of Materials Chemistry C, 2013, 1, 3104.	2.7	150
10	Highly active horseradish peroxidase immobilized in 1-butyl-3-methylimidazolium tetrafluoroborate room-temperature ionic liquid based sol–gel host materials. Chemical Communications, 2005, , 1778-1780.	2,2	145
11	Heterogeneous NiCo2O4@polypyrrole core/sheath nanowire arrays on Ni foam for high performance supercapacitors. Journal of Power Sources, 2015, 294, 120-127.	4.0	142
12	A novel room temperature ionic liquid sol–gel matrix for amperometric biosensor application. Green Chemistry, 2005, 7, 655.	4.6	137
13	Insight into the Mechanism of Axial Ligands Regulating the Catalytic Activity of Fe–N∢sub>4∢/sub> Sites for Oxygen Reduction Reaction. Advanced Energy Materials, 2022, 12, .	10.2	124
14	Holey graphene hydrogel with in-plane pores for high-performance capacitive desalination. Nano Research, 2016, 9, 2458-2466.	5.8	110
15	Preparation and Properties of Nanostructure Anatase TiO2 Monoliths Using 1-Butyl-3-methylimidazolium Tetrafluoroborate Room-Temperature Ionic Liquids as Template Solvents. Crystal Growth and Design, 2005, 5, 1643-1649.	1.4	108
16	A Room-Temperature Ionic-Liquid-Templated Proton-Conducting Gelatinous Electrolyte. Journal of Physical Chemistry B, 2004, 108, 17512-17518.	1.2	106
17	The electrochemical behavior of Clâ° assisted Al3+ insertion into titanium dioxide nanotube arrays in aqueous solution for aluminum ion batteries. Electrochimica Acta, 2014, 143, 340-346.	2.6	102
18	Novel helical TiO2 nanotube arrays modified by Cu2O for enzyme-free glucose oxidation. Biosensors and Bioelectronics, 2014, 59, 243-250.	5. 3	96

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19	A novel nickel-based mixed rare-earth oxide/activated carbon supercapacitor using room temperature ionic liquid electrolyte. Electrochimica Acta, 2006, 51, 1925-1931.	2.6	95
20	A Retinaâ€Like Dual Band Organic Photosensor Array for Filterâ€Free Nearâ€Infraredâ€toâ€Memory Operations. Advanced Materials, 2017, 29, 1701772.	11.1	95
21	Theoryâ€Guided Regulation of FeN ₄ Spin State by Neighboring Cu Atoms for Enhanced Oxygen Reduction Electrocatalysis in Flexible Metalâ€"Air Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	93
22	Biopolymer-chitosan based supramolecular hydrogels as solid state electrolytes for electrochemical energy storage. Chemical Communications, 2017, 53, 1615-1618.	2.2	91
23	Facile electrodeposition of 3D concentration-gradient Ni-Co hydroxide nanostructures on nickel foam as high performance electrodes for asymmetric supercapacitors. Nano Research, 2015, 8, 2744-2754.	5.8	90
24	In situ fabrication of nickel aluminum-layered double hydroxide nanosheets/hollow carbon nanofibers composite as a novel electrode material for supercapacitors. Journal of Power Sources, 2014, 267, 188-196.	4.0	89
25	Single Lithium-Ion Conducting Solid Polymer Electrolyte with Superior Electrochemical Stability and Interfacial Compatibility for Solid-State Lithium Metal Batteries. ACS Applied Materials & Samp; Interfaces, 2020, 12, 7249-7256.	4.0	88
26	Preparation of Porous Aminopropylsilsesquioxane by a Nonhydrolytic Solâ^'Gel Method in Ionic Liquid Solvent. Langmuir, 2005, 21, 1618-1622.	1.6	83
27	Electrodeposition of Platinum in Room-Temperature Ionic Liquids and Electrocatalytic Effect on Electro-oxidation of Methanol. Journal of the Electrochemical Society, 2005, 152, E146.	1.3	79
28	Facile interfacial adhesion enabled LATP-based solid-state lithium metal battery. Chemical Engineering Journal, 2020, 392, 123650.	6.6	78
29	Graphene-based materials for flexible electrochemical energy storage. International Journal of Energy Research, 2015, 39, 727-740.	2.2	72
30	High surface area nanoporous platinum: facile fabrication and electrocatalytic activity. Nanotechnology, 2006, 17, 2167-2173.	1.3	69
31	A Flexible Acetylcholinesterase-Modified Graphene for Chiral Pesticide Sensor. Journal of the American Chemical Society, 2019, 141, 14643-14649.	6.6	67
32	Facile synthesis of monodisperse, size-tunable SnS nanoparticles potentially for solar cell energy conversion. Nanotechnology, 2010, 21, 105707.	1.3	66
33	Design, Synthesis, and Properties of Asymmetrical Heteroacene and Its Application in Organic Electronics. Journal of Physical Chemistry C, 2010, 114, 10565-10571.	1.5	64
34	Alternating assembly of Ni–Al layered double hydroxide and graphene for high-rate alkaline battery cathode. Chemical Communications, 2015, 51, 9983-9986.	2.2	63
35	The electrochemical capacitance of nanoporous carbons in aqueous and ionic liquids. Journal of Power Sources, 2007, 171, 1054-1061.	4.0	55
36	Morphological solution for enhancement of electrochemical kinetic performance of LiFePO4. Electrochimica Acta, 2010, 56, 995-999.	2.6	55

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37	In-situ assembly of TiO2 with high exposure of (001) facets on three-dimensional porous graphene aerogel for lithium-sulfur battery. Journal of Energy Chemistry, 2020, 49, 316-322.	7.1	52
38	Organic–inorganic composites based on room temperature ionic liquid and 12-phosphotungstic acid salt with high assistant catalysis and proton conductivity. Journal of Power Sources, 2006, 158, 103-109.	4.0	51
39	Ordered hierarchical mesoporous anatase TiO2 from yeast biotemplates. Colloids and Surfaces B: Biointerfaces, 2009, 74, 274-278.	2.5	49
40	Ionic liquid-gelled polyvinylidene fluoride/polyvinyl acetate polymer electrolyte for solid supercapacitor. Chemical Engineering Journal, 2014, 258, 320-326.	6.6	48
41	Electrochemically conductive treatment of TiO2 nanotube arrays in AlCl3 aqueous solution for supercapacitors. Journal of Power Sources, 2015, 294, 216-222.	4.0	48
42	Threeâ€Component Integrated Ultrathin Organic Photosensors for Plastic Optoelectronics. Advanced Materials, 2016, 28, 624-630.	11.1	48
43	Simultaneous electrochemical synthesis of few-layer graphene flakes on both electrodes in protic ionic liquids. Chemical Communications, 2013, 49, 5301.	2.2	47
44	Highly dispersed Fe-Nx active sites on Graphitic-N dominated porous carbon for synergetic catalysis of oxygen reduction reaction. Carbon, 2021, 171, 1-9.	5.4	46
45	Soft template interfacial growth of novel ultralong polypyrrole nanowires for electrochemical energy storage. Electrochimica Acta, 2014, 132, 112-117.	2.6	44
46	Low-Cost and Novel Si-Based Gel for Li-Ion Batteries. ACS Applied Materials & Samp; Interfaces, 2017, 9, 10699-10707.	4.0	42
47	MoC ultrafine nanoparticles confined in porous graphitic carbon as extremely stable anode materials for lithium- and sodium-ion batteries. Inorganic Chemistry Frontiers, 2017, 4, 289-295.	3.0	42
48	The electrochemical behavior of TiO2-NTAs electrode in H+ and Al3+ coexistent aqueous solution. Electrochimica Acta, 2016, 187, 92-97.	2.6	41
49	Co/Sm-modified Ti/PbO2 anode for atrazine degradation: Effective electrocatalytic performance and degradation mechanism. Chemosphere, 2021, 268, 128799.	4.2	41
50	Ionization and dissociation of CH3I in intense laser field. Journal of Chemical Physics, 2007, 126, 044316.	1.2	40
51	Enhanced oxygen evolution reaction activity of NiFe layered double hydroxide on nickel foam-reduced graphene oxide interfaces. International Journal of Hydrogen Energy, 2019, 44, 2656-2663.	3.8	35
52	An Alternative Approach to Constructing Solution Processable Multifunctional Materials: Their Structure, Properties, and Application in Highâ€Performance Organic Lightâ€Emitting Diodes. Advanced Functional Materials, 2010, 20, 3125-3135.	7.8	34
53	Water-assisted growth of large-sized single crystal hexagonal boron nitride grains. Materials Chemistry Frontiers, 2017, 1, 1836-1840.	3.2	34
54	Hierarchical structured Sm 2 O 3 modified CuO nanoflowers as electrode materials for high performance supercapacitors. Applied Surface Science, 2017, 426, 933-943.	3.1	33

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55	A high-rate cathode material hybridized by in-site grown Ni–Fe layered double hydroxides and carbon black nanoparticles. Journal of Materials Chemistry A, 2016, 4, 4877-4881.	5.2	32
56	Facile and economical mass production of graphene dispersions and flakes. Journal of Materials Chemistry A, 2014, 2, 4132-4135.	5.2	31
57	Binder-free hydrogenated NiO–CoO hybrid electrodes for high performance supercapacitors. RSC Advances, 2015, 5, 31725-31731.	1.7	31
58	Facile fabrication of GNS/NiCoAl-LDH composite as an advanced electrode material for high-performance supercapacitors. Journal of Solid State Electrochemistry, 2015, 19, 607-617.	1.2	31
59	Synthesis and morphology transformation of single-crystal graphene domains based on activated carbon dioxide by chemical vapor deposition. Journal of Materials Chemistry C, 2013, 1, 2990.	2.7	30
60	Facile synthesis of ultrathin MoS ₂ /C nanosheets for use in sodium-ion batteries. RSC Advances, 2017, 7, 285-289.	1.7	30
61	The Inherent Capacitive Behavior of Imidazolium-based Room-Temperature Ionic Liquids at Carbon Paste Electrode. Electrochemical and Solid-State Letters, 2005, 8, J17.	2.2	28
62	Facile one-step fabrication of bimetallic Co–Ni–P hollow nanospheres anchored on reduced graphene oxide as highly efficient electrocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2019, 44, 24140-24150.	3.8	28
63	Phenanthro[1,10,9,8-cdefg]carbazole-containing copolymer for high performance thin-film transistors and polymer solar cells. Journal of Materials Chemistry, 2012, 22, 3696.	6.7	26
64	In Situ Study of K ⁺ Electrochemical Intercalating into MoS ₂ Flakes. Journal of Physical Chemistry C, 2019, 123, 5067-5072.	1.5	26
65	Electrochemical determination of hydroquinone using hydrophobic ionic liquid-type carbon paste electrodes. Chemistry Central Journal, 2010, 4, 17.	2.6	25
66	MnO2-decorated graphene aerogel with dual-polymer interpenetrating network as an efficient hybrid host for Li-S batteries. Journal of Alloys and Compounds, 2019, 791, 483-489.	2.8	22
67	Tuning morphology and structure of Fe–N–C catalyst for ultra-high oxygen reduction reaction activity. International Journal of Hydrogen Energy, 2020, 45, 6380-6390.	3.8	22
68	A combination of MnO2-decorated graphene aerogel modified separator and I/N codoped graphene aerogel sulfur host to synergistically promote Liâ€"S battery performance. Electrochimica Acta, 2020, 348, 136173.	2.6	22
69	Co2SnO4/activated carbon composite electrode for supercapacitor. Materials Chemistry and Physics, 2012, 137, 576-579.	2.0	21
70	One-step electrodeposition synthesis of high performance carbon nanotubes/graphene-doped Ni(OH)2 thin film electrode for high-performance supercapacitor. Electrochimica Acta, 2019, 322, 134747.	2.6	19
71	Carbon Dots Doped with Ni(OH) ₂ as Thin-Film Electrodes for Supercapacitors. ACS Applied Nano Materials, 2020, 3, 12106-12114.	2.4	18
72	Engineering sodium-rich manganese oxide with robust tunnel structure for high-performance sodium-ion battery cathode application. Chemical Engineering Journal, 2021, 417, 128097.	6.6	18

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73	Crystalline Vanadium Pentoxide with Hierarchical Mesopores and Its Capacitive Behavior. Chemistry - an Asian Journal, 2006, 1, 701-706.	1.7	17
74	Production of graphene nanospheres by annealing of graphene oxide in solution. Nano Research, 2011, 4, 705-711.	5.8	17
75	Effect of methylsisesquioxane filler on the properties of ionic liquid based polymer electrolyte. Polymer, 2005, 46, 7578-7584.	1.8	16
76	Facile one-pot synthesis of binder-free nano/micro structured dendritic cobalt activated nickel sulfide: a highly efficient electrocatalyst for oxygen evolution reaction. International Journal of Hydrogen Energy, 2020, 45, 19304-19312.	3.8	16
77	Achieving fully reversible conversion in Si anode for lithium-ion batteries by design of pomegranate-like Si@C structure. Electrochimica Acta, 2021, 389, 138736.	2.6	15
78	Synthesis and photovoltaic properties of a star-shaped molecule based on a triphenylamine core and branched terthiophene end groups. Science China Chemistry, 2013, 56, 997-1003.	4.2	14
79	Tuning Overall Water Splitting on an Electrodeposited NiCoFeP Films. ChemElectroChem, 2021, 8, 539-546.	1.7	14
80	Cu/Cu2O nanoparticles co-regulated carbon catalyst for alkaline Al-air batteries. Chinese Chemical Letters, 2021, 32, 2427-2432.	4.8	14
81	Reactions of platinum cluster ions with benzene. Rapid Communications in Mass Spectrometry, 2006, 20, 1899-1904.	0.7	13
82	Synthesis and ionic conductivity of polymeric ion gel containing room temperature ionic liquid and phosphotungstic acid. Solid State Ionics, 2006, 177, 1281-1286.	1.3	13
83	Low temperature growth of clean single layer hexagonal boron nitride flakes and film for graphene-based field-effect transistors. Science China Materials, 2019, 62, 1218-1225.	3.5	13
84	Generation of [Mm-phenyl]–Â(M = Mn–Cu) complexes in the gas phase: Metal cluster anions inducement of a selective benzene C–H cleavage. PhysChemComm, 2003, 6, 32-35.	0.8	12
85	From supramolecular hydrogels to functional aerogels: a facile strategy to fabricate Fe ₃ O ₄ /N-doped graphene composites. RSC Advances, 2015, 5, 77296-77302.	1.7	12
86	Nanosized Fe3O4-modified activated carbon for supercapacitor electrodes. Russian Journal of Electrochemistry, 2013, 49, 354-358.	0.3	11
87	The nanoscale effects on the morphology, microstructure and electrochemical performances of the cathodic deposited α-Ni(OH)2. Electrochimica Acta, 2018, 261, 58-65.	2.6	11
88	Engineering Porous Quasiâ€Spherical Feâ^'Nâ^'C Nanocatalysts with Robust Oxygen Reduction Performance for Znâ€Air Battery Application. ChemNanoMat, 2020, 6, 1782-1788.	1.5	11
89	A flexible polycation-type anion-dominated conducting polymer as potential all-solid-state supercapacitor film electrolyte. Chemical Engineering Journal, 2017, 330, 753-756.	6.6	10
90	Hydrophilic NiFe-LDH/Ti3C2Tx/NF electrode for assisting efficiently oxygen evolution reaction. Journal of Solid State Chemistry, 2021, 295, 121943.	1.4	10

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91	Self-assembled nanocotton-like Co–B–P/bacterial cellulose based carbon nanofiber as highly efficient electrocatalyst for oxygen evolution reaction. International Journal of Hydrogen Energy, 2021, 46, 20930-20940.	3.8	10
92	Pbmâ^'Phenyl (m = 1â^'5) Complexes:  an Anion Photoelectron Spectroscopy and Density Functional Journal of Physical Chemistry A, 2006, 110, 8688-8694.	Study.	9
93	Enhanced Structural, Electrochemical, and Electrode Kinetic Properties of Na _{0.5} Ni _{0.2} Mg _{0.1} Mn _{0.7} O ₂ Material for Sodium-Ion Battery Applications. Industrial & Engineering Chemistry Research, 2019, 58, 22804-22810.	1.8	9
94	Facile synthesis of reduced graphene oxide-modified, nitrogen-doped carbon xerogel with enhanced electrochemical capacitance. Materials Chemistry and Physics, 2014, 148, 1171-1177.	2.0	8
95	Photosensors: A Retinaâ€Like Dual Band Organic Photosensor Array for Filterâ€Free Nearâ€Infraredâ€toâ€Memory Operations (Adv. Mater. 32/2017). Advanced Materials, 2017, 29, .	11.1	8
96	An efficient and facile one-step synthesis strategy: Bismuth oxide with controllable size and shape for high-performance supercapacitors. Materials Letters, 2019, 245, 29-32.	1.3	8
97	Engineering of Chemical Vapor Deposition Graphene Layers: Growth, Characterization, and Properties. Advanced Functional Materials, 2022, 32, .	7.8	8
98	Theoryâ€Guided Regulation of FeN ₄ Spin State by Neighboring Cu Atoms for Enhanced Oxygen Reduction Electrocatalysis in Flexible Metal–Air Batteries. Angewandte Chemie, 0, , .	1.6	8
99	Solvothermal hybridization of LiMn _{1/3} O ₂ and reduced graphene oxide to promote lithium-ion cathode performance. RSC Advances, 2014, 4, 62615-62620.	1.7	7
100	Anisotropic Chargeâ€Carrier Transport in Highâ€Mobility Donor–Acceptor Conjugated Polymer Semiconductor Films. Chemistry - an Asian Journal, 2016, 11, 2725-2729.	1.7	7
101	Mesoporous SiO2 produced by mineralization of yeast cells as an efficient electrocatalyst for oxygen reduction reaction. Russian Chemical Bulletin, 2017, 66, 969-974.	0.4	6
102	Neuromorphic Devices: A Ferroelectric/Electrochemical Modulated Organic Synapse for Ultraflexible, Artificial Visual-Perception System (Adv. Mater. 46/2018). Advanced Materials, 2018, 30, 1870349.	11.1	6
103	Effect of in-situ doped anions on electrochemical performances of cathodically electrodeposited Ni(OH)2. Journal of Physics and Chemistry of Solids, 2019, 124, 352-360.	1.9	6
104	Effect of Gd2O3 on the hydrogen evolution property of nickel–cobalt coatings electrodeposited on titanium substrate. Journal of Physics and Chemistry of Solids, 2011, 72, 1261-1264.	1.9	5
105	Fe/Fe 3 C Nanoparticles Confined in Graphitic Layers/Carbon Nanotubes as Efficient Oxygen Reduction Reaction Catalysts. ChemistrySelect, 2019, 4, 10863-10867.	0.7	4
106	Fieldâ€Effect Transistors: Monolayer Hexagonal Boron Nitride Films with Large Domain Size and Clean Interface for Enhancing the Mobility of Grapheneâ€Based Fieldâ€Effect Transistors (Adv. Mater. 10/2014). Advanced Materials, 2014, 26, 1474-1474.	11.1	3
107	Conductive and high anticorrosive rGO-modified copper foil prepared by electrocoagulation and chemical reduction. Ionics, 2019, 25, 2935-2944.	1.2	3
108	Facile in-situ fabrication of nanocoral-like bimetallic Co-Mo carbide/nitrogen-doped carbon: a highly active and stable electrocatalyst for hydrogen evolution. Journal of Materials Science, 2021, 56, 11894-11906.	1.7	3

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109	The electrochemical properties of iodine cathode in a novel rechargeable hydrogen ion supercapattery system with molybdenum trioxide as anode. Electrochimica Acta, 2021, 399, 139331.	2.6	3
110	Airâ€Stable Symmetric Ambipolar Fieldâ€Effect Transistors Based on Reduced Graphene Oxideâ€OTS Selfâ€Assembled Monolayer Heterostructure. ChemNanoMat, 2019, 5, 472-478.	1.5	2
111	Unusual tubular organization with crystal stacks from a new cyclic thiophene compound,. CrystEngComm, 2009, 11, 2288.	1.3	1
112	Transistors: Inkjet Printing Shortâ€Channel Polymer Transistors with Highâ€Performance and Ultrahigh Photoresponsivity (Adv. Mater. 27/2014). Advanced Materials, 2014, 26, 4752-4752.	11.1	1
113	A gas-diffusion gold-ring-tip: Fabrication, characterization, and application in electrocatalysis. Electrochemistry Communications, 2009, 11, 885-888.	2.3	0
114	Nanoscale Materials: A General Approach for Fast Detection of Charge Carrier Type and Conductivity Difference in Nanoscale Materials (Adv. Mater. 48/2013). Advanced Materials, 2013, 25, 6916-6916.	11.1	0
115	Graphene: Layerâ€Stacking Growth and Electrical Transport of Hierarchical Graphene Architectures (Adv. Mater. 20/2014). Advanced Materials, 2014, 26, 3355-3355.	11.1	0