Masaru Yao

List of Publications by Year
in descending order

58 papers	1,904 citations	304743 22 h-index	265206 42 g-index
59 all docs	59 docs citations	59 times ranked	2137 citing authors

#	Article	IF	Citations
1	High-capacity organic positive-electrode material based on a benzoquinone derivative for use in rechargeable lithium batteries. Journal of Power Sources, 2010, 195, 8336-8340.	7.8	220
2	A two-compartment cell for using soluble benzoquinone derivatives as active materials in lithium secondary batteries. Electrochimica Acta, 2011, 56, 10145-10150.	5.2	117
3	Indigo carmine: An organic crystal as a positive-electrode material for rechargeable sodium batteries. Scientific Reports, 2014, 4, 3650.	3.3	109
4	Na-ion capacitor using sodium pre-doped hard carbon and activated carbon. Electrochimica Acta, 2012, 76, 320-325.	5.2	104
5	Crystalline polycyclic quinone derivatives as organic positive-electrode materials for use in rechargeable lithium batteries. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 483-487.	3.5	99
6	Redox active poly(N-vinylcarbazole) for use in rechargeable lithium batteries. Journal of Power Sources, 2012, 202, 364-368.	7.8	82
7	Indigo Dye as a Positive-electrode Material for Rechargeable Lithium Batteries. Chemistry Letters, 2010, 39, 950-952.	1.3	81
8	Mg2+ Storage in Organic Positive-electrode Active Material Based on 2,5-Dimethoxy-1,4-benzoquinone. Chemistry Letters, 2012, 41, 1594-1596.	1.3	71
9	LiFePO4-based electrode using micro-porous current collector for high power lithium ion battery. Journal of Power Sources, 2007, 173, 545-549.	7.8	69
10	A pentakis-fused tetrathiafulvalene system extended by cyclohexene-1,4-diylidenes: a new positive electrode material for rechargeable batteries utilizing ten electron redox. Journal of Materials Chemistry A, 2014, 2, 6747.	10.3	66
11	Long cycle-life LiFePO4/Cu-Sn lithium ion battery using foam-type three-dimensional current collector. Journal of Power Sources, 2010, 195, 2077-2081.	7.8	61
12	Molecular ion battery: a rechargeable system without using any elemental ions as a charge carrier. Scientific Reports, 2015, 5, 10962.	3.3	53
13	Reversible air electrodes integrated with an anion-exchange membrane for secondary air batteries. Journal of Power Sources, 2011, 196, 808-813.	7.8	47
14	Sulfone-Based Electrolyte Solutions for Rechargeable Magnesium Batteries Using 2,5-Dimethoxy-1,4-benzoquinone Positive Electrode. Journal of the Electrochemical Society, 2014, 161, A1315-A1320.	2.9	47
15	Electrocatalytic oxidation of alcohols by a carbon-supported Rh porphyrin. Chemical Communications, 2012, 48, 4353.	4.1	46
16	Organic Positive-Electrode Materials Based on Dialkoxybenzoquinone Derivatives for Use in Rechargeable Lithium Batteries. ECS Transactions, 2010, 28, 3-10.	0.5	40
17	Organic positive-electrode material utilizing both an anion and cation: a benzoquinone-tetrathiafulvalene triad molecule, Q-TTF-Q, for rechargeable Li, Na, and K batteries. New Journal of Chemistry, 2019, 43, 1626-1631.	2.8	38
18	Gallium (III) sulfide as an active material in lithium secondary batteries. Journal of Power Sources, 2011, 196, 5631-5636.	7.8	36

#	Article	IF	Citations
19	A Tris-fused Tetrathiafulvalene Extended with Cyclohexene-1,4-diylidene: A New Positive Electrode Material for Organic Rechargeable Batteries. Chemistry Letters, 2013, 42, 1556-1558.	1.3	33
20	New-Concept CO-Tolerant Anode Catalysts Using a Rh Porphyrin-Deposited PtRu/C. Journal of Physical Chemistry C, 2010, 114, 21856-21860.	3.1	30
21	High-power nickel/metal-hydride battery using new micronetwork substrate: Discharge rate capability and cycle-life performance. Journal of Power Sources, 2007, 171, 1033-1039.	7.8	24
22	Fused Tetrathiafulvalene and Benzoquinone Triads: Organic Positiveâ€Electrode Materials Based on a Dual Redox System. ChemSusChem, 2020, 13, 2312-2320.	6.8	23
23	Anthraquinoneâ€Based Oligomer as a Long Cycleâ€Life Organic Electrode Material for Use in Rechargeable Batteries. ChemPhysChem, 2019, 20, 967-971.	2.1	22
24	Electrochemical characteristics of aluminum sulfide for use in lithium secondary batteries. Journal of Power Sources, 2010, 195, 8327-8330.	7.8	21
25	Novel aromatic N-oxyl radical based on the benzo[g]quinoline skeleton: synthesis and intermolecular ferromagnetic interaction. Chemical Physics Letters, 2005, 402, 11-16.	2.6	19
26	CO Electro-oxidation by Rh Disulfo-deuteroporphyrin, and Its Mitigation Effect on CO Poisoning of PEMFC Anode. Electrochemical and Solid-State Letters, 2011, 14, B23.	2.2	19
27	Dialkoxybenzoquinone-type Active Materials for Rechargeable Lithium Batteries: The Effect of the Alkoxy Group Length on the Cycle-stability. Energy Procedia, 2013, 34, 880-887.	1.8	19
28	Polycyclic Quinone Fused by a Sulfur-containing Ring as an Organic Positive-electrode Material for Use in Rechargeable Lithium Batteries. Energy Procedia, 2016, 89, 222-230.	1.8	18
29	Trisâ€Fused Tetrathiafulvalenes Extended with an Anthraquinoid Spacer as New Positive Electrode Materials for Rechargeable Batteries. European Journal of Organic Chemistry, 2019, 2019, 2725-2728.	2.4	17
30	Formation of a One-Dimensional Stacking Structure of Ï€-Conjugated Nitroxyl Radical Bearing a 1,2,5-Thiadiazole Ring and Its Magnetic Property. Crystal Growth and Design, 2005, 5, 413-417.	3.0	16
31	Fused Donorâ€“Donorâ€“Acceptor Triads Composed of Tetrathiafulvalene and Benzoquinone Derivatives as the Positive Electrode Materials for Rechargeable Lithium and Sodium Batteries. Chemistry Letters, 2017, 46, 368-370.	1.3	16
32	Rechargeable organic batteries using chloro-substituted naphthazarin derivatives as positive electrode materials. Journal of Materials Science, 2017, 52, 12401-12408.	3.7	16
33	Amphiphilic meso-Disubstituted Porphyrins:â€‰ Synthesis and the Effect of the Hydrophilic Group on Absorption Spectra at the Airâ^'Water Interface. Langmuir, 2005, 21, 595-601.	3.5	15
34	Long Cycle-life Organic Electrode Material based on an Ionic Naphthoquinone Derivative for Rechargeable Batteries. Energy Procedia, 2014, 56, 228-236.	1.8	15
35	Nickel Substrate Having Three-Dimensional Micronetwork Structure for High-Power Nickel/Metal-Hydride Battery. Electrochemical and Solid-State Letters, 2007, 10, A56.	2.2	14
36	A Tris-fused Donor System Composed of Two Tetrathiafulvalenes and an Extended Tetrathiafulvalene with an Anthraquinoid Spacer. Chemistry Letters, 2019, 48, 1507-1510.	1.3	13

#	Article	IF	Citations
37	Improvement of the Battery Performance of Indigo, an Organic Electrode Material, Using PEDOT/PSS with <scp>d-</scp>Sorbitol. ACS Omega, 2020, 5, 18565-18572.	3.5	13
38	Synthesis and Properties of [3]Dendralenes with Redox-active 1,3-Dithiol-2-ylidenes and Dicyanomethylidene and Application to Rechargeable Batteries. Chemistry Letters, 2018, 47, 1176-1179.	1.3	12
39	Improved gravimetric energy density and cycle life in organic lithium-ion batteries with naphthazarin-based electrode materials. Communications Materials, 2020, 1, .	6.9	12
40	Characterization of a Rh(<scp>iii</scp>) porphyrinâ€“CO complex: its structure and reactivity with an electron acceptor. Dalton Transactions, 2015, 44, 13823-13827.	3.3	11
41	Viologen Derivatives Extended with Aromatic Rings Acting as Negative Electrode Materials for Use in Rechargeable Molecular Ion Batteries. ChemSusChem, 2020, 13, 2379-2385.	6.8	11
42	Donor-Acceptor Triads Composed of Tetrathiafulvalene and Benzoquinone Fused by Benzene-Spacers: Application to the Positive Electrode Materials for Use in Rechargeable Batteries. Bulletin of the Chemical Society of Japan, 2021, 94, 44-52.	3.2	11
43	High-Capacity Electric Double Layer Capacitor Using Three-Dimensional Porous Current Collector. Electrochemical and Solid-State Letters, 2007, 10, A245.	2.2	10
44	Influence of Nickel Foam Pore Structure on the High-Rate Capability of Nickel/Metal-Hydride Batteries. Journal of the Electrochemical Society, 2007, 154, A709.	2.9	10
45	Metallocomplex-based borohydride electro-oxidation catalysts. Catalysis Today, 2011, 170, 141-147.	4.4	9
46	CO electro-oxidation by carbon-supported Rh tetraphenylporphyrins that have o-methyl groups on meso-phenyl substituents. Journal of Electroanalytical Chemistry, 2012, 668, 60-65.	3.8	9
47	Synthesis and magnetic properties of 2,2,4- and 2,2,6-triphenyl-1,2-dihydroquinoline-N-oxyl derivatives. Polyhedron, 2005, 24, 2828-2834.	2.2	8
48	Synthesis and physicochemical properties of some 5,15-diarylporphyrin derivatives. Polyhedron, 2003, 22, 2281-2285.	2.2	7
49	Conductive polymer binder and separator for high energy density lithium organic battery. MRS Communications, 2019, 9, 979-984.	1.8	7
50	Reduction of redox mediators by CO in the presence of a Co porphyrin: Implication for electrochemical cells powered by CO. Journal of Power Sources, 2013, 235, 105-110.	7.8	6
51	Synthesis, Structure, and Electrochemical Properties of Extended Tetrathiafulvalene Dimers Linked by Flexible Butylene Chain. Bulletin of the Chemical Society of Japan, 2021, 94, 1059-1065.	3.2	6
52	Synthesis and Properties of Fused Extended Tetrathiafulvalene Donors with Dithienylmethylene Spacer and Application to Organic Rechargeable Batteries. Bulletin of the Chemical Society of Japan, 2021, 94, 1940-1947.	3.2	6
53	Improving the Cycle-life of Naphthoquinone-based Active Materials by Their Polymerization for Rechargeable Organic Batteries. Energy Procedia, 2016, 89, 213-221.	1.8	5
54	Analytical Measurements to Elucidate Structural Behavior of 2,5â€Dimethoxyâ€1,4â€benzoquinone During Charge and Discharge. ChemSusChem, 2020, 13, 2354-2363.	6.8	5

#	Article	IF	Citations
55	A Tris-fused Tetrathiafulvalene Analog Composed of an Anthraquinoid- and Two Vinyl-extended Tetrathiafulvalenes. Chemistry Letters, 2021, 50, 1164-1168.	1.3	5
56	Effect of hydrophilic group on absorption spectra of meso-disubstituted porphyrin LB films. Synthetic Metals, 2003, 137, 917-918.	3.9	3
57	3. ã‚ãƒŽãƒ³é¡žã‚„ã‚ãƒ³ãƒ‡ã‚£ã‚´é¡žã‚’æ£æ¥µæ´»ç‰©è³ªã«ç”¨ã„ãŸæœ‰æ©Ÿä¸Œæ¬¡é›»æ±. Electrochemistry, 2014, 82, 682-687.	1.4	1
58	A New Bio-based Battery Material: Effect of Rate of Anthraquinone Skeleton Incorporation into Polyglycidol on Battery Performance. Energy Procedia, 2016, 89, 207-212.	1.8	1