

# Yanliang Liang

## List of Publications by Year in descending order

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61  
papers

8,770  
citations

76326

40  
h-index

133252

59  
g-index

64  
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64  
docs citations

64  
times ranked

8734  
citing authors

#	ARTICLE	IF	CITATIONS
1	Organic Electrode Materials for Rechargeable Lithium Batteries. <i>Advanced Energy Materials</i> , 2012, 2, 742-769.	19.5	1,125
2	Current status and future directions of multivalent metal-ion batteries. <i>Nature Energy</i> , 2020, 5, 646-656.	39.5	798
3	Universal quinone electrodes for long cycle life aqueous rechargeable batteries. <i>Nature Materials</i> , 2017, 16, 841-848.	27.5	615
4	Opportunities and Challenges for Organic Electrodes in Electrochemical Energy Storage. <i>Chemical Reviews</i> , 2020, 120, 6490-6557.	47.7	517
5	Rechargeable Mg Batteries with Graphene-like MoS <sub>2</sub> Cathode and Ultrasmall Mg Nanoparticle Anode. <i>Advanced Materials</i> , 2011, 23, 640-643.	21.0	474
6	Interlayer-Expanded Molybdenum Disulfide Nanocomposites for Electrochemical Magnesium Storage. <i>Nano Letters</i> , 2015, 15, 2194-2202.	9.1	357
7	Function-oriented design of conjugated carbonyl compound electrodes for high energy lithium batteries. <i>Chemical Science</i> , 2013, 4, 1330.	7.4	355
8	Positioning Organic Electrode Materials in the Battery Landscape. <i>Joule</i> , 2018, 2, 1690-1706.	24.0	320
9	Fast kinetics of magnesium monochloride cations in interlayer-expanded titanium disulfide for magnesium rechargeable batteries. <i>Nature Communications</i> , 2017, 8, 339.	12.8	304
10	Fused Heteroaromatic Organic Compounds for High-Power Electrodes of Rechargeable Lithium Batteries. <i>Advanced Energy Materials</i> , 2013, 3, 600-605.	19.5	293
11	Enhancing sodium-ion battery performance with interlayer-expanded MoS <sub>2</sub> /PEO nanocomposites. <i>Nano Energy</i> , 2015, 15, 453-461.	16.0	269
12	An Aqueous Ca <sup>2+</sup> Ion Battery. <i>Advanced Science</i> , 2017, 4, 1700465.	11.2	254
13	Heavily n-Dopable $\pi$ -Conjugated Redox Polymers with Ultrafast Energy Storage Capability. <i>Journal of the American Chemical Society</i> , 2015, 137, 4956-4959.	13.7	242
14	Poly(anthraquinonyl sulfide) cathode for potassium-ion batteries. <i>Electrochemistry Communications</i> , 2016, 71, 5-8.	4.7	235
15	High-power Mg batteries enabled by heterogeneous enolization redox chemistry and weakly coordinating electrolytes. <i>Nature Energy</i> , 2020, 5, 1043-1050.	39.5	205
16	Tailored Organic Electrode Material Compatible with Sulfide Electrolyte for Stable All-Solid-State Sodium Batteries. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2630-2634.	13.8	138
17	Directing Mg-Storage Chemistry in Organic Polymers toward High-Energy Mg Batteries. <i>Joule</i> , 2019, 3, 782-793.	24.0	124
18	High Areal Capacity Hybrid Magnesium-Lithium-Ion Battery with 99.9% Coulombic Efficiency for Large-Scale Energy Storage. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 7001-7007.	8.0	123

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19	Facile polymer-assisted synthesis of LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> with a hierarchical micro-nano structure and high rate capability. RSC Advances, 2012, 2, 5669.	3.6	111
20	Li <sub>3</sub> VO <sub>4</sub> anchored graphene nanosheets for long-life and high-rate lithium-ion batteries. Chemical Communications, 2015, 51, 229-231.	4.1	107
21	Boiling water-catalyzed neutral and selective N-Boc deprotection. Chemical Communications, 2009, , 5144.	4.1	100
22	Density functional theory study of Li, Na, and Mg intercalation and diffusion in MoS <sub>2</sub> with controlled interlayer spacing. Materials Research Express, 2016, 3, 064001.	1.6	100
23	Cross-conjugated oligomeric quinones for high performance organic batteries. Nano Energy, 2017, 37, 46-52.	16.0	97
24	Correlating Dye Adsorption Behavior with the Open-Circuit Voltage of Triphenylamine-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 10992-10998.	3.1	95
25	Triphenylamine-Based Dyes Bearing Functionalized 3,4-Propylenedioxythiophene Linkers with Enhanced Performance for Dye-Sensitized Solar Cells. Organic Letters, 2010, 12, 1204-1207.	4.6	95
26	Separator Effect on Zinc Electrodeposition Behavior and Its Implication for Zinc Battery Lifetime. Nano Letters, 2021, 21, 10446-10452.	9.1	94
27	A high-voltage rechargeable magnesium-sodium hybrid battery. Nano Energy, 2017, 34, 188-194.	16.0	84
28	Hyperbranched PEO-Based Hyperstar Solid Polymer Electrolytes with Simultaneous Improvement of Ion Transport and Mechanical Strength. ACS Applied Energy Materials, 2019, 2, 1608-1615.	5.1	74
29	Taming Active Material-Solid Electrolyte Interfaces with Organic Cathode for All-Solid-State Batteries. Joule, 2019, 3, 1349-1359.	24.0	70
30	Quasi-Solid-State Dye-Sensitized Solar Cells with Polymer Gel Electrolyte and Triphenylamine-Based Organic Dyes. ACS Applied Materials & Interfaces, 2009, 1, 944-950.	8.0	67
31	Architectural design and fabrication approaches for solid-state batteries. MRS Bulletin, 2018, 43, 775-781.	3.5	64
32	Effect of electrolyte anions on the cycle life of a polymer electrode in aqueous batteries. EScience, 2022, 2, 110-115.	41.6	58
33	Current status and future directions of all-solid-state batteries with lithium metal anodes, sulfide electrolytes, and layered transition metal oxide cathodes. Nano Energy, 2021, 87, 106081.	16.0	55
34	All-Solid-State Dye-Sensitized Solar Cells with Alkyloxy-Imidazolium Iodide Ionic Polymer/SiO <sub>2</sub> Nanocomposite Electrolyte and Triphenylamine-Based Organic Dyes. Journal of Physical Chemistry C, 2010, 114, 6814-6821.	3.1	52
35	Chromate conversion coated aluminium as a light-weight and corrosion-resistant current collector for aqueous lithium-ion batteries. Journal of Materials Chemistry A, 2016, 4, 395-399.	10.3	50
36	A magnesium-sodium hybrid battery with high operating voltage. Chemical Communications, 2016, 52, 8263-8266.	4.1	48

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37	A thermally and electrochemically stable organic hole-transporting material with an adamantane central core and triarylamine moieties. <i>Synthetic Metals</i> , 2012, 162, 490-496.	3.9	47
38	Flower-Like Molybdenum Disulfide for Polarity-Triggered Accumulation/Release of Small Molecules. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 36431-36437.	8.0	45
39	Carbon-coated rhombohedral $\text{Li}_3\text{V}_2(\text{PO}_4)_3$ as both cathode and anode materials for lithium-ion batteries: electrochemical performance and lithium storage mechanism. <i>Journal of Materials Chemistry A</i> , 2014, 2, 20231-20236.	10.3	44
40	$\text{Ni}_x\text{Pt}_x$ ( $x=0\text{--}0.08$ ) films as the photocathode of dye-sensitized solar cells with high efficiency. <i>Nano Research</i> , 2009, 2, 484-492.	10.4	42
41	Microstructure engineering of solid-state composite cathode via solvent-assisted processing. <i>Joule</i> , 2021, 5, 1845-1859.	24.0	42
42	Triphenylamine-based organic dye containing the diphenylvinyl and rhodanine-3-acetic acid moieties for efficient dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2009, 187, 620-626.	7.8	39
43	Intercalation Pseudocapacitance of Exfoliated Molybdenum Disulfide for Ultrafast Energy Storage. <i>ChemNanoMat</i> , 2016, 2, 688-691.	2.8	38
44	High-Energy All-Solid-State Organic Lithium Batteries Based on Ceramic Electrolytes. <i>ACS Energy Letters</i> , 2021, 6, 201-207.	17.4	37
45	Roadmap of Solid-State Lithium-Organic Batteries toward $500 \text{ Wh kg}^{-1}$ . <i>ACS Energy Letters</i> , 2021, 6, 3287-3306.	17.4	31
46	Triphenylamine-Based Ionic Dyes with Simple Structures: Broad Photoresponse and Limitations on Open-Circuit Voltage in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15842-15848.	3.1	29
47	Charge Storage Mechanism of a Quinone Polymer Electrode for Zinc-ion Batteries. <i>Journal of the Electrochemical Society</i> , 2020, 167, 070558.	2.9	24
48	On the quality of tape-cast thin films of sulfide electrolytes for solid-state batteries. <i>Materials Today Physics</i> , 2021, 18, 100397.	6.0	23
49	Tailored Organic Electrode Material Compatible with Sulfide Electrolyte for Stable All-Solid-State Sodium Batteries. <i>Angewandte Chemie</i> , 2018, 130, 2660-2664.	2.0	22
50	Moisture-driven phase transition for improved perovskite solar cells with reduced trap-state density. <i>Nano Research</i> , 2017, 10, 1413-1422.	10.4	20
51	A Quinone Anode for Lithium-Ion Batteries in Mild Aqueous Electrolytes. <i>ChemSusChem</i> , 2020, 13, 2250-2255.	6.8	20
52	Size-controlled chalcopyrite $\text{CuInS}_2$ nanocrystals: One-pot synthesis and optical characterization. <i>Science China Chemistry</i> , 2012, 55, 1236-1241.	8.2	17
53	Chemically inert covalently networked triazole-based solid polymer electrolytes for stable all-solid-state lithium batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19691-19695.	10.3	17
54	Promoted hydrogen release from ammonia borane with mannitol via a solid-state reaction route. <i>Dalton Transactions</i> , 2012, 41, 871-875.	3.3	16

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55	Organic Electrodes: Organic Electrode Materials for Rechargeable Lithium Batteries (Adv. Energy) Tj ETQq1 1 0.784314 rgBT /Overloc	19.5	14
56	Halfway through. Nature Energy, 2019, 4, 10-11.	39.5	11
57	Advancing Electrolytes Towards Stable Organic Batteries. General Chemistry, 2017, 3, 207-212.	0.6	9
58	Low Dose Electron Microscopy of Interlayer Expanded Molybdenum Disulfide Nanocomposites. Microscopy and Microanalysis, 2015, 21, 1057-1058.	0.4	0
59	Titelbild: Tailored Organic Electrode Material Compatible with Sulfide Electrolyte for Stable All-Solid-State Sodium Batteries (Angew. Chem. 10/2018). Angewandte Chemie, 2018, 130, 2531-2531.	2.0	0
60	In situ observations of interfacial evolutions in solid-state lithium battery with sulfide-based solid electrolyte. , 2019, , .		0
61	Electrolyte dictated materials design for beyond lithium ion batteries. , 2018, , .		0