Dongliang Chao

List of Publications by Year in Descending Order

122 papers	13,911 citations	58 h-index	117 g-index
134 ext. papers	17,245 ext. citations	14.3 avg, IF	7.14 L-index

#	Paper	IF	Citations
122	Making MXenes more energetic in aqueous battery. *Matter*, **2022**, 5, 8-10	12.7	5
121	Unusual Mesoporous Titanium Niobium Oxides Realizing Sodium-Ion Batteries Operated at -40℃.. *Advanced Materials*, **2022**, e2202873	24	5
120	Synchrotron X-ray Spectroscopic Investigations of In-Situ Formed Alloy Anodes for Magnesium Batteries.. *Advanced Materials*, **2021**, e2108688	24	2
119	Catalytic Oxidation of KS via Atomic Co and Pyridinic N Synergy in Potassium-Sulfur Batteries. *Journal of the American Chemical Society*, **2021**, 143, 16902-16907	16.4	11
118	Amorphous VO : A Pseudocapacitive Platform for High-Rate Symmetric Batteries. *Advanced Materials*, **2021**, 33, e2103736	24	8
117	An Energetic CuS-Cu Battery System Based on CuS Nanosheet Arrays. *ACS Nano*, **2021**, 15, 5420-5427	16.7	20
116	Electronic Modulation of Non-van der Waals 2D Electrocatalysts for Efficient Energy Conversion. *Advanced Materials*, **2021**, 33, e2008422	24	68
115	2D-VN MXene as a novel anode material for Li, Na and K ion batteries: Insights from the first-principles calculations. *Journal of Colloid and Interface Science*, **2021**, 593, 51-58	9.3	7
114	Simultaneous Regulation on Solvation Shell and Electrode Interface for Dendrite-Free Zn Ion Batteries Achieved by a Low-Cost Glucose Additive. *Angewandte Chemie - International Edition*, **2021**, 60, 18247-18255	16.4	113
113	Opportunities of Aqueous Manganese-Based Batteries with Deposition and Stripping Chemistry. *Advanced Energy Materials*, **2021**, 11, 2002904	21.8	37
112	C-plasma derived precise volumetric buffering for high-rate and stable alloying-type energy storage. *Nano Energy*, **2021**, 80, 105557	17.1	0
111	Advanced in situ technology for Li/Na metal anodes: an in-depth mechanistic understanding. *Energy and Environmental Science*, **2021**, 14, 3872-3911	35.4	9
110	Mechanism for Zincophilic Sites on Zinc-Metal Anode Hosts in Aqueous Batteries. *Advanced Energy Materials*, **2021**, 11, 2003419	21.8	79
109	Boosting Zinc Electrode Reversibility in Aqueous Electrolytes by Using Low-Cost Antisolvents. *Angewandte Chemie*, **2021**, 133, 7442-7451	3.6	43
108	Boosting Zinc Electrode Reversibility in Aqueous Electrolytes by Using Low-Cost Antisolvents. *Angewandte Chemie - International Edition*, **2021**, 60, 7366-7375	16.4	161
107	Simultaneous Regulation on Solvation Shell and Electrode Interface for Dendrite-Free Zn Ion Batteries Achieved by a Low-Cost Glucose Additive. *Angewandte Chemie*, **2021**, 133, 18395-18403	3.6	14
106	Surface-Electronic-Structure Reconstruction of Perovskite via Double-Cation Gradient Etching for Superior Water Oxidation. *Nano Letters*, **2021**, 21, 8166-8174	11.5	5

105	Sulfur-Based Aqueous Batteries: Electrochemistry and Strategies. *Journal of the American Chemical Society*, **2021**, 143, 15475-15489	16.4	23
104	Microscale Silicon-Based Anodes: Fundamental Understanding and Industrial Prospects for Practical High-Energy Lithium-Ion Batteries. *ACS Nano*, **2021**, 15, 15567-15593	16.7	23
103	Co2+/3+/4+-Regulated Electron State of Mn-O for Superb Aqueous Zinc-Manganese Oxide Batteries. *Advanced Energy Materials*, **2021**, 11, 2003203	21.8	54
102	Atomic Engineering Catalyzed MnO Electrolysis Kinetics for a Hybrid Aqueous Battery with High Power and Energy Density. *Advanced Materials*, **2020**, 32, e2001894	24	123
101	Hierarchical porous LiNiCoMnO with yolk-shell-like architecture as stable cathode material for lithium-ion batteries.. *RSC Advances*, **2020**, 10, 18776-18783	3.7	8
100	A scalable top-down strategy toward practical metrics of Ni□n aqueous batteries with total energy densities of 165 W h kg□ and 506 W h L□. *Energy and Environmental Science*, **2020**, 13, 4157-4167	35.4	72
99	Flexible Pseudocapacitive Electrochromics via Inkjet Printing of Additive-Free Tungsten Oxide Nanocrystal Ink. *Advanced Energy Materials*, **2020**, 10, 2000142	21.8	45
98	Unveiling the Advances of 2D Materials for Li/Na-S Batteries Experimentally and Theoretically. *Matter*, **2020**, 2, 323-344	12.7	78
97	Al O -Assisted Confinement Synthesis of Oxide/Carbon Hollow Composite Nanofibers and Application in Metal-Ion Capacitors. *Small*, **2020**, 16, e2001950	11	47
96	Hybrid Aqueous Batteries: Atomic Engineering Catalyzed MnO2 Electrolysis Kinetics for a Hybrid Aqueous Battery with High Power and Energy Density (Adv. Mater. 25/2020). *Advanced Materials*, **2020**, 32, 2070191	24	2
95	Three-dimensional TiNbO anchored on carbon nanofiber core-shell arrays as an anode for high-rate lithium ion storage.. *RSC Advances*, **2020**, 10, 6342-6350	3.7	6
94	Electron-State Confinement of Polysulfides for Highly Stable Sodium-Sulfur Batteries. *Advanced Materials*, **2020**, 32, e1907557	24	87
93	Transition metal dichalcogenides for alkali metal ion batteries: engineering strategies at the atomic level. *Energy and Environmental Science*, **2020**, 13, 1096-1131	35.4	135
92	Hydrogenated dual-shell sodium titanate cubes for sodium-ion batteries with optimized ion transportation. *Journal of Materials Chemistry A*, **2020**, 8, 15829-15833	13	7
91	Roadmap for advanced aqueous batteries: From design of materials to applications. *Science Advances*, **2020**, 6, eaba4098	14.3	455
90	Revealing Principles for Design of Lean-Electrolyte Lithium Metal Anode via In Situ Spectroscopy. *Journal of the American Chemical Society*, **2020**, 142, 2012-2022	16.4	84
89	Toward High-Voltage Aqueous Batteries: Super- or Low-Concentrated Electrolyte?. *Joule*, **2020**, 4, 1846-1851	39.8	102
88	Revealing the Magnesium-Storage Mechanism in Mesoporous Bismuth via Spectroscopy and Ab-Initio Simulations. *Angewandte Chemie - International Edition*, **2020**, 59, 21728-21735	16.4	10

87	Revealing the Magnesium-Storage Mechanism in Mesoporous Bismuth via Spectroscopy and Ab-Initio Simulations. *Angewandte Chemie*, **2020**, 132, 21912-21919	3.6	3
86	Atomic-Layer-Deposited Amorphous MoS2 for Durable and Flexible Li□O2 Batteries. *Small Methods*, **2020**, 4, 1900274	12.8	34
85	Targeted Synergy between Adjacent Co Atoms on Graphene Oxide as an Efficient New Electrocatalyst for Li□O2 Batteries. *Advanced Functional Materials*, **2019**, 29, 1904206	15.6	49
84	Revealing the Origin of Improved Reversible Capacity of Dual-Shell Bismuth Boxes Anode for Potassium-Ion Batteries. *Matter*, **2019**, 1, 1681-1693	12.7	62
83	An Electrolytic Zn□MnO2 Battery for High-Voltage and Scalable Energy Storage. *Angewandte Chemie*, **2019**, 131, 7905-7910	3.6	49
82	An Electrolytic Zn-MnO Battery for High-Voltage and Scalable Energy Storage. *Angewandte Chemie - International Edition*, **2019**, 58, 7823-7828	16.4	464
81	Multi-shell hollow structured Sb2S3 for sodium-ion batteries with enhanced energy density. *Nano Energy*, **2019**, 60, 591-599	17.1	100
80	Vanadate-Based Materials for Li-Ion Batteries: The Search for Anodes for Practical Applications. *Advanced Energy Materials*, **2019**, 9, 1803324	21.8	113
79	Hierarchical vertical graphene nanotube arrays via universal carbon plasma processing strategy: A platform for high-rate performance battery electrodes. *Energy Storage Materials*, **2019**, 18, 462-469	19.4	9
78	Intercalation Pseudocapacitive Behavior Powers Aqueous Batteries. *CheM*, **2019**, 5, 1359-1361	16.2	66
77	Vanadium Pentoxide for Li-Ion Storage. *Springer Theses*, **2019**, 29-50	0.1	1
76	Vanadium Dioxide for Li- and Na-Ion Storage. *Springer Theses*, **2019**, 51-73	0.1	
75	Na3(VO)2(PO4)2F Array for Cathode of Na-Ion Battery. *Springer Theses*, **2019**, 75-91	0.1	
74	Ag Embedded Li3VO4 as Superior Anode for Li-Ion Batteries. *Journal of the Electrochemical Society*, **2019**, 166, A5295-A5300	3.9	12
73	SnS Array for Anode of Na-Ion Battery. *Springer Theses*, **2019**, 93-115	0.1	
72	Intercalation Na-ion storage in two-dimensional MoS2-xSex and capacity enhancement by selenium substitution. *Energy Storage Materials*, **2018**, 14, 136-142	19.4	72
71	Nanoengineering of 2D tin sulfide nanoflake arrays incorporated on polyaniline nanofibers with boosted capacitive behavior. *2D Materials*, **2018**, 5, 031005	5.9	15
70	High-rate and ultra-stable Na-ion storage for Ni3S2 nanoarrays via self-adaptive pseudocapacitance. *Electrochimica Acta*, **2018**, 265, 709-716	6.7	63

69	In Situ Grown Epitaxial Heterojunction Exhibits High-Performance Electrocatalytic Water Splitting. *Advanced Materials*, **2018**, 30, e1705516	24	273
68	Flexible Quasi-Solid-State Sodium-Ion Capacitors Developed Using 2D Metal□Organic-Framework Array as Reactor. *Advanced Energy Materials*, **2018**, 8, 1702769	21.8	163
67	Confining Sulfur in Integrated Composite Scaffold with Highly Porous Carbon Fibers/Vanadium Nitride Arrays for High-Performance Lithium□Sulfur Batteries. *Advanced Functional Materials*, **2018**, 28, 1706391	15.6	258
66	TMD-based highly efficient electrocatalysts developed by combined computational and experimental approaches. *Chemical Society Reviews*, **2018**, 47, 4332-4356	58.5	154
65	Sodium Vanadium Fluorophosphates (NVOPF) Array Cathode Designed for High-Rate Full Sodium Ion Storage Device. *Advanced Energy Materials*, **2018**, 8, 1800058	21.8	124
64	Theoretical calculation and experimental verification of Zn3V3O8 as an insertion type anode for LIBs. *Journal of Alloys and Compounds*, **2018**, 730, 228-233	5.7	13
63	Partial Nitridation-Induced Electrochemistry Enhancement of Ternary Oxide Nanosheets for Fiber Energy Storage Device. *Advanced Energy Materials*, **2018**, 8, 1800685	21.8	54
62	Recent Advances in Zn-Ion Batteries. *Advanced Functional Materials*, **2018**, 28, 1802564	15.6	981
61	Design rules of heteroatom-doped graphene to achieve high performance lithium-sulfur batteries: Both strong anchoring and catalysing based on first principles calculation. *Journal of Colloid and Interface Science*, **2018**, 529, 426-431	9.3	33
60	Vertical graphene/Ti2Nb10O29/hydrogen molybdenum bronze composite arrays for enhanced lithium ion storage. *Energy Storage Materials*, **2018**, 12, 137-144	19.4	93
59	Self-adaptive electrochemical reconstruction boosted exceptional Li+ ion storage in a Cu3P@C anode. *Journal of Materials Chemistry A*, **2018**, 6, 18821-18826	13	48
58	C-Plasma of Hierarchical Graphene Survives SnS Bundles for Ultrastable and High Volumetric Na-Ion Storage. *Advanced Materials*, **2018**, 30, e1804833	24	98
57	Interface Synergistic Effect from Layered Metal Sulfides of MoS2/SnS2 van der Waals Heterojunction with Enhanced Li-Ion Storage Performance. *Journal of Physical Chemistry C*, **2018**, 122, 24600-24608	3.8	22
56	A High-Rate and Stable Quasi-Solid-State Zinc-Ion Battery with Novel 2D Layered Zinc Orthovanadate Array. *Advanced Materials*, **2018**, 30, e1803181	24	389
55	Rapid Pseudocapacitive Sodium-Ion Response Induced by 2D Ultrathin Tin Monoxide Nanoarrays. *Advanced Functional Materials*, **2017**, 27, 1606232	15.6	81
54	Self-branched □MnO2/□MnO2 heterojunction nanowires with enhanced pseudocapacitance. *Materials Horizons*, **2017**, 4, 415-422	14.4	89
53	Is borophene a suitable anode material for sodium ion battery?. *Journal of Alloys and Compounds*, **2017**, 704, 152-159	5.7	44
52	Recent progress in surface coating of layered LiNi x Co y Mn z O 2 for lithium-ion batteries. *Materials Research Bulletin*, **2017**, 96, 491-502	5.1	76

51	Phase evolution of lithium intercalation dynamics in 2H-MoS. *Nanoscale*, **2017**, 9, 7533-7540	7.7	58
50	Graphene nanowires anchored to 3D graphene foam via self-assembly for high performance Li and Na ion storage. *Nano Energy*, **2017**, 37, 108-117	17.1	128
49	Ultrathin MoSe@N-doped carbon composite nanospheres for stable Na-ion storage. *Nanotechnology*, **2017**, 28, 42LT01	3.4	43
48	Nonaqueous Hybrid Lithium-Ion and Sodium-Ion Capacitors. *Advanced Materials*, **2017**, 29, 1702093	24	541
47	Amorphous GaN@Cu Freestanding Electrode for High-Performance Li-Ion Batteries. *Advanced Functional Materials*, **2017**, 27, 1701808	15.6	37
46	Toward greener lithium-ion batteries: Aqueous binder-based LiNi0.4Co0.2Mn0.4O2 cathode material with superior electrochemical performance. *Journal of Power Sources*, **2017**, 372, 180-187	8.9	44
45	1D nanobar-like LiNi0.4Co0.2Mn0.4O2 as a stable cathode material for lithium-ion batteries with superior long-term capacity retention and high rate capability. *Journal of Materials Chemistry A*, **2017**, 5, 15669-15675	13	43
44	Borophene as Efficient Sulfur Hosts for Lithium−Sulfur Batteries: Suppressing Shuttle Effect and Improving Conductivity. *Journal of Physical Chemistry C*, **2017**, 121, 15549-15555	3.8	74
43	Graphene quantum dots-shielded Na3(VO)2(PO4)2F@C nanocuboids as robust cathode for Na-ion battery. *Energy Storage Materials*, **2016**, 5, 198-204	19.4	61
42	Array of nanosheets render ultrafast and high-capacity Na-ion storage by tunable pseudocapacitance. *Nature Communications*, **2016**, 7, 12122	17.4	990
41	Hierarchical Porous LiNi1/3Co1/3Mn1/3O2 Nano-/Micro Spherical Cathode Material: Minimized Cation Mixing and Improved Li(+) Mobility for Enhanced Electrochemical Performance. *Scientific Reports*, **2016**, 6, 25771	4.9	122
40	Pseudocapacitive Na-Ion Storage Boosts High Rate and Areal Capacity of Self-Branched 2D Layered Metal Chalcogenide Nanoarrays. *ACS Nano*, **2016**, 10, 10211-10219	16.7	702
39	Large size nitrogen-doped graphene-coated graphite for high performance lithium-ion battery anode. *RSC Advances*, **2016**, 6, 104010-104015	3.7	10
38	Confined Fe2O3 Nanoparticles on Graphite Foam as High-Rate and Stable Lithium-Ion Battery Anode. *Particle and Particle Systems Characterization*, **2016**, 33, 487-492	3.1	29
37	Refined Sulfur Nanoparticles Immobilized in Metal-Organic Polyhedron as Stable Cathodes for Li-S Battery. *ACS Applied Materials & Interfaces*, **2016**, 8, 14328-33	9.5	38
36	MoS2 nanosheets decorated Ni3S2@MoS2 coaxial nanofibers: Constructing an ideal heterostructure for enhanced Na-ion storage. *Nano Energy*, **2016**, 20, 1-10	17.1	161
35	Generic Synthesis of Carbon Nanotube Branches on Metal Oxide Arrays Exhibiting Stable High-Rate and Long-Cycle Sodium-Ion Storage. *Small*, **2016**, 12, 3048-58	11	377
34	Integrated Photo-Supercapacitor Based on PEDOT Modified Printable Perovskite Solar Cell. *Advanced Materials Technologies*, **2016**, 1, 1600074	6.8	82

33	A 2.0 V capacitive device derived from shape-preserved metal nitride nanorods. *Nano Energy*, **2016**, 26, 1-6	17.1	23
32	Ultrafast-Charging Supercapacitors Based on Corn-Like Titanium Nitride Nanostructures. *Advanced Science*, **2016**, 3, 1500299	13.6	132
31	MoS2 architectures supported on graphene foam/carbon nanotube hybrid films: highly integrated frameworks with ideal contact for superior lithium storage. *Journal of Materials Chemistry A*, **2015**, 3, 17534-17543	13	47
30	Tubular TiC fibre nanostructures as supercapacitor electrode materials with stable cycling life and wide-temperature performance. *Energy and Environmental Science*, **2015**, 8, 1559-1568	35.4	188
29	Heterogeneous Nanostructures for Sodium Ion Batteries and Supercapacitors. *ChemNanoMat*, **2015** , 1, 458-476	3.5	25
28	A low-cost and one-step synthesis of N-doped monolithic quasi-graphene films with porous carbon frameworks for Li-ion batteries. *Nano Energy*, **2015**, 17, 43-51	17.1	68
27	Graphene quantum dots coated VO2 arrays for highly durable electrodes for Li and Na ion batteries. *Nano Letters*, **2015**, 15, 565-73	11.5	417
26	Novel Metal@Carbon Spheres Core–Shell Arrays by Controlled Self-Assembly of Carbon Nanospheres: A Stable and Flexible Supercapacitor Electrode. *Advanced Energy Materials*, **2015**, 5, 1401709	21.8	129
25	VO2 nanoflake arrays for supercapacitor and Li-ion battery electrodes: performance enhancement by hydrogen molybdenum bronze as an efficient shell material. *Materials Horizons*, **2015**, 2, 237-244	14.4	142
24	The roles of lithium-philic giant nitrogen-doped graphene in protecting micron-sized silicon anode from fading. *Scientific Reports*, **2015**, 5, 15665	4.9	38
23	All Metal Nitrides Solid-State Asymmetric Supercapacitors. *Advanced Materials*, **2015**, 27, 4566-71	24	313
22	Enhanced Lithium Storage Performance of CuO Nanowires by Coating of Graphene Quantum Dots. *Advanced Materials Interfaces*, **2015**, 2, 1400499	4.6	80
21	Surfactant-assisted encapsulation of uniform SnO 2 nanoparticles in graphene layers for high-performance Li-storage. *2D Materials*, **2015**, 2, 014005	5.9	15
20	TiO2 nanotube @ SnO2 nanoflake core–branch arrays for lithium-ion battery anode. *Nano Energy*, **2014**, 4, 105-112	17.1	151
19	Ni3S2@MoS2 core/shell nanorod arrays on Ni foam for high-performance electrochemical energy storage. *Nano Energy*, **2014**, 7, 151-160	17.1	214
18	Microwave-assisted production of giant graphene sheets for high performance energy storage applications. *Journal of Materials Chemistry A*, **2014**, 2, 12166-12170	13	30
17	Hollow nickel nanocorn arrays as three-dimensional and conductive support for metal oxides to boost supercapacitive performance. *Nanoscale*, **2014**, 6, 5691-7	7.7	39
16	Effects of Co Substitution for Ni on Microstructures and Electrochemical Properties of LaNi3.8 Hydrogen Storage Alloys. *Rare Metal Materials and Engineering*, **2014**, 43, 519-524		4

15	Self-assembly of honeycomb-like MoS2 nanoarchitectures anchored into graphene foam for enhanced lithium-ion storage. *Advanced Materials*, **2014**, 26, 7162-9	24	373
14	Porous □Fe2O3 nanorods supported on carbon nanotubes-graphene foam as superior anode for lithium ion batteries. *Nano Energy*, **2014**, 9, 364-372	17.1	211
13	A new type of porous graphite foams and their integrated composites with oxide/polymer core/shell nanowires for supercapacitors: structural design, fabrication, and full supercapacitor demonstrations. *Nano Letters*, **2014**, 14, 1651-8	11.5	395
12	A V2O5/conductive-polymer core/shell nanobelt array on three-dimensional graphite foam: a high-rate, ultrastable, and freestanding cathode for lithium-ion batteries. *Advanced Materials*, **2014**, 26, 5794-800	24	400
11	Three-dimensional graphene and their integrated electrodes. *Nano Today*, **2014**, 9, 785-807	17.9	228
10	Solution synthesis of metal oxides for electrochemical energy storage applications. *Nanoscale*, **2014**, 6, 5008-48	7.7	321
9	Controllable growth of conducting polymers shell for constructing high-quality organic/inorganic core/shell nanostructures and their optical-electrochemical properties. *Nano Letters*, **2013**, 13, 4562-8	11.5	177
8	Influence factors of capacity loss after short-time standing of metal-hydride electrode and its EIS model. *Journal of Rare Earths*, **2013**, 31, 772-777	3.7	2
7	Repeated microwave-assisted exfoliation of expandable graphite for the preparation of large scale and high quality multi-layer graphene. *RSC Advances*, **2013**, 3, 11601	3.7	30
6	Steep capacity loss of discharged state metal-hydride electrode and its mechanism. *Electrochimica Acta*, **2012**, 66, 22-27	6.7	9
5	Composition optimization and electrochemical characteristics of Co-free Fe-containing AB5-type hydrogen storage alloys through uniform design. *Journal of Rare Earths*, **2012**, 30, 361-366	3.7	10
4	Improvement in high-temperature performance of Co-free high-Fe AB5-type hydrogen storage alloys. *International Journal of Hydrogen Energy*, **2012**, 37, 12375-12383	6.7	34
3	Microstructures and electrochemical properties of LaNi3.8□Mnx hydrogen storage alloys. *Electrochimica Acta*, **2011**, 58, 668-673	6.7	11
2	The origin of capacity fluctuation and rescue of dead Mn-based Zn□n batteries: a Mn-based competitive capacity evolution protocol. *Energy and Environmental Science*,	35.4	15
1	Energetic Aqueous Batteries. *Advanced Energy Materials*,2201074	21.8	6