Zhong-Shuai Wu

List of Publications by Year in Descending Order

214 papers	30,317 citations	68 h-index	173 g-index
234 ext. papers	34,701 ext. citations	14.3 avg, IF	7.53 L-index

#	Paper	IF	Citations
214	Phosphorus doping and phosphates coating for nickel molybdate/nickel molybdate hydrate enabling efficient overall water splitting. *Journal of Colloid and Interface Science*, **2022**, 606, 384-392	9.3	3
213	A safe, low-cost and high-efficiency presodiation strategy for pouch-type sodium-ion capacitors with high energy density. *Journal of Energy Chemistry*, **2022**, 64, 442-450	12	13
212	K-Functionalized Carbon Quantum Dots-Induced Interface Assembly of Carbon Nanocages for Ultrastable Potassium Storage Performance.. *Small Methods*, **2022**, e2101627	12.8	0
211	2D Cu2□x Se@graphene multifunctional interlayer boosting polysulfide rapid conversion and uniform Li2S nucleation for high performance Li□S batteries. *2D Materials*, **2022**, 9, 025028	5.9	
210	1.6□V high-voltage aqueous symmetric micro-pseudocapacitors based on two-dimensional polypyrrole/graphene nanosheets. *Carbon*, **2022**, 194, 240-247	10.4	0
209	Digital Microscale Electrochemical Energy Storage Devices for a Fully Connected and Intelligent World. *ACS Energy Letters*, **2022**, 7, 267-281	20.1	3
208	Rapid fabrication of high-quality few-layer graphene through gel-phase electrochemical exfoliation of graphite for high-energy-density ionogel-based micro-supercapacitors. *Carbon*, **2022**, 196, 203-212	10.4	2
207	Multi-Layer Printable Lithium Ion Micro-Batteries with Remarkable Areal Energy Density and Flexibility for Wearable Smart Electronics. *Small*, **2021**, e2104506	11	2
206	Ultrahigh-rate and high-frequency MXene micro-supercapacitors for kHz AC line-filtering. *Journal of Energy Chemistry*, **2021**, 69, 1-1	12	2
205	Recent advances in micro-supercapacitors for AC line-filtering performance: From fundamental models to emerging applications. *EScience*, **2021**,		5
204	Recent Progress on Two-Dimensional Materials. *Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica*, **2021**, 2108017-0	3.8	69
203	□MnO/MWCNTs as an electrocatalyst for rechargeable relatively closed system Li-O batteries. *Chemical Communications*, **2021**, 57, 11823-11826	5.8	1
202	In Situ Modulation of A-Site Vacancies in LaMnO Perovskite for Surface Lattice Oxygen Activation and Boosted Redox Reactions. *Angewandte Chemie - International Edition*, **2021**, 60, 26747-26754	16.4	13
201	Scalable Production of Freestanding Few-Layer □Borophene Single Crystalline Sheets as Efficient Electrocatalysts for Lithium-Sulfur Batteries. *ACS Nano*, **2021**,	16.7	5
200	Operando surface science methodology reveals surface effect in charge storage electrodes. *National Science Review*, **2021**, 8, nwaa289	10.8	6
199	Electrochemical impedance spectroscopy study of lithium-ion capacitors: Modeling and capacity fading mechanism. *Journal of Power Sources*, **2021**, 488, 229454	8.9	17
198	In Situ and Operando Characterizations of 2D Materials in Electrochemical Energy Storage Devices. *Small Science*, **2021**, 1, 2000076		23

197	High-Voltage Potassium Ion Micro-Supercapacitors with Extraordinary Volumetric Energy Density for Wearable Pressure Sensor System. *Advanced Energy Materials*, **2021**, 11, 2003835	21.8	20
196	Aqueous MXene/PH1000 Hybrid Inks for Inkjet-Printing Micro-Supercapacitors with Unprecedented Volumetric Capacitance and Modular Self-Powered Microelectronics. *Advanced Energy Materials*, **2021**, 11, 2100746	21.8	18
195	In Situ and Operando Characterizations of 2D Materials in Electrochemical Energy Storage Devices. *Small Science*, **2021**, 1, 2170010		3
194	High-voltage aqueous planar symmetric sodium ion micro-batteries with superior performance at low-temperature of −40 °C. *Nano Energy*, **2021**, 82, 105688	17.1	12
193	Interfacial Engineering of Bifunctional Niobium (V)-Based Heterostructure Nanosheet Toward High Efficiency Lean-Electrolyte Lithium–Sulfur Full Batteries. *Advanced Functional Materials*, **2021**, 31, 2102314	15.6	24
192	Micro-Supercapacitors: High-Voltage Potassium Ion Micro-Supercapacitors with Extraordinary Volumetric Energy Density for Wearable Pressure Sensor System (Adv. Energy Mater. 17/2021). *Advanced Energy Materials*, **2021**, 11, 2170065	21.8	
191	Oxygen defect enriched (NH4)2V10O25·8H2O nanosheets for superior aqueous zinc-ion batteries. *Nano Energy*, **2021**, 84, 105876	17.1	59
190	Manipulating Crystallographic Orientation of Zinc Deposition for Dendrite-free Zinc Ion Batteries. *Advanced Energy Materials*, **2021**, 11, 2101299	21.8	77
189	Micro-Supercapacitors: Aqueous MXene/PH1000 Hybrid Inks for Inkjet-Printing Micro-Supercapacitors with Unprecedented Volumetric Capacitance and Modular Self-Powered Microelectronics (Adv. Energy Mater. 23/2021). *Advanced Energy Materials*, **2021**, 11, 2170088	21.8	0
188	Tetrabutylammonium-Intercalated 1T-MoS2 Nanosheets with Expanded Interlayer Spacing Vertically Coupled on 2D Delaminated MXene for High-Performance Lithium-Ion Capacitors. *Advanced Functional Materials*, **2021**, 31, 2104286	15.6	29
187	A perspective on graphene for supercapacitors: Current status and future challenges. *Journal of Energy Chemistry*, **2021**, 53, 354-357	12	17
186	Recent advances in carbon nanostructures prepared from carbon dioxide for high-performance supercapacitors. *Journal of Energy Chemistry*, **2021**, 54, 352-367	12	44
185	Lignin derived hierarchical porous carbon with extremely suppressed polyselenide shuttling for high-capacity and long-cycle-life lithium–selenium batteries. *Journal of Energy Chemistry*, **2021**, 55, 476-483	12	11
184	Nitrogen-doped holey graphene nanoscrolls for high-energy and high-power supercapacitors. *Chinese Chemical Letters*, **2021**, 32, 914-917	8.1	5
183	A General Synthetic Strategy toward Highly Doped Pyridinic Nitrogen-Rich Carbons. *Advanced Functional Materials*, **2021**, 31, 2006076	15.6	12
182	Pyridinic nitrogen enriched porous carbon derived from bimetal organic frameworks for high capacity zinc ion hybrid capacitors with remarkable rate capability. *Journal of Energy Chemistry*, **2021**, 56, 404-411	12	24
181	Toward high-performance and flexible all-solid-state micro-supercapacitors: MOF bulk vs. MOF nanosheets. *Chemical Engineering Journal*, **2021**, 413, 127520	14.7	15
180	Photopolymerized Gel Electrolyte with Unprecedented Room-Temperature Ionic Conductivity for High-Energy-Density Solid-State Sodium Metal Batteries. *Advanced Energy Materials*, **2021**, 11, 2002930	21.8	21

179	Two-dimensional Boron Nitride for Electronics and Energy Applications. *Energy and Environmental Materials*, **2021**,	13	1
178	Recent Advances on Carbon-Based Materials for High Performance Lithium-Ion Capacitors. *Batteries and Supercaps*, **2021**, 4, 407-428	5.6	8
177	An intrinsically flexible phase change film for wearable thermal managements. *Energy Storage Materials*, **2021**, 34, 508-514	19.4	51
176	Scalable and fast fabrication of graphene integrated micro-supercapacitors with remarkable volumetric capacitance and flexibility through continuous centrifugal coating. *Journal of Energy Chemistry*, **2021**, 52, 284-290	12	15
175	A high-performance rocking-chair lithium-ion battery-supercapacitor hybrid device boosted by doubly matched capacity and kinetics of the faradaic electrodes. *Energy and Environmental Science*, **2021**, 14, 2269-2277	35.4	18
174	Solid-state integrated micro-supercapacitor array construction with low-cost porous biochar. *Materials Chemistry Frontiers*, **2021**, 5, 4772-4779	7.8	2
173	Engineering nanoreactors for metal□halcogen batteries. *Energy and Environmental Science*, **2021**, 14, 540-575	35.4	26
172	Multitasking MXene Inks Enable High-Performance Printable Microelectrochemical Energy Storage Devices for All-Flexible Self-Powered Integrated Systems. *Advanced Materials*, **2021**, 33, e2005449	24	64
171	A three-dimensional polyoxometalate/graphene aerogel as a highly efficient and recyclable absorbent for oil/water separation. *New Carbon Materials*, **2021**, 36, 189-197	4.4	7
170	Aqueous high-voltage all 3D-printed micro-supercapacitors with ultrahigh areal capacitance and energy density. *Journal of Energy Chemistry*, **2021**,	12	6
169	Nitrogen-enriched graphene framework from a large-scale magnesiothermic conversion of CO2 with synergistic kinetics for high-power lithium-ion capacitors. *NPG Asia Materials*, **2021**, 13,	10.3	5
168	Ink formulation, scalable applications and challenging perspectives of screen printing for emerging printed microelectronics. *Journal of Energy Chemistry*, **2021**,	12	9
167	Recent Advances in Interface Engineering and Architecture Design of Air-Stable and Water-Resistant Lithium Metal Anodes. *Energy & Fuels*, **2021**, 35, 12902-12920	4.1	3
166	Ultrarapid synthesis Ni-Cu bifunctional electrocatalyst by self-etching electrodeposition for high-performance water splitting reaction. *Applied Surface Science*, **2021**, 561, 150030	6.7	4
165	Advanced design of cathodes and interlayers for high-performance lithium-selenium batteries. *SusMat*, **2021**, 1, 393-412		5
164	Room-temperature fast assembly of 3D macroscopically porous graphene frameworks for binder-free compact supercapacitors with high gravimetric and volumetric capacitances. *Journal of Energy Chemistry*, **2021**, 61, 23-28	12	12
163	Achieving stable Na metal cycling via polydopamine/multilayer graphene coating of a polypropylene separator. *Nature Communications*, **2021**, 12, 5786	17.4	9
162	Scalable fabrication of in-plane microscale self-powered integrated systems for fast-response and highly selective dual-channel gas detection. *Nano Energy*, **2021**, 88, 106253	17.1	4

161	Tailoring the defects of two-dimensional borocarbonitride nanomesh for high energy density micro-supercapacitor. *Energy Storage Materials*, **2021**, 42, 430-437	19.4	3
160	Two-dimensional materials and their derivatives for high performance phase change materials: emerging trends and challenges. *Energy Storage Materials*, **2021**, 42, 845-870	19.4	9
159	General synthesis of hollow mesoporous conducting polymers by dual-colloid interface co-assembly for high-energy-density micro-supercapacitors. *Journal of Energy Chemistry*, **2021**, 62, 145-152	12	8
158	Strongly coupled tungsten oxide/carbide heterogeneous hybrid for ultrastable aqueous rocking-chair zinc-ion batteries. *Chemical Engineering Journal*, **2021**, 426, 131893	14.7	11
157	Sodium Ion Microscale Electrochemical Energy Storage Device: Present Status and Future Perspective. *Small Structures*, **2020**, 1, 2070003	8.7	
156	Lithium–Sulfur Batteries: Molecular-Level Design of Pyrrhotite Electrocatalyst Decorated Hierarchical Porous Carbon Spheres as Nanoreactors for Lithium–Sulfur Batteries (Adv. Energy Mater. 20/2020). *Advanced Energy Materials*, **2020**, 10, 2070092	21.8	5
155	3D Flexible, Conductive, and Recyclable TiCT MXene-Melamine Foam for High-Areal-Capacity and Long-Lifetime Alkali-Metal Anode. *ACS Nano*, **2020**, 14, 8678-8688	16.7	92
154	Layer-by-layer stacked amorphous V2O5/Graphene 2D heterostructures with strong-coupling effect for high-capacity aqueous zinc-ion batteries with ultra-long cycle life. *Energy Storage Materials*, **2020**, 31, 156-163	19.4	41
153	Recent Advancements and Perspective of High-Performance Printed Power Sources with Multiple Form Factors. *Electrochemical Energy Reviews*, **2020**, 3, 581-612	29.3	12
152	MXene for energy storage: present status and future perspectives. *JPhys Energy*, **2020**, 2, 032004	4.9	25
151	Zinc-Ion Batteries: 2D Amorphous V2O5/Graphene Heterostructures for High-Safety Aqueous Zn-Ion Batteries with Unprecedented Capacity and Ultrahigh Rate Capability (Adv. Energy Mater. 22/2020). *Advanced Energy Materials*, **2020**, 10, 2070100	21.8	2
150	Sodium Ion Batteries: Toward High Energy Density All Solid-State Sodium Batteries with Excellent Flexibility (Adv. Energy Mater. 12/2020). *Advanced Energy Materials*, **2020**, 10, 2070055	21.8	0
149	The Chemistry and Promising Applications of Graphene and Porous Graphene Materials. *Advanced Functional Materials*, **2020**, 30, 1909035	15.6	79
148	A Two-Dimensional Mesoporous Polypyrrole–Graphene Oxide Heterostructure as a Dual-Functional Ion Redistributor for Dendrite-Free Lithium Metal Anodes. *Angewandte Chemie*, **2020**, 132, 12245-12251	3.6	8
147	A Two-Dimensional Mesoporous Polypyrrole-Graphene Oxide Heterostructure as a Dual-Functional Ion Redistributor for Dendrite-Free Lithium Metal Anodes. *Angewandte Chemie - International Edition*, **2020**, 59, 12147-12153	16.4	69
146	2D Amorphous V2O5/Graphene Heterostructures for High-Safety Aqueous Zn-Ion Batteries with Unprecedented Capacity and Ultrahigh Rate Capability. *Advanced Energy Materials*, **2020**, 10, 2000081	21.8	128
145	Hierarchical Ordered Dual-Mesoporous Polypyrrole/Graphene Nanosheets as Bi-Functional Active Materials for High-Performance Planar Integrated System of Micro-Supercapacitor and Gas Sensor. *Advanced Functional Materials*, **2020**, 30, 1909756	15.6	55
144	Design and construction of few-layer graphene cathode for ultrafast and high-capacity aluminum-ion batteries. *Energy Storage Materials*, **2020**, 27, 396-404	19.4	22

143	Ionogel-based sodium ion micro-batteries with a 3D Na-ion diffusion mechanism enable ultrahigh rate capability. *Energy and Environmental Science*, **2020**, 13, 821-829	35.4	47
142	Toward High Energy Density All Solid-State Sodium Batteries with Excellent Flexibility. *Advanced Energy Materials*, **2020**, 10, 1903698	21.8	67
141	High-Valence Nickel Single-Atom Catalysts Coordinated to Oxygen Sites for Extraordinarily Activating Oxygen Evolution Reaction. *Advanced Science*, **2020**, 7, 1903089	13.6	93
140	Bioinspired footed soft robot with unidirectional all-terrain mobility. *Materials Today*, **2020**, 35, 42-49	21.8	29
139	Functional integrated electromagnetic interference shielding in flexible micro-supercapacitors by cation-intercalation typed Ti3C2Tx MXene. *Nano Energy*, **2020**, 72, 104741	17.1	27
138	Targeted synthesis and reaction mechanism discussion of Mo2C based insertion-type electrodes for advanced pseudocapacitors. *Journal of Materials Chemistry A*, **2020**, 8, 7819-7827	13	5
137	Recent Advances and Promise of MXene-Based Nanostructures for High-Performance Metal Ion Batteries. *Advanced Functional Materials*, **2020**, 30, 2000706	15.6	93
136	Interfacial interaction-induced temperature-dependent mechanical property of graphene-PDMS nanocomposite. *Journal of Materials Science*, **2020**, 55, 1553-1561	4.3	9
135	Graphene encapsulated iron nitrides confined in 3D carbon nanosheet frameworks for high-rate lithium ion batteries. *Carbon*, **2020**, 159, 213-220	10.4	22
134	Recent Advances and Challenges of Two-Dimensional Materials for High-Energy and High-Power Lithium-Ion Capacitors. *Batteries and Supercaps*, **2020**, 3, 10-29	5.6	26
133	Substrate-Free and Shapeless Planar Micro-Supercapacitors. *Advanced Functional Materials*, **2020**, 30, 1908758	15.6	32
132	Rapid synthesis of dielectric tantalum-based oxynitrides. *Materials and Design*, **2020**, 187, 108416	8.1	3
131	Porous Graphene Materials: The Chemistry and Promising Applications of Graphene and Porous Graphene Materials (Adv. Funct. Mater. 41/2020). *Advanced Functional Materials*, **2020**, 30, 2070275	15.6	17
130	LithiumSulfur Batteries: Dual-Functional Atomic Zinc Decorated Hollow Carbon Nanoreactors for Kinetically Accelerated Polysulfides Conversion and Dendrite Free Lithium Sulfur Batteries (Adv. Energy Mater. 39/2020). *Advanced Energy Materials*, **2020**, 10, 2070162	21.8	1
129	Three-dimensional nitrogen doped hierarchically porous carbon aerogels with ultrahigh specific surface area for high-performance supercapacitors and flexible micro-supercapacitors. *Carbon*, **2020**, 168, 701-709	10.4	43
128	Micro-supercapacitors powered integrated system for flexible electronics. *Energy Storage Materials* , **2020**, 32, 402-417	19.4	21
127	Unraveling the Nature of Excellent Potassium Storage in Small-Molecule Se@Peapod-Like N-Doped Carbon Nanofibers. *Advanced Materials*, **2020**, 32, e2003879	24	47
126	Hybrid Nanostructures: Recent Advances and Promise of MXene-Based Nanostructures for High-Performance Metal Ion Batteries (Adv. Funct. Mater. 47/2020). *Advanced Functional Materials*, **2020**, 30, 2070310	15.6	3

125	NH Sensor Based on 2D Wormlike Polypyrrole/Graphene Heterostructures for a Self-Powered Integrated System. *ACS Applied Materials & Interfaces*, **2020**, 12, 38674-38681	9.5	17
124	Three dimensional Ti3C2 MXene nanoribbon frameworks with uniform potassiophilic sites for the dendrite-free potassium metal anodes. *Nanoscale Advances*, **2020**, 2, 4212-4219	5.1	20
123	Zinc based micro-electrochemical energy storage devices: Present status and future perspective. *EcoMat*, **2020**, 2, e12042	9.4	7
122	Recent advances and future perspectives of two-dimensional materials for rechargeable Li-O2 batteries. *Energy Storage Materials*, **2020**, 31, 470-491	19.4	17
121	2D intrinsically defective RuO2/Graphene heterostructures as All-pH efficient oxygen evolving electrocatalysts with unprecedented activity. *Nano Energy*, **2020**, 78, 105185	17.1	21
120	Dual-Functional Atomic Zinc Decorated Hollow Carbon Nanoreactors for Kinetically Accelerated Polysulfides Conversion and Dendrite Free Lithium Sulfur Batteries. *Advanced Energy Materials*, **2020**, 10, 2002271	21.8	67
119	Sodium Ion Microscale Electrochemical Energy Storage Device: Present Status and Future Perspective. *Small Structures*, **2020**, 1, 2000053	8.7	31
118	Boosting Li-S battery performance by an efficient polysulfide double-blocking strategy. *FlatChem*, **2020**, 24, 100209	5.1	2
117	Scalable fabrication of printed Zn//MnO planar micro-batteries with high volumetric energy density and exceptional safety. *National Science Review*, **2020**, 7, 64-72	10.8	80
116	A general bimetal-ion adsorption strategy to prepare nickel single atom catalysts anchored on graphene for efficient oxygen evolution reaction. *Journal of Energy Chemistry*, **2020**, 43, 52-57	12	51
115	Molecular-Level Design of Pyrrhotite Electrocatalyst Decorated Hierarchical Porous Carbon Spheres as Nanoreactors for Lithium–Sulfur Batteries. *Advanced Energy Materials*, **2020**, 10, 2000651	21.8	61
114	Rational design of MoS2 nanosheets decorated on mesoporous hollow carbon spheres as a dual-functional accelerator in sulfur cathode for advanced pouch-type Li–S batteries. *Journal of Energy Chemistry*, **2020**, 51, 262-271	12	32
113	One-Step Scalable Fabrication of Graphene-Integrated Micro-Supercapacitors with Remarkable Flexibility and Exceptional Performance Uniformity. *Advanced Functional Materials*, **2019**, 29, 1902860	15.6	64
112	The Promise and Challenge of Phosphorus-Based Composites as Anode Materials for Potassium-Ion Batteries. *Advanced Materials*, **2019**, 31, e1901414	24	105
111	A perspective on two-dimensional materials for planar micro-supercapacitors. *APL Materials*, **2019**, 7, 090902	5.7	18
110	Preparation and interface modification of Si3N4f/SiO2 composites. *Journal of Materials Science and Technology*, **2019**, 35, 2767-2771	9.1	2
109	Ultrahigh-voltage integrated micro-supercapacitors with designable shapes and superior flexibility. *Energy and Environmental Science*, **2019**, 12, 1534-1541	35.4	129
108	Screen-printing fabrication of high volumetric energy density micro-supercapacitors based on high-resolution thixotropic-ternary hybrid interdigital micro-electrodes. *Materials Chemistry Frontiers*, **2019**, 3, 626-635	7.8	24

107	Two-dimensional materials for advanced Li-S batteries. *Energy Storage Materials*, **2019**, 22, 284-310	19.4	69
106	The Road Towards Planar Microbatteries and Micro-Supercapacitors: From 2D to 3D Device Geometries. *Advanced Materials*, **2019**, 31, e1900583	24	92
105	Nitrogen-doped hierarchical porous carbon with ultrathin graphitic framework for superior lithium storage. *Applied Surface Science*, **2019**, 493, 177-184	6.7	5
104	General Interfacial Self-Assembly Engineering for Patterning Two-Dimensional Polymers with Cylindrical Mesopores on Graphene. *Angewandte Chemie - International Edition*, **2019**, 58, 10173-10178	16.4	53
103	General Interfacial Self-Assembly Engineering for Patterning Two-Dimensional Polymers with Cylindrical Mesopores on Graphene. *Angewandte Chemie*, **2019**, 131, 10279-10284	3.6	15
102	Ultrahigh Surface Area N-Doped Hierarchically Porous Carbon for Enhanced CO Capture and Electrochemical Energy Storage. *ChemSusChem*, **2019**, 12, 3541-3549	8.3	25
101	High-Energy-Density Hydrogen-Ion-Rocking-Chair Hybrid Supercapacitors Based on TiC T MXene and Carbon Nanotubes Mediated by Redox Active Molecule. *ACS Nano*, **2019**, 13, 6899-6905	16.7	82
100	Shape-tailorable high-energy asymmetric micro-supercapacitors based on plasma reduced and nitrogen-doped graphene oxide and MoO2 nanoparticles. *Journal of Materials Chemistry A*, **2019**, 7, 14328-14336	13	27
99	2D hierarchical yolk-shell heterostructures as advanced host-interlayer integrated electrode for enhanced Li-S batteries. *Journal of Energy Chemistry*, **2019**, 36, 64-73	12	29
98	Two-dimensional energy materials: Opportunities and perspectives. *Energy Storage Materials*, **2019**, 22, 15-17	19.4	8
97	High mass loading Ni-decorated Co9S8 with enhanced electrochemical performance for flexible quasi-solid-state asymmetric supercapacitors. *Journal of Power Sources*, **2019**, 423, 106-114	8.9	26
96	Ionic liquid pre-intercalated MXene films for ionogel-based flexible micro-supercapacitors with high volumetric energy density. *Journal of Materials Chemistry A*, **2019**, 7, 9478-9485	13	74
95	Graphene aerogel derived compact films for ultrafast and high-capacity aluminum ion batteries. *Energy Storage Materials*, **2019**, 23, 664-669	19.4	31
94	Free-standing integrated cathode derived from 3D graphene/carbon nanotube aerogels serving as binder-free sulfur host and interlayer for ultrahigh volumetric-energy-density lithium sulfur batteries. *Nano Energy*, **2019**, 60, 743-751	17.1	98
93	Sequential growth of hierarchical N-doped carbon-MoS2 nanocomposites with variable nanostructures. *Journal of Materials Chemistry A*, **2019**, 7, 6197-6204	13	16
92	All-Solid-State Planar Sodium-Ion Microcapacitors with Multidirectional Fast Ion Diffusion Pathways. *Advanced Science*, **2019**, 6, 1902147	13.6	23
91	Switchable Adhesion of Micropillar Adhesive on Rough Surfaces. *Small*, **2019**, 15, e1904248	11	40
90	The Synergetic Effect of Ni and Fe Bi-metal Single Atom Catalysts on Graphene for Highly Efficient Oxygen Evolution Reaction. *Frontiers in Materials*, **2019**, 6,	4	14

89	Reversible Adhesion via Light-Regulated Conformations of Rubber Chains. *ACS Applied Materials & Interfaces*, **2019**, 11, 46337-46343	9.5	11
88	Single-atom nickel confined nanotube superstructure as support for catalytic wet air oxidation of acetic acid. *Communications Chemistry*, **2019**, 2,	6.3	7
87	Conducting and Lithiophilic MXene/Graphene Framework for High-Capacity, Dendrite-Free Lithium-Metal Anodes. *ACS Nano*, **2019**, 13, 14308-14318	16.7	97
86	Potassium-Ion Batteries: The Promise and Challenge of Phosphorus-Based Composites as Anode Materials for Potassium-Ion Batteries (Adv. Mater. 50/2019). *Advanced Materials*, **2019**, 31, 1970354	24	1
85	Microscale Energy-Storage Devices: The Road Towards Planar Microbatteries and Micro-Supercapacitors: From 2D to 3D Device Geometries (Adv. Mater. 50/2019). *Advanced Materials*, **2019**, 31, 1970351	24	5
84	2D hybrid interlayer of electrochemically exfoliated graphene and Co(OH)2 nanosheet as a bi-functionalized polysulfide barrier for high-performance lithium□sulfur batteries. *JPhys Energy*, **2019**, 1, 015002	4.9	4
83	2D mesoporous MnO2 nanosheets for high-energy asymmetric micro-supercapacitors in water-in-salt gel electrolyte. *Energy Storage Materials*, **2019**, 18, 397-404	19.4	95
82	Additive-Free Nb2O5□TiO2 Hybrid Anode towards Low-Cost and Safe Lithium-Ion Batteries: A Green Electrode Material Produced in an Environmentally Friendly Process. *Batteries and Supercaps*, **2019**, 2, 160-167	5.6	4
81	Embedding Co3O4 nanoparticles into graphene nanoscrolls as anode for lithium ion batteries with superior capacity and outstanding cycling stability. *Progress in Natural Science: Materials International*, **2018**, 28, 212-217	3.6	8
80	All-MXene-Based Integrated Electrode Constructed by TiC Nanoribbon Framework Host and Nanosheet Interlayer for High-Energy-Density Li-S Batteries. *ACS Nano*, **2018**, 12, 2381-2388	16.7	258
79	Stretchable tandem micro-supercapacitors with high voltage output and exceptional mechanical robustness. *Energy Storage Materials*, **2018**, 13, 233-240	19.4	63
78	2D transition metal carbide MXene as a robust biosensing platform for enzyme immobilization and ultrasensitive detection of phenol. *Biosensors and Bioelectronics*, **2018**, 107, 69-75	11.8	153
77	All-solid-state high-energy planar hybrid micro-supercapacitors based on 2D VN nanosheets and Co(OH)2 nanoflowers. *Npj 2D Materials and Applications*, **2018**, 2,	8.8	47
76	Supercapacitors. *Chinese Chemical Letters*, **2018**, 29, 551-552	8.1	3
75	Mesoporous polypyrrole-based graphene nanosheets anchoring redox polyoxometalate for all-solid-state micro-supercapacitors with enhanced volumetric capacitance. *Science China Materials* , **2018**, 61, 233-242	7.1	37
74	Recent advances of graphene-based materials for high-performance and new-concept supercapacitors. *Journal of Energy Chemistry*, **2018**, 27, 25-42	12	95
73	All-solid-state planar integrated lithium ion micro-batteries with extraordinary flexibility and high-temperature performance. *Nano Energy*, **2018**, 51, 613-620	17.1	68
72	Recent advances in the preparation, characterization, and applications of two-dimensional heterostructures for energy storage and conversion. *Journal of Materials Chemistry A*, **2018**, 6, 21747-21784	13	62

71	Electrochemically Scalable Production of Fluorine-Modified Graphene for Flexible and High-Energy Ionogel-Based Microsupercapacitors. *Journal of the American Chemical Society*, **2018**, 140, 8198-8205	16.4	188
70	Conductive Microporous Covalent Triazine-Based Framework for High-Performance Electrochemical Capacitive Energy Storage. *Angewandte Chemie - International Edition*, **2018**, 57, 7992-7996	16.4	133
69	All-solid-state high-energy planar asymmetric supercapacitors based on all-in-one monolithic film using boron nitride nanosheets as separator. *Energy Storage Materials*, **2018**, 10, 24-31	19.4	50
68	Simplified fabrication of high areal capacitance all-solid-state micro-supercapacitors based on graphene and MnO2 nanosheets. *Chinese Chemical Letters*, **2018**, 29, 582-586	8.1	23
67	Synthesis of mesoporous Fe3Si aerogel as a photo-thermal material for highly efficient and stable corrosive-water evaporation. *Journal of Materials Chemistry A*, **2018**, 6, 23263-23269	13	17
66	All-solid-state flexible planar lithium ion micro-capacitors. *Energy and Environmental Science*, **2018**, 11, 2001-2009	35.4	121
65	2D holey cobalt sulfide nanosheets derived from metal-organic frameworks for high-rate sodium ion batteries with superior cyclability. *Journal of Materials Chemistry A*, **2018**, 6, 14324-14329	13	60
64	Supercapacitors: Stacked-Layer Heterostructure Films of 2D Thiophene Nanosheets and Graphene for High-Rate All-Solid-State Pseudocapacitors with Enhanced Volumetric Capacitance (Adv. Mater. 3/2017). *Advanced Materials*, **2017**, 29,	24	14
63	Arbitrary-Shaped Graphene-Based Planar Sandwich Supercapacitors on One Substrate with Enhanced Flexibility and Integration. *ACS Nano*, **2017**, 11, 2171-2179	16.7	103
62	Bottom-Up Fabrication of Sulfur-Doped Graphene Films Derived from Sulfur-Annulated Nanographene for Ultrahigh Volumetric Capacitance Micro-Supercapacitors. *Journal of the American Chemical Society*, **2017**, 139, 4506-4512	16.4	248
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