Patrice Simon

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Materials for electrochemical capacitors. Nature Materials, 2008, 7, 845-854.	27.5	14,090
2	Where Do Batteries End and Supercapacitors Begin?. Science, 2014, 343, 1210-1211.	12.6	4,605
3	Pseudocapacitive oxide materials for high-rate electrochemical energy storage. Energy and Environmental Science, 2014, 7, 1597.	30.8	4,223
4	Electrochemical Capacitors for Energy Management. Science, 2008, 321, 651-652.	12.6	4,116
5	High-rate electrochemical energy storage through Li+ intercalation pseudocapacitance. Nature Materials, 2013, 12, 518-522.	27.5	4,021
6	Anomalous Increase in Carbon Capacitance at Pore Sizes Less Than 1 Nanometer. Science, 2006, 313, 1760-1763.	12.6	3,404
7	Cation Intercalation and High Volumetric Capacitance of Two-Dimensional Titanium Carbide. Science, 2013, 341, 1502-1505.	12.6	3,329
8	Ultrahigh-power micrometre-sized supercapacitors based on onion-like carbon. Nature Nanotechnology, 2010, 5, 651-654.	31.5	2,451
9	Relation between the Ion Size and Pore Size for an Electric Double-Layer Capacitor. Journal of the American Chemical Society, 2008, 130, 2730-2731.	13.7	2,066
10	True Performance Metrics in Electrochemical Energy Storage. Science, 2011, 334, 917-918.	12.6	2,057
11	High rate capabilities Fe3O4-based Cu nano-architectured electrodes for lithium-ion battery applications. Nature Materials, 2006, 5, 567-573.	27.5	1,924
12	Electrochemical Characteristics and Impedance Spectroscopy Studies of Carbon-Carbon Supercapacitors. Journal of the Electrochemical Society, 2003, 150, A292.	2.9	1,680
13	Efficient storage mechanisms for building better supercapacitors. Nature Energy, 2016, 1, .	39.5	1,655
14	Ultra-high-rate pseudocapacitive energy storage in two-dimensional transition metal carbides. Nature Energy, 2017, 2, .	39.5	1,626
15	Energy applications of ionic liquids. Energy and Environmental Science, 2014, 7, 232-250.	30.8	1,455
16	Capacitive Energy Storage in Nanostructured Carbonâ€“Electrolyte Systems. Accounts of Chemical Research, 2013, 46, 1094-1103.	15.6	1,281
17	MXene: a promising transition metal carbide anode for lithium-ion batteries. Electrochemistry Communications, 2012, 16, 61-64.	4.7	1,252
18	Monolithic Carbide-Derived Carbon Films for Micro-Supercapacitors. Science, 2010, 328, 480-483.	12.6	1,206

#	ARTICLE	IF	CITATIONS
19	Perspectives for electrochemical capacitors and related devices. Nature Materials, 2020, 19, 1151-1163.	27.5	1,187
20	Studies and characterisations of various activated carbons used for carbon/carbon supercapacitors. Journal of Power Sources, 2001, 101, 109-116.	7.8	1,145
21	A general Lewis acidic etching route for preparing MXenes with enhanced electrochemical performance in non-aqueous electrolyte. Nature Materials, 2020, 19, 894-899.	27.5	870
22	On the molecular origin of supercapacitance in nanoporous carbon electrodes. Nature Materials, 2012, 11, 306-310.	27.5	861
23	Energy Storage Data Reporting in Perspectiveâ€"Guidelines for Interpreting the Performance of Electrochemical Energy Storage Systems. Advanced Energy Materials, 2019, 9, 1902007.	19.5	793
24	On-chip and freestanding elastic carbon films for micro-supercapacitors. Science, 2016, 351, 691-695.	12.6	623
25	Highly confined ions store charge more efficiently in supercapacitors. Nature Communications, 2013, 4, 2701.	12.8	570
26	Desolvation of Ions in Subnanometer Pores and Its Effect on Capacitance and Doubleâ€Layer Theory. Angewandte Chemie - International Edition, 2008, 47, 3392-3395.	13.8	569
27	High temperature carbonâ€"carbon supercapacitor using ionic liquid as electrolyte. Journal of Power Sources, 2007, 165, 922-927.	7.8	552
28	Long-term cycling behavior of asymmetric activated carbon/MnO2 aqueous electrochemical supercapacitor. Journal of Power Sources, 2007, 173, 633-641.	7.8	453
29	Elaboration of a microstructured inkjet-printed carbon electrochemical capacitor. Journal of Power Sources, 2010, 195, 1266-1269.	7.8	421
30	High capacitance of surface-modified 2D titanium carbide in acidic electrolyte. Electrochemistry Communications, 2014, 48, 118-122.	4.7	420
31	Nanoporous carbon for electrochemical capacitive energy storage. Chemical Society Reviews, 2020, 49, 3005-3039.	38.1	391
32	High-Rate, Long-Life Niâ€"Sn Nanostructured Electrodes for Lithium-Ion Batteries. Advanced Materials, 2007, 19, 1632-1635.	21.0	378
33	Modification of Al current collector surface by solâ€"gel deposit for carbonâ€"carbon supercapacitor applications. Electrochimica Acta, 2004, 49, 905-912.	5.2	377
34	Influences from solvents on charge storage in titanium carbide MXenes. Nature Energy, 2019, 4, 241-248.	39.5	363
35	Capacitive Energy Storage from â^'50 to 100 Â°C Using an Ionic Liquid Electrolyte. Journal of Physical Chemistry Letters, 2011, 2, 2396-2401.	4.6	361
36	3D Macroscopic Architectures from Selfâ€Assembled MXene Hydrogels. Advanced Functional Materials, 2019, 29, 1903960.	14.9	360

#	ARTICLE	IF	CITATIONS
37	Two-Dimensional Vanadium Carbide (MXene) as Positive Electrode for Sodium-Ion Capacitors. Journal of Physical Chemistry Letters, 2015, 6, 2305-2309.	4.6	358
38	Materials for supercapacitors: When Li-ion battery power is not enough. Materials Today, 2018, 21, 419-436.	14.2	335
39	A Non-Aqueous Asymmetric Cell with a Ti₂C-Based Two-Dimensional Negative Electrode. Journal of the Electrochemical Society, 2012, 159, A1368-A1373.	2.9	332
40	High power density electrodes for Carbon supercapacitor applications. Electrochimica Acta, 2005, 50, 4174-4181.	5.2	327
41	Polythiophene-based supercapacitors. Journal of Power Sources, 1999, 80, 142-148.	7.8	322
42	Outstanding performance of activated graphene based supercapacitors in ionic liquid electrolyte from âˆ’50 to 80Â°C. Nano Energy, 2013, 2, 403-411.	16.0	314
43	In situ NMR and electrochemical quartz crystal microbalance techniques reveal the structure of the electrical double layer in supercapacitors. Nature Materials, 2015, 14, 812-819.	27.5	296
44	Nanoarchitectured Grapheneâ€Based Supercapacitors for Nextâ€Generation Energyâ€Storage Applications. Chemistry - A European Journal, 2014, 20, 13838-13852.	3.3	274
45	Capacitance of Ti3C2Tx MXene in ionic liquid electrolyte. Journal of Power Sources, 2016, 326, 575-579.	7.8	250
46	New Materials and New Configurations for Advanced Electrochemical Capacitors. Electrochemical Society Interface, 2008, 17, 34-37.	0.4	249
47	Electrochemical Quartz Crystal Microbalance (EQCM) Study of Ion Dynamics in Nanoporous Carbons. Journal of the American Chemical Society, 2014, 136, 8722-8728.	13.7	248
48	Nanostructured Carbons: Double-Layer Capacitance and More. Electrochemical Society Interface, 2008, 17, 38-43.	0.4	246
49	Capacitance of two-dimensional titanium carbide (MXene) and MXene/carbon nanotube composites in organic electrolytes. Journal of Power Sources, 2016, 306, 510-515.	7.8	245
50	Electrochemical Kinetics of Nanostructured Nb₂O₅Electrodes. Journal of the Electrochemical Society, 2014, 161, A718-A725.	2.9	235
51	Charge storage mechanism in nanoporous carbons and its consequence for electrical double layer capacitors. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 3457-3467.	3.4	233
52	Microelectrode Study of Pore Size, Ion Size, and Solvent Effects on the Charge/Discharge Behavior of Microporous Carbons for Electrical Double-Layer Capacitors. Journal of the Electrochemical Society, 2009, 156, A7.	2.9	231
53	3D lithium ion batteriesâ€”from fundamentals to fabrication. Journal of Materials Chemistry, 2011, 21, 9876.	6.7	231
54	Self-Supported Three-Dimensional Nanoelectrodes for Microbattery Applications. Nano Letters, 2009, 9, 3230-3233.	9.1	226

#	Article	IF	Citations
55	Influence of carbon nanotubes addition on carbonâ€“carbon supercapacitor performances in organic electrolyte. Journal of Power Sources, 2005, 139, 371-378.	7.8	222
56	Simulating Supercapacitors: Can We Model Electrodes As Constant Charge Surfaces?. Journal of Physical Chemistry Letters, 2013, 4, 264-268.	4.6	220
57	Partial breaking of the Coulombic ordering of ionic liquids confined in carbon nanopores. Nature Materials, 2017, 16, 1225-1232.	27.5	219
58	On the origin of the extra capacity at low potential in materials for Li batteries reacting through conversion reaction. Electrochimica Acta, 2012, 61, 13-18.	5.2	214
59	Materials for electrochemical capacitors. , 2009, , 320-329.		205
60	On the Dynamics of Charging in Nanoporous Carbon-Based Supercapacitors. ACS Nano, 2014, 8, 1576-1583.	14.6	201
61	Cycling stability of a hybrid activated carbon//poly(3-methylthiophene) supercapacitor with N-butyl-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide ionic liquid as electrolyte. Electrochimica Acta, 2005, 50, 2233-2237.	5.2	186
62	NMR Study of Ion Dynamics and Charge Storage in Ionic Liquid Supercapacitors. Journal of the American Chemical Society, 2015, 137, 7231-7242.	13.7	182
63	Two-dimensional MXenes for electrochemical capacitor applications: Progress, challenges and perspectives. Energy Storage Materials, 2021, 35, 630-660.	18.0	182
64	Solvent effect on the ion adsorption from ionic liquid electrolyte into sub-nanometer carbon pores. Electrochimica Acta, 2009, 54, 7025-7032.	5.2	181
65	Two-Dimensional MXene with Controlled Interlayer Spacing for Electrochemical Energy Storage. ACS Nano, 2017, 11, 2393-2396.	14.6	178
66	Direct Laser Writing of Graphene Made from Chemical Vapor Deposition for Flexible, Integratable Microâ€Supercapacitors with Ultrahigh Power Output. Advanced Materials, 2018, 30, e1801384.	21.0	178
67	Activated Carbon/Conducting Polymer Hybrid Supercapacitors. Journal of the Electrochemical Society, 2003, 150, A645.	2.9	177
68	Increase in Capacitance by Subnanometer Pores in Carbon. ACS Energy Letters, 2016, 1, 1262-1265.	17.4	173
69	Continuous carbide-derived carbon films with high volumetric capacitance. Energy and Environmental Science, 2011, 4, 135-138.	30.8	168
70	Structure and Electrochemical Performance of Carbideâ€Derived Carbon Nanopowders. Advanced Functional Materials, 2013, 23, 1081-1089.	14.9	165
71	Qualitative Electrochemical Impedance Spectroscopy study of ion transport into sub-nanometer carbon pores in Electrochemical Double Layer Capacitor electrodes. Electrochimica Acta, 2010, 55, 7489-7494.	5.2	156
72	High rate capability pure Sn-based nano-architectured electrode assembly for rechargeable lithium batteries. Journal of Power Sources, 2009, 188, 578-582.	7.8	155

#	ARTICLE	IF	CITATIONS
73	Nanoarchitectured 3D Cathodes for Liâ€‘ion Microbatteries. Advanced Materials, 2010, 22, 4978-4981.	21.0	153
74	In Situ NMR Spectroscopy of Supercapacitors: Insight into the Charge Storage Mechanism. Journal of the American Chemical Society, 2013, 135, 18968-18980.	13.7	152
75	Confinement, Desolvation, And Electrosorption Effects on the Diffusion of Ions in Nanoporous Carbon Electrodes. Journal of the American Chemical Society, 2015, 137, 12627-12632.	13.7	152
76	Modifications of MXene layers for supercapacitors. Nano Energy, 2020, 73, 104734.	16.0	149
77	Real-Time NMR Studies of Electrochemical Double-Layer Capacitors. Journal of the American Chemical Society, 2011, 133, 19270-19273.	13.7	145
78	Electrode surface treatment and electrochemical impedance spectroscopy study on carbon/carbon supercapacitors. Applied Physics A: Materials Science and Processing, 2006, 82, 639-646.	2.3	144
79	Fast Charging Materials for High Power Applications. Advanced Energy Materials, 2020, 10, 2001128.	19.5	136
80	Lithium conducting solid electrolyte Li1.3Al0.3Ti1.7(PO4)3 obtained via solution chemistry. Journal of the European Ceramic Society, 2013, 33, 1145-1153.	5.7	135
81	Electrochemical and in-situ X-ray diffraction studies of Ti 3 C 2 T x MXene in ionic liquid electrolyte. Electrochemistry Communications, 2016, 72, 50-53.	4.7	134
82	TiO2 (B)/activated carbon non-aqueous hybrid system for energy storage. Journal of Power Sources, 2006, 158, 571-577.	7.8	133
83	Hard carbons derived from green phenolic resins for Na-ion batteries. Carbon, 2018, 139, 248-257.	10.3	131
84	Li4Ti5O12/poly(methyl)thiophene asymmetric hybrid electrochemical device. Journal of Power Sources, 2004, 125, 95-102.	7.8	130
85	Continuous transition from double-layer to Faradaic charge storage in confined electrolytes. Nature Energy, 2022, 7, 222-228.	39.5	130
86	Micro-supercapacitors from carbide derived carbon (CDC) films on silicon chips. Journal of Power Sources, 2013, 225, 240-244.	7.8	129
87	Unraveling the Charge Storage Mechanism of Ti₃C₂T<i>_{<i>x</i>}</i> MXene Electrode in Acidic Electrolyte. ACS Energy Letters, 2020, 5, 2873-2880.	17.4	129
88	Alkali Ions Preâ€‘intercalated Layered MnO₂ Nanosheet for Zincâ€‘ions Storage. Advanced Energy Materials, 2021, 11, 2101287.	19.5	120
89	Ultrafast chargeâ€“discharge characteristics of a nanosized coreâ€“shell structured LiFePO₄ material for hybrid supercapacitor applications. Energy and Environmental Science, 2016, 9, 2143-2151.	30.8	117
90	Electrochemical Kinetic Study of LiFePO4 Using Cavity Microelectrode. Journal of the Electrochemical Society, 2011, 158, A1090.	2.9	114

#	Article	IF	Citations
91	Graphene-like carbide derived carbon for high-power supercapacitors. Nano Energy, 2015, 12, 197-206.	16.0	114
92	A Nonaqueous Asymmetric Hybrid Li[sub 4]Ti[sub 5]O[sub 12]/Poly(fluorophenylthiophene) Energy Storage Device. Journal of the Electrochemical Society, 2002, 149, A302.	2.9	111
93	Electrochemical study of pseudocapacitive behavior of Ti3C2Tx MXene material in aqueous electrolytes. Energy Storage Materials, 2019, 18, 456-461.	18.0	111
94	On-chip micro-supercapacitors for operation in a wide temperature range. Electrochemistry Communications, 2013, 36, 53-56.	4.7	110
95	Hybrid Supercapacitors Based on Activated Carbons and Conducting Polymers. Journal of the Electrochemical Society, 2001, 148, A1130.	2.9	109
96	Capacitive deionization concept based on suspension electrodes without ion exchange membranes. Electrochemistry Communications, 2014, 43, 18-21.	4.7	109
97	Exfoliation and Delamination of Ti₃C₂T_{<i>x</i>} MXene Prepared <i>via</i> Molten Salt Etching Route. ACS Nano, 2022, 16, 111-118.	14.6	107
98	Non-Aqueous Li-Based Redox Flow Batteries. Journal of the Electrochemical Society, 2012, 159, A1360-A1367.	2.9	103
99	Anionic redox chemistry in Na-rich Na 2 Ru 1â^'y Sn y O 3 positive electrode material for Na-ion batteries. Electrochemistry Communications, 2015, 53, 29-32.	4.7	103
100	Interlayer gap widened Î±-phase molybdenum trioxide as high-rate anodes for dual-ion-intercalation energy storage devices. Nature Communications, 2020, 11, 1348.	12.8	100
101	Activated carbonâ€"carbon nanotube composite porous film for supercapacitor applications. Materials Research Bulletin, 2006, 41, 478-484.	5.2	99
102	Ion counting in supercapacitor electrodes using NMR spectroscopy. Faraday Discussions, 2014, 176, 49-68.	3.2	95
103	A SAXS outlook on disordered carbonaceous materials for electrochemical energy storage. Energy Storage Materials, 2019, 21, 162-173.	18.0	95
104	Li-ion storage properties of two-dimensional titanium-carbide synthesized via fast one-pot method in air atmosphere. Nature Communications, 2021, 12, 5085.	12.8	88
105	Direct electrodeposition of aluminium nano-rods. Electrochemistry Communications, 2008, 10, 1467-1470.	4.7	86
106	Relationship between the carbon nano-onions (CNOs) surface chemistry/defects and their capacitance in aqueous and organic electrolytes. Carbon, 2016, 105, 628-637.	10.3	84
107	Ionogel-based solid-state supercapacitor operating over a wide range of temperature. Electrochimica Acta, 2016, 206, 490-495.	5.2	84
108	Characterization of commercial supercapacitors for low temperature applications. Journal of Power Sources, 2012, 219, 235-239.	7.8	82

#	ARTICLE	IF	CITATIONS
109	Sparsely Pillared Graphene Materials for High-Performance Supercapacitors: Improving Ion Transport and Storage Capacity. ACS Nano, 2019, 13, 1443-1453.	14.6	81
110	MXenes as High-Rate Electrodes for Energy Storage. Trends in Chemistry, 2020, 2, 654-664.	8.5	81
111	Enhanced Electrochemical Performance of Ultracentrifugation-Derived nc-Li₃VO₄/MWCNT Composites for Hybrid Supercapacitors. ACS Nano, 2016, 10, 5398-5404.	14.6	78
112	Nuclear magnetic resonance study of ion adsorption on microporous carbide-derived carbon. Physical Chemistry Chemical Physics, 2013, 15, 7722.	2.8	77
113	Ordered mesoporous silicon carbide-derived carbon for high-power supercapacitors. Electrochemistry Communications, 2013, 34, 109-112.	4.7	75
114	Facile and Scalable Preparation of Ruthenium Oxideâ€Based Flexible Microâ€Supercapacitors. Advanced Energy Materials, 2020, 10, 1903136.	19.5	74
115	Electrode compositions for carbon power supercapacitors. Journal of Power Sources, 1999, 80, 149-155.	7.8	73
116	Capacitance of Nanoporous Carbon-Based Supercapacitors Is a Trade-Off between the Concentration and the Separability of the Ions. Journal of Physical Chemistry Letters, 2016, 7, 4015-4021.	4.6	72
117	3D rGO aerogel with superior electrochemical performance for K â€“ Ion battery. Energy Storage Materials, 2019, 19, 306-313.	18.0	70
118	Charge Storage Mechanisms of Single-Layer Graphene in Ionic Liquid. Journal of the American Chemical Society, 2019, 141, 16559-16563.	13.7	67
119	Combining Electrochemistry and Metallurgy for New Electrode Designs in Li-Ion Batteries. Chemistry of Materials, 2005, 17, 5041-5047.	6.7	66
120	High capacitance of coarse-grained carbide derived carbon electrodes. Journal of Power Sources, 2016, 306, 32-41.	7.8	65
121	Wafer-level fabrication process for fully encapsulated micro-supercapacitors with high specific energy. Microsystem Technologies, 2012, 18, 467-473.	2.0	64
122	Graphene-Based Supercapacitors Using Eutectic Ionic Liquid Mixture Electrolyte. Electrochimica Acta, 2016, 206, 446-451.	5.2	63
123	Polypyrrole-Fe2O3 nanohybrid materials for electrochemical storage. Journal of Solid State Electrochemistry, 2006, 11, 398-406.	2.5	62
124	Non-aqueous gel polymer electrolyte with phosphoric acid ester and its application for quasi solid-state supercapacitors. Journal of Power Sources, 2015, 274, 1147-1154.	7.8	62
125	Multi-scale modelling of supercapacitors: From molecular simulations to a transmission line model. Journal of Power Sources, 2016, 326, 680-685.	7.8	62
126	Steric effects in adsorption of ions from mixed electrolytes into microporous carbon. Electrochemistry Communications, 2012, 15, 63-65.	4.7	61

#	Article	IF	Citations
127	Self-supported binder-free hard carbon electrodes for sodium-ion batteries: insights into their sodium storage mechanisms. Journal of Materials Chemistry A, 2020, 8, 5558-5571.	10.3	60
128	Ultrafast Nanocrystallineâ€TiO₂(B)/Carbon Nanotube Hyperdispersion Prepared via Combined Ultracentrifugation and Hydrothermal Treatments for Hybrid Supercapacitors. Advanced Materials, 2016, 28, 6751-6757.	21.0	58
129	High power density aqueous hybrid supercapacitor combining activated carbon and highly conductive spinel cobalt oxide. Journal of Power Sources, 2016, 331, 277-284.	7.8	58
130	Investigating the n- and p-Type Electrolytic Charging of Colloidal Nanoplatelets. Journal of Physical Chemistry C, 2015, 119, 21795-21799.	3.1	57
131	Titanium Carbide MXene Shows an Electrochemical Anomaly in Water-in-Salt Electrolytes. ACS Nano, 2021, 15, 15274-15284.	14.6	56
132	Modification of Al Current Collector/Active Material Interface for Power Improvement of Electrochemical Capacitor Electrodes. Journal of the Electrochemical Society, 2006, 153, A649.	2.9	55
133	MnO2-coated Ni nanorods: Enhanced high rate behavior in pseudo-capacitive supercapacitor. Electrochimica Acta, 2010, 55, 7454-7459.	5.2	55
134	Microporous Carbon-Based Electrical Double Layer Capacitor Operating at High Temperature in Ionic Liquid Electrolyte. Electrochemical and Solid-State Letters, 2011, 14, A174.	2.2	54
135	Understanding of carbon-based supercapacitors ageing mechanisms by electrochemical and analytical methods. Journal of Power Sources, 2017, 366, 123-130.	7.8	54
136	Future Directions for Electrochemical Capacitors. ACS Energy Letters, 2021, 6, 4311-4316.	17.4	53
137	Proton conducting Gel Polymer Electrolytes for supercapacitor applications. Electrochimica Acta, 2017, 242, 31-37.	5.2	52
138	Hard carbon key properties allow for the achievement of high Coulombic efficiency and high volumetric capacity in Na-ion batteries. Journal of Materials Chemistry A, 2021, 9, 1743-1758.	10.3	52
139	The good reactivity of lithium with nanostructured copper phosphide. Journal of Materials Chemistry, 2008, 18, 5956.	6.7	51
140	Tracking Ionic Rearrangements and Interpreting Dynamic Volumetric Changes in Twoâ€Dimensional Metal Carbide Supercapacitors: A Molecular Dynamics Simulation Study. ChemSusChem, 2018, 11, 1892-1899.	6.8	50
141	Computational Insights into Charge Storage Mechanisms of Supercapacitors. Energy and Environmental Materials, 2020, 3, 235-246.	12.8	49
142	Electrode optimisation for carbon power supercapacitors. Journal of Power Sources, 1999, 79, 37-42.	7.8	48
143	Effect of the carbon microporous structure on the capacitance of aqueous supercapacitors. Energy Storage Materials, 2019, 21, 190-195.	18.0	48
144	Chemical synthesis and characterization of fluorinated polyphenylthiophenes: application to energy storage. Synthetic Metals, 2001, 123, 311-319.	3.9	47

#	Article	IF	Citations
145	Electrochemical Method for Direct Deposition of Nanometric Bismuth and Its Electrochemical Properties vs Li. Electrochemical and Solid-State Letters, 2008, 11, E5.	2.2	47
146	Understanding Battery Interfaces by Combined Characterization and Simulation Approaches: Challenges and Perspectives. Advanced Energy Materials, 2022, 12, .	19.5	46
147	Sputtered Titanium Carbide Thick Film for High Areal Energy on Chip Carbonâ€Based Microâ€Supercapacitors. Advanced Functional Materials, 2017, 27, 1606813.	14.9	45
148	The tin effect in lead-calcium alloys. Journal of Power Sources, 1997, 67, 61-67.	7.8	44
149	Solvent-Free Electrolytes for Electrical Double Layer Capacitors. Journal of the Electrochemical Society, 2015, 162, A5037-A5040.	2.9	44
150	Possible improvements in making carbon electrodes for organic supercapacitors. Journal of Power Sources, 1999, 79, 238-241.	7.8	43
151	Designing ionic channels in novel carbons for electrochemical energy storage. National Science Review, 2020, 7, 191-201.	9.5	42
152	Laser-scribed Ru organometallic complex for the preparation of RuO2 micro-supercapacitor electrodes on flexible substrate. Electrochimica Acta, 2018, 281, 816-821.	5.2	41
153	Synthesis of T-Nb2O5 thin-films deposited by Atomic Layer Deposition for miniaturized electrochemical energy storage devices. Energy Storage Materials, 2019, 16, 581-588.	18.0	40
154	Ionic Liquids under Confinement: From Systematic Variations of the Ion and Pore Sizes toward an Understanding of the Structure and Dynamics in Complex Porous Carbons. ACS Applied Materials & Interfaces, 2020, 12, 1789-1798.	8.0	39
155	Electrochemical double layer capacitors: What is next beyond the corner?. Current Opinion in Electrochemistry, 2017, 6, 115-119.	4.8	38
156	Ion Sieving Effects in Chemically Tuned Pillared Graphene Materials for Electrochemical Capacitors. Chemistry of Materials, 2018, 30, 3040-3047.	6.7	37
157	Impact of the surface roughness on the electrical capacitance. Microelectronics Journal, 2006, 37, 752-758.	2.0	36
158	Recent Advances in Understanding the Capacitive Storage in Microporous Carbons. Fuel Cells, 2010, 10, 819-824.	2.4	36
159	Effects of functional groups and anion size on the charging mechanisms in layered electrode materials. Energy Storage Materials, 2020, 33, 460-469.	18.0	36
160	Electrochemical behavior of high performance on-chip porous carbon films for micro-supercapacitors applications in organic electrolytes. Journal of Power Sources, 2016, 328, 520-526.	7.8	35
161	Single Electrode Capacitances of Porous Carbons in Neat Ionic Liquid Electrolyte at 100Â°C: A Combined Experimental and Modeling Approach. Journal of the Electrochemical Society, 2015, 162, A5091-A5095.	2.9	32
162	Fast Xâ€ray Nanotomography with Subâ€10Ânm Resolution as a Powerful Imaging Tool for Nanotechnology and Energy Storage Applications. Advanced Materials, 2021, 33, e2008653.	21.0	32

#	Article	IF	Citations
163	Original Conductive Nano-Co3O4 Investigated as Electrode Material for Hybrid Supercapacitors. Electrochemical and Solid-State Letters, 2011, 14, A139.	2.2	31
164	Electrochemical Characterization of Single Layer Graphene/Electrolyte Interface: Effect of Solvent on the Interfacial Capacitance. Angewandte Chemie - International Edition, 2021, 60, 13317-13322.	13.8	31
165	Electrodeposition of Arrays of Ru, Pt, and PtRu Alloy 1D Metallic Nanostructures. Journal of the Electrochemical Society, 2010, 157, K59.	2.9	30
166	Nanomaterials for Electrochemical Energy Storage: the Good and the Bad. Acta Chimica Slovenica, 2016, 63, 417-423.	0.6	30
167	Anthraquinone modification of microporous carbide derived carbon films for on-chip micro-supercapacitors applications. Electrochimica Acta, 2017, 246, 391-398.	5.2	29
168	Proton Ion Exchange Reaction in Li₃IrO₄: A Way to New H₃₊<i>_x</i>IrO₄ Phases Electrochemically Active in Both Aqueous and Nonaqueous Electrolytes. Advanced Energy Materials, 2018, 8, 1702855.	19.5	29
169	Fast Electrochemical Storage Process in Sputtered Nb₂O₅ Porous Thin Films. ACS Nano, 2019, 13, 5826-5832.	14.6	29
170	Perovskiteâ€Type SrVO₃ as Highâ€Performance Anode Materials for Lithiumâ€Ion Batteries. Advanced Materials, 2022, 34, e2107262.	21.0	29
171	Dense on Porous Solid <scp>LATP</scp> Electrolyte System: Preparation and Conductivity Measurement. Journal of the American Ceramic Society, 2017, 100, 141-149.	3.8	28
172	Advanced analytical techniques to characterize materials for electrochemical capacitors. Current Opinion in Electrochemistry, 2018, 9, 18-25.	4.8	28
173	Characterization by electrochemical impedance spectroscopy of passive layers formed on lead-tin alloys, in tetraborate and sulfuric acid solutions. Journal of Power Sources, 1995, 55, 63-71.	7.8	27
174	Electrodeposited Cu2Sb as anode material for 3-dimensional Li-ion microbatteries. Journal of Materials Research, 2010, 25, 1485-1491.	2.6	27
175	Preparation of activated carbon from Turbinaria turbinata seaweeds and its use as supercapacitor electrode materials. Comptes Rendus Chimie, 2013, 16, 73-79.	0.5	27
176	Salt-template synthesis of mesoporous carbon monolith for ionogel-based supercapacitors. Electrochemistry Communications, 2018, 96, 6-10.	4.7	27
177	Investigation of ion transport in chemically tuned pillared graphene materials through electrochemical impedance analysis. Electrochimica Acta, 2019, 296, 882-890.	5.2	27
178	Cation-Disordered Li₃VO₄: Reversible Li Insertion/Deinsertion Mechanism for Quasi Li-Rich Layered Li_{1+<i>x</i>}[V_{1/2}Li_{1/2}]O₂ (<i>x</i> = 0â€“1). Chemistry of Materials, 2018, 30, 4926-4934.	6.7	26
179	Materials for electrochemical capacitors. , 2010, , 138-147.		25
180	Vertically Oriented Propylene Carbonate Molecules and Tetraethyl Ammonium Ions in Carbon Slit Pores. Journal of Physical Chemistry C, 2013, 117, 5752-5757.	3.1	25

#	Article	IF	Citations
181	Materials for Electrochemical Capacitors. , 2017, , 495-561.		25
182	Impact of biomass inorganic impurities on hard carbon properties and performance in Na-ion batteries. Sustainable Materials and Technologies, 2020, 26, e00227.	3.3	25
183	Molten Saltâ€Shielded Synthesis (MS³) of MXenes in Air. Energy and Environmental Materials, 2023, 6, .	12.8	25
184	X-ray photoelectronspectroscopy study of passive layers formed on lead-tin alloys. Journal of Power Sources, 1994, 52, 31-39.	7.8	24
185	Blue Energy and Desalination with Nanoporous Carbon Electrodes: Capacitance from Molecular Simulations to Continuous Models. Physical Review X, 2018, 8, .	8.9	23
186	<i>In Situ</i> Magnetic Resonance Imaging of a Complete Supercapacitor Giving Additional Insight on the Role of Nanopores. ACS Nano, 2019, 13, 12810-12815.	14.6	23
187	In situ redox conductivity, XPS and impedance spectroscopy studies of passive layers formed on lead-tin alloys. Journal of Power Sources, 1995, 53, 163-173.	7.8	22
188	Understanding the different (dis)charging steps of supercapacitors: influence of potential and solvation. Electrochimica Acta, 2016, 206, 504-512.	5.2	22
189	Tracking ionic fluxes in porous carbon electrodes from aqueous electrolyte mixture at various pH. Electrochemistry Communications, 2018, 93, 119-122.	4.7	22
190	Single electron transfer photoinduced oxidation of piperidine and pyrrolidine derivatives to the corresponding lactams. Perkin Transactions II RSC, 2000, , 1147-1153.	1.1	21
191	Electrochemical kinetics of nanostructure LiFePO 4 /graphitic carbon electrodes. Electrochemistry Communications, 2016, 72, 10-14.	4.7	21
192	Improved electro-grafting of nitropyrene onto onion-like carbon via in situ electrochemical reduction and polymerization: tailoring redox energy density of the supercapacitor positive electrode. Journal of Materials Chemistry A, 2017, 5, 1488-1494.	10.3	21
193	Synthesis and Characterization of Well Aligned Ru Nanowires and Nanotubes. ECS Transactions, 2010, 25, 3-11.	0.5	20
194	Spark plasma sintered carbon electrodes for electrical double layer capacitor applications. Journal of Power Sources, 2011, 196, 1620-1625.	7.8	20
195	Outstanding room-temperature capacitance of biomass-derived microporous carbons in ionic liquid electrolyte. Electrochemistry Communications, 2017, 79, 5-8.	4.7	20
196	What Can Text Mining Tell Us About Lithiumâ€Ion Battery Researchersâ€™ Habits?. Batteries and Supercaps, 2021, 4, 758-766.	4.7	20
197	An in situ study of the effect of tin on the passivation of lead-tin alloys. Journal of Power Sources, 1994, 50, 141-152.	7.8	19
198	Fundamental research on the role of alloying tin as a means to eliminate the passivation phenomena in lead/acid batteries.. Journal of Power Sources, 1998, 73, 30-35.	7.8	19

#	Article	IF	Citations
199	Self supported nickel antimonides based electrodes for Li ion battery. Solid State Ionics, 2011, 192, 298-303.	2.7	19
200	Understanding ageing mechanisms of porous carbons in non-aqueous electrolytes for supercapacitors applications. Journal of Power Sources, 2019, 434, 226734.	7.8	19
201	Noncrystalline Nanocomposites as a Remedy for the Low Diffusivity of Multivalent Ions in Battery Cathodes. Chemistry of Materials, 2020, 32, 1011-1021.	6.7	19
202	Screening Methodology for the Efficient Pairing of Ionic Liquids and Carbonaceous Electrodes Applied to Electric Energy Storage. Journal of Physical Chemistry C, 2014, 118, 864-872.	3.1	18
203	Carbonâ€“carbon supercapacitors: Beyond the average pore size or how electrolyte confinement and inaccessible pores affect the capacitance. Journal of Chemical Physics, 2021, 155, 184703.	3.0	17
204	MnO₂-MXene Composite as Electrode for Supercapacitor. Journal of the Electrochemical Society, 2022, 169, 030524.	2.9	17
205	Stabilizing the Structure of LiCoPO4 Nanocrystals via Addition of Fe3+: Formation of Fe3+ Surface Layer, Creation of Diffusion-Enhancing Vacancies, and Enabling High-Voltage Battery Operation. Chemistry of Materials, 2018, 30, 6675-6683.	6.7	16
206	On the development of an original mesoscopic model to predict the capacitive properties of carbon-carbon supercapacitors. Electrochimica Acta, 2019, 327, 135022.	5.2	16
207	Effect of polarisation mode, time and potential on the properties of the passive layer on lead-tin alloys. Journal of Power Sources, 1997, 64, 21-27.	7.8	15
208	Multi electrode prismatic power prototype carbon/carbon supercapacitors. Journal of Power Sources, 1999, 83, 162-169.	7.8	15
209	Silicon carbide with tunable ordered mesoporosity. Microporous and Mesoporous Materials, 2013, 180, 172-177.	4.4	14
210	Ultrafast Synthesis of Calcium Vanadate for Superior Aqueous Calcium-Ion Battery. Research, 2019, 2019, 6585686.	5.7	14
211	In Situ Conductivity Study of the Corrosion Layers on Leadâ€Tin Alloys in Sulfuric Acid. Journal of the Electrochemical Society, 1997, 144, 443-449.	2.9	13
212	Electrochemical Study of Conductive Nanometric Co₃O₄- Based Electrodes for Asymmetric Supercapacitors in Alkaline Electrolyte. Journal of the Electrochemical Society, 2016, 163, A2004-A2010.	2.9	13
213	Electrophoretic silica-coating process on a nano-structured copper electrode. Chemical Communications, 2008, , 5004.	4.1	12
214	Eco-Friendly Synthesis of Nitrogen-Doped Mesoporous Carbon for Supercapacitor Application. Journal of Carbon Research, 2018, 4, 20.	2.7	12
215	Simulations of Ionic Liquids Confined in Surface-Functionalized Nanoporous Carbons: Implications for Energy Storage. ACS Applied Nano Materials, 2021, 4, 4007-4015.	5.0	12
216	Preparation and characterization of electrolytic alumina deposit on austenitic stainless steel. Science and Technology of Advanced Materials, 2005, 6, 519-524.	6.1	11

#	Article	IF	Citations
217	Design of Fe3â€“xO4 raspberry decorated graphene nanocomposites with high performances in lithium-ion battery. Journal of Energy Chemistry, 2016, 25, 272-277.	12.9	11
218	Electrochemically Induced Deformation Determines the Rate of Lithium Intercalation in Bulk TiS₂. ACS Energy Letters, 2021, 6, 4173-4178.	17.4	11
219	Synthesis of nanosized MnO2 prepared by the polyol method and its application in high power supercapacitors. Materials for Renewable and Sustainable Energy, 2013, 2, 1.	3.6	10
220	Dual-Cation Electrolytes for High-Power and High-Energy LTO//AC Hybrid Capacitors. Journal of Physical Chemistry C, 2020, 124, 12230-12238.	3.1	10
221	Confined water controls capacitance. Nature Materials, 2021, 20, 1597-1598.	27.5	10
222	The effects of local graphitization on the charging mechanisms of microporous carbon supercapacitor electrodes. Electrochemistry Communications, 2022, 137, 107258.	4.7	10
223	Ultracentrifugation: An effective novel route to ultrafast nanomaterials for hybrid supercapacitors. Current Opinion in Electrochemistry, 2017, 6, 120-126.	4.8	8
224	The path to high-rate energy storage goes through narrow channels. Joule, 2022, 6, 28-30.	24.0	7
225	TiC-carbide derived carbon electrolyte adsorption study by ways of X-ray scattering analysis. Materials for Renewable and Sustainable Energy, 2015, 4, 17.	3.6	6
226	Hybrid Supercapacitors with Ionic Liquid Electrolytes. ECS Transactions, 2006, 1, 55-59.	0.5	5
227	Enhanced Hybrid Supercapacitors Utilizing Nanostructured Metal Oxides. , 2017, , 247-264.		5
228	Electrochemical Characterization of Single Layer Graphene/Electrolyte Interface: Effect of Solvent on the Interfacial Capacitance. Angewandte Chemie, 2021, 133, 13429-13434.	2.0	5
229	Influence of carbonaceous electrodes on capacitance and breakdown voltage for hybrid capacitor. Microelectronics Journal, 2007, 38, 642-648.	2.0	4
230	Outer and Inner Surface Contribution of Manganese Dioxides Energy Storage Characterization by Cavity Microelectrode Technique. ECS Transactions, 2014, 58, 53-59.	0.5	4
231	Non - electrochemical Na â€“ deintercalation from O3 NaVO2. Materials Research Bulletin, 2020, 121, 110586.	5.2	4
232	Mesoscopic simulations of the in situ NMR spectra of porous carbon based supercapacitors: electronic structure and adsorbent reorganisation effects. Physical Chemistry Chemical Physics, 2021, 23, 15925-15934.	2.8	4
233	Power harvesting and management from vibrations: a multi-source strategy simulation for aircraft structure health monitoring. Proceedings of SPIE, 2008, , .	0.8	3
234	Electrochemical Energy Storage: The Benefits of Nanomaterials. , 2013, , 277-298.		3

#	Article	IF	Citations
235	Tracking Ionic Rearrangements and Interpreting Dynamic Volumetric Changes in Twoâ€Dimensional Metal Carbide Supercapacitors: A Molecular Dynamics Simulation Study. ChemSusChem, 2018, 11, 1889-1889.	6.8	3
236	Characterization of the mass transfer fluxes in a capacitive desalination cell by using FeIII(CN)63â^'/FeII(CN)64â^' redox couple as an electrochemical probe. Journal of Electroanalytical Chemistry, 2019, 842, 127-132.	3.8	3
237	Practical Works on Nanotechnology: Middle School to Undergraduate Students. IEEE Nanotechnology Magazine, 2020, 14, 21-28.	1.3	3
238	What Can Text Mining Tell Us About Lithiumâ€Ion Battery Researchersâ€™ Habits?. Batteries and Supercaps, 2021, 4, 689-689.	4.7	3
239	An Artificial Interface for High Cell Voltage Aqueous-Based Electrochemical Capacitors. Journal of the Electrochemical Society, 2021, 168, 070520.	2.9	3
240	MXenes for Supercapacitor Application. , 2019, , 349-365.		3
241	Charge Storage Mechanism in Sub-Nanometer Pores and its Consequence for Electrical Double Layer Capacitors. ECS Meeting Abstracts, 2008, , .	0.0	2
242	The Use of Additional Redox Couples in the Investigation of the Electronic Conductivity of Passive Layers. Materials Science Forum, 1998, 289-292, 1073-1082.	0.3	1
243	Ink-jet printed carbon-based micro-supercapacitor for mobile self-powered modules. Materials Research Society Symposia Proceedings, 2008, 1127, 1.	0.1	1
244	Preparation of Carbonaceous Materials in Fused Carbonate Salts. , 2013, , 331-354.		1
245	On-chip carbide derived carbon films for high performance micro-supercapacitors. , 2016, , .		1
246	Non-Intrusive Battery Health Monitoring. E3S Web of Conferences, 2017, 16, 07006.	0.5	1
247	Comment to the letter to the editor from Costentin etÂal. Entitled â€œOhmic drop correction in electrochemical techniques. Multiple potential step chrono-amperometry at the test benchâ€• Energy Storage Materials, 2020, 24, 4-5.	18.0	1
248	RÃ¼cktitelbild: Electrochemical Characterization of Single Layer Graphene/Electrolyte Interface: Effect of Solvent on the Interfacial Capacitance (Angew. Chem. 24/2021). Angewandte Chemie, 2021, 133, 13800-13800.	2.0	1
249	Electrochemical Energy Storage: The Benefits of Nanomaterials. , 0, , 155-176.		0
250	â€œGive Energy to Your Studyâ€• Students Worldwide Gather in Europe To Design Future Materials for Energy Storage and Conversion. Journal of Chemical Education, 2011, 88, 1203-1206.	2.3	0