

# Patrice Simon

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/2615548/patrice-simon-publications-by-citations.pdf>  
**Version:** 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.  
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

252 papers	67,542 citations	89 h-index	259 g-index
263 ext. papers	75,616 ext. citations	12.4 avg, IF	8.51 L-index

#	Paper	IF	Citations
252	Materials for electrochemical capacitors. <i>Nature Materials</i> , <b>2008</b> , 7, 845-54	27	12536
251	Materials science. Where do batteries end and supercapacitors begin?. <i>Science</i> , <b>2014</b> , 343, 1210-1	33.3	3680
250	Materials science. Electrochemical capacitors for energy management. <i>Science</i> , <b>2008</b> , 321, 651-2	33.3	3660
249	Pseudocapacitive oxide materials for high-rate electrochemical energy storage. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 1597	35.4	3208
248	High-rate electrochemical energy storage through Li <sup>+</sup> intercalation pseudocapacitance. <i>Nature Materials</i> , <b>2013</b> , 12, 518-22	27	3039
247	Anomalous increase in carbon capacitance at pore sizes less than 1 nanometer. <i>Science</i> , <b>2006</b> , 313, 1760-3	33.3	2937
246	Cation intercalation and high volumetric capacitance of two-dimensional titanium carbide. <i>Science</i> , <b>2013</b> , 341, 1502-5	33.3	2510
245	Ultrahigh-power micrometre-sized supercapacitors based on onion-like carbon. <i>Nature Nanotechnology</i> , <b>2010</b> , 5, 651-4	28.7	2188
244	High rate capabilities Fe <sub>3</sub> O <sub>4</sub> -based Cu nano-architected electrodes for lithium-ion battery applications. <i>Nature Materials</i> , <b>2006</b> , 5, 567-73	27	1803
243	Materials science. True performance metrics in electrochemical energy storage. <i>Science</i> , <b>2011</b> , 334, 917-8	33.3	1781
242	Relation between the ion size and pore size for an electric double-layer capacitor. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 2730-1	16.4	1755
241	Electrochemical Characteristics and Impedance Spectroscopy Studies of Carbon-Carbon Supercapacitors. <i>Journal of the Electrochemical Society</i> , <b>2003</b> , 150, A292	3.9	1431
240	Efficient storage mechanisms for building better supercapacitors. <i>Nature Energy</i> , <b>2016</b> , 1,	62.3	1256
239	Energy applications of ionic liquids. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 232-250	35.4	1244
238	Capacitive energy storage in nanostructured carbon-electrolyte systems. <i>Accounts of Chemical Research</i> , <b>2013</b> , 46, 1094-103	24.3	1112
237	Monolithic carbide-derived carbon films for micro-supercapacitors. <i>Science</i> , <b>2010</b> , 328, 480-3	33.3	1099
236	Ultra-high-rate pseudocapacitive energy storage in two-dimensional transition metal carbides. <i>Nature Energy</i> , <b>2017</b> , 2,	62.3	1071

235	Studies and characterisations of various activated carbons used for carbon/carbon supercapacitors. <i>Journal of Power Sources</i> , <b>2001</b> , 101, 109-116	8.9	1002
234	MXene: a promising transition metal carbide anode for lithium-ion batteries. <i>Electrochemistry Communications</i> , <b>2012</b> , 16, 61-64	5.1	963
233	On the molecular origin of supercapacitance in nanoporous carbon electrodes. <i>Nature Materials</i> , <b>2012</b> , 11, 306-10	27	728
232	On-chip and freestanding elastic carbon films for micro-supercapacitors. <i>Science</i> , <b>2016</b> , 351, 691-5	33.3	522
231	Perspectives for electrochemical capacitors and related devices. <i>Nature Materials</i> , <b>2020</b> , 19, 1151-1163	27	493
230	Desolvation of ions in subnanometer pores and its effect on capacitance and double-layer theory. <i>Angewandte Chemie - International Edition</i> , <b>2008</b> , 47, 3392-5	16.4	487
229	High temperature carbon/carbon supercapacitor using ionic liquid as electrolyte. <i>Journal of Power Sources</i> , <b>2007</b> , 165, 922-927	8.9	485
228	Long-term cycling behavior of asymmetric activated carbon/MnO <sub>2</sub> aqueous electrochemical supercapacitor. <i>Journal of Power Sources</i> , <b>2007</b> , 173, 633-641	8.9	404
227	Elaboration of a microstructured inkjet-printed carbon electrochemical capacitor. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 1266-1269	8.9	375
226	A general Lewis acidic etching route for preparing MXenes with enhanced electrochemical performance in non-aqueous electrolyte. <i>Nature Materials</i> , <b>2020</b> , 19, 894-899	27	368
225	High-Rate, Long-Life NiSn Nanostructured Electrodes for Lithium-Ion Batteries. <i>Advanced Materials</i> , <b>2007</b> , 19, 1632-1635	24	354
224	Energy Storage Data Reporting in Perspective—Guidelines for Interpreting the Performance of Electrochemical Energy Storage Systems. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1902007	21.8	349
223	Modification of Al current collector surface by sol-gel deposit for carbon/carbon supercapacitor applications. <i>Electrochimica Acta</i> , <b>2004</b> , 49, 905-912	6.7	343
222	Highly confined ions store charge more efficiently in supercapacitors. <i>Nature Communications</i> , <b>2013</b> , 4, 2701	17.4	328
221	High capacitance of surface-modified 2D titanium carbide in acidic electrolyte. <i>Electrochemistry Communications</i> , <b>2014</b> , 48, 118-122	5.1	308
220	Capacitive Energy Storage from 80 to 100 °C Using an Ionic Liquid Electrolyte. <i>Journal of Physical Chemistry Letters</i> , <b>2011</b> , 2, 2396-2401	6.4	308
219	High power density electrodes for Carbon supercapacitor applications. <i>Electrochimica Acta</i> , <b>2005</b> , 50, 4174-4181	6.7	297
218	Two-Dimensional Vanadium Carbide (MXene) as Positive Electrode for Sodium-Ion Capacitors. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 2305-9	6.4	294

217	Outstanding performance of activated graphene based supercapacitors in ionic liquid electrolyte from 0 to 80 °C. <i>Nano Energy</i> , <b>2013</b> , 2, 403-411	17.1	276
216	Polythiophene-based supercapacitors. <i>Journal of Power Sources</i> , <b>1999</b> , 80, 142-148	8.9	274
215	A Non-Aqueous Asymmetric Cell with a Ti2C-Based Two-Dimensional Negative Electrode. <i>Journal of the Electrochemical Society</i> , <b>2012</b> , 159, A1368-A1373	3.9	270
214	Nanoarchitected graphene-based supercapacitors for next-generation energy-storage applications. <i>Chemistry - A European Journal</i> , <b>2014</b> , 20, 13838-52	4.8	245
213	Materials for supercapacitors: When Li-ion battery power is not enough. <i>Materials Today</i> , <b>2018</b> , 21, 419-428	13.6	234
212	In situ NMR and electrochemical quartz crystal microbalance techniques reveal the structure of the electrical double layer in supercapacitors. <i>Nature Materials</i> , <b>2015</b> , 14, 812-9	27	233
211	Influences from solvents on charge storage in titanium carbide MXenes. <i>Nature Energy</i> , <b>2019</b> , 4, 241-248	62.3	229
210	New Materials and New Configurations for Advanced Electrochemical Capacitors. <i>Electrochemical Society Interface</i> , <b>2008</b> , 17, 34-37	3.6	211
209	Self-supported three-dimensional nanoelectrodes for microbattery applications. <i>Nano Letters</i> , <b>2009</b> , 9, 3230-3	11.5	210
208	Nanostructured Carbons: Double-Layer Capacitance and More. <i>Electrochemical Society Interface</i> , <b>2008</b> , 17, 38-43	3.6	209
207	3D Macroscopic Architectures from Self-Assembled MXene Hydrogels. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1903960	15.6	207
206	3D lithium ion batteries from fundamentals to fabrication. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 9876		201
205	Charge storage mechanism in nanoporous carbons and its consequence for electrical double layer capacitors. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2010</b> , 368, 3457-67	3	199
204	Microelectrode Study of Pore Size, Ion Size, and Solvent Effects on the Charge/Discharge Behavior of Microporous Carbons for Electrical Double-Layer Capacitors. <i>Journal of the Electrochemical Society</i> , <b>2009</b> , 156, A7	3.9	197
203	On the origin of the extra capacity at low potential in materials for Li batteries reacting through conversion reaction. <i>Electrochimica Acta</i> , <b>2012</b> , 61, 13-18	6.7	195
202	Influence of carbon nanotubes addition on carbon/carbon supercapacitor performances in organic electrolyte. <i>Journal of Power Sources</i> , <b>2005</b> , 139, 371-378	8.9	195
201	Electrochemical quartz crystal microbalance (EQCM) study of ion dynamics in nanoporous carbons. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 8722-8	16.4	192
200	Electrochemical Kinetics of Nanostructured Nb2O5 Electrodes. <i>Journal of the Electrochemical Society</i> , <b>2014</b> , 161, A718-A725	3.9	188

199	Capacitance of two-dimensional titanium carbide (MXene) and MXene/carbon nanotube composites in organic electrolytes. <i>Journal of Power Sources</i> , <b>2016</b> , 306, 510-515	8.9	182
198	Simulating Supercapacitors: Can We Model Electrodes As Constant Charge Surfaces?. <i>Journal of Physical Chemistry Letters</i> , <b>2013</b> , 4, 264-8	6.4	170
197	Nanoporous carbon for electrochemical capacitive energy storage. <i>Chemical Society Reviews</i> , <b>2020</b> , 49, 3005-3039	58.5	169
196	Partial breaking of the Coulombic ordering of ionic liquids confined in carbon nanopores. <i>Nature Materials</i> , <b>2017</b> , 16, 1225-1232	27	166
195	Capacitance of Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene in ionic liquid electrolyte. <i>Journal of Power Sources</i> , <b>2016</b> , 326, 575-579	8.9	163
194	Continuous carbide-derived carbon films with high volumetric capacitance. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 135-138	35.4	157
193	Cycling stability of a hybrid activated carbon//poly(3-methylthiophene) supercapacitor with N-butyl-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide ionic liquid as electrolyte. <i>Electrochimica Acta</i> , <b>2005</b> , 50, 2233-2237	6.7	157
192	Solvent effect on the ion adsorption from ionic liquid electrolyte into sub-nanometer carbon pores. <i>Electrochimica Acta</i> , <b>2009</b> , 54, 7025-7032	6.7	156
191	Activated Carbon/Conducting Polymer Hybrid Supercapacitors. <i>Journal of the Electrochemical Society</i> , <b>2003</b> , 150, A645	3.9	156
190	Structure and Electrochemical Performance of Carbide-Derived Carbon Nanopowders. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 1081-1089	15.6	153
189	On the dynamics of charging in nanoporous carbon-based supercapacitors. <i>ACS Nano</i> , <b>2014</b> , 8, 1576-83	16.7	151
188	NMR Study of Ion Dynamics and Charge Storage in Ionic Liquid Supercapacitors. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 7231-42	16.4	148
187	High rate capability pure Sn-based nano-architected electrode assembly for rechargeable lithium batteries. <i>Journal of Power Sources</i> , <b>2009</b> , 188, 578-582	8.9	141
186	Nanoarchitected 3D cathodes for Li-ion microbatteries. <i>Advanced Materials</i> , <b>2010</b> , 22, 4978-81	24	137
185	Direct Laser Writing of Graphene Made from Chemical Vapor Deposition for Flexible, Integratable Micro-Supercapacitors with Ultrahigh Power Output. <i>Advanced Materials</i> , <b>2018</b> , 30, e1801384	24	137
184	Materials for electrochemical capacitors <b>2009</b> , 320-329		136
183	Increase in Capacitance by Subnanometer Pores in Carbon. <i>ACS Energy Letters</i> , <b>2016</b> , 1, 1262-1265	20.1	133
182	Qualitative Electrochemical Impedance Spectroscopy study of ion transport into sub-nanometer carbon pores in Electrochemical Double Layer Capacitor electrodes. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 7489-7494	6.7	131

181	Real-time NMR studies of electrochemical double-layer capacitors. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 19270-3	16.4	125
180	In situ NMR spectroscopy of supercapacitors: insight into the charge storage mechanism. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 18968-80	16.4	124
179	Two-Dimensional MXene with Controlled Interlayer Spacing for Electrochemical Energy Storage. <i>ACS Nano</i> , <b>2017</b> , 11, 2393-2396	16.7	123
178	Micro-supercapacitors from carbide derived carbon (CDC) films on silicon chips. <i>Journal of Power Sources</i> , <b>2013</b> , 225, 240-244	8.9	120
177	TiO <sub>2</sub> (B)/activated carbon non-aqueous hybrid system for energy storage. <i>Journal of Power Sources</i> , <b>2006</b> , 158, 571-577	8.9	119
176	Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> /poly(methyl)thiophene asymmetric hybrid electrochemical device. <i>Journal of Power Sources</i> , <b>2004</b> , 125, 95-102	8.9	118
175	Electrode surface treatment and electrochemical impedance spectroscopy study on carbon/carbon supercapacitors. <i>Applied Physics A: Materials Science and Processing</i> , <b>2006</b> , 82, 639-646	2.6	117
174	Confinement, Desolvation, And Electrosorption Effects on the Diffusion of Ions in Nanoporous Carbon Electrodes. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 12627-32	16.4	116
173	Desolvation of Ions in Subnanometer Pores and Its Effect on Capacitance and Double-Layer Theory. <i>Angewandte Chemie</i> , <b>2008</b> , 120, 3440-3443	3.6	115
172	Lithium conducting solid electrolyte Li <sub>1.3</sub> Al <sub>0.3</sub> Ti <sub>1.7</sub> (PO <sub>4</sub> ) <sub>3</sub> obtained via solution chemistry. <i>Journal of the European Ceramic Society</i> , <b>2013</b> , 33, 1145-1153	6	107
171	Graphene-like carbide derived carbon for high-power supercapacitors. <i>Nano Energy</i> , <b>2015</b> , 12, 197-206	17.1	101
170	A Nonaqueous Asymmetric Hybrid Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> /Poly(fluorophenylthiophene) Energy Storage Device. <i>Journal of the Electrochemical Society</i> , <b>2002</b> , 149, A302	3.9	99
169	Ultrafast charge/discharge characteristics of a nanosized core-shell structured LiFePO <sub>4</sub> material for hybrid supercapacitor applications. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 2143-2151	35.4	99
168	Hybrid Supercapacitors Based on Activated Carbons and Conducting Polymers. <i>Journal of the Electrochemical Society</i> , <b>2001</b> , 148, A1130	3.9	95
167	On-chip micro-supercapacitors for operation in a wide temperature range. <i>Electrochemistry Communications</i> , <b>2013</b> , 36, 53-56	5.1	94
166	Electrochemical and in-situ X-ray diffraction studies of Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene in ionic liquid electrolyte. <i>Electrochemistry Communications</i> , <b>2016</b> , 72, 50-53	5.1	92
165	Capacitive deionization concept based on suspension electrodes without ion exchange membranes. <i>Electrochemistry Communications</i> , <b>2014</b> , 43, 18-21	5.1	91
164	Electrochemical Kinetic Study of LiFePO <sub>4</sub> Using Cavity Microelectrode. <i>Journal of the Electrochemical Society</i> , <b>2011</b> , 158, A1090	3.9	90

- 163 Non-Aqueous Li-Based Redox Flow Batteries. *Journal of the Electrochemical Society*, **2012**, 159, A1360-A1367 5.1 87
- 162 Activated carbon-carbon nanotube composite porous film for supercapacitor applications. *Materials Research Bulletin*, **2006**, 41, 478-484 5.1 84
- 161 Anionic redox chemistry in Na-rich Na<sub>2</sub>Ru<sub>1-x</sub>Sn<sub>y</sub>O<sub>3</sub> positive electrode material for Na-ion batteries. *Electrochemistry Communications*, **2015**, 53, 29-32 5.1 83
- 160 Hard carbons derived from green phenolic resins for Na-ion batteries. *Carbon*, **2018**, 139, 248-257 10.4 80
- 159 Direct electrodeposition of aluminium nano-rods. *Electrochemistry Communications*, **2008**, 10, 1467-1470 5.1 77
- 158 Ion counting in supercapacitor electrodes using NMR spectroscopy. *Faraday Discussions*, **2014**, 176, 49-68 6.6 75
- 157 Modifications of MXene layers for supercapacitors. *Nano Energy*, **2020**, 73, 104734 17.1 74
- 156 Two-dimensional MXenes for electrochemical capacitor applications: Progress, challenges and perspectives. *Energy Storage Materials*, **2021**, 35, 630-660 19.4 71
- 155 Characterization of commercial supercapacitors for low temperature applications. *Journal of Power Sources*, **2012**, 219, 235-239 8.9 69
- 154 Ionogel-based solid-state supercapacitor operating over a wide range of temperature. *Electrochimica Acta*, **2016**, 206, 490-495 6.7 65
- 153 Nuclear magnetic resonance study of ion adsorption on microporous carbide-derived carbon. *Physical Chemistry Chemical Physics*, **2013**, 15, 7722-30 3.6 65
- 152 Ordered mesoporous silicon carbide-derived carbon for high-power supercapacitors. *Electrochemistry Communications*, **2013**, 34, 109-112 5.1 65
- 151 Enhanced Electrochemical Performance of Ultracentrifugation-Derived nc-Li<sub>3</sub>VO<sub>4</sub>/MWCNT Composites for Hybrid Supercapacitors. *ACS Nano*, **2016**, 10, 5398-404 16.7 63
- 150 Combining Electrochemistry and Metallurgy for New Electrode Designs in Li-Ion Batteries. *Chemistry of Materials*, **2005**, 17, 5041-5047 9.6 62
- 149 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 6.4 62
- 148 Electrochemical study of pseudocapacitive behavior of Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene material in aqueous electrolytes. *Energy Storage Materials*, **2019**, 18, 456-461 19.4 60
- 147 Electrode compositions for carbon power supercapacitors. *Journal of Power Sources*, **1999**, 80, 149-155 8.9 58
- 146 Relationship between the carbon nano-onions (CNOs) surface chemistry/defects and their capacitance in aqueous and organic electrolytes. *Carbon*, **2016**, 105, 628-637 10.4 58

145	Wafer-level fabrication process for fully encapsulated micro-supercapacitors with high specific energy. <i>Microsystem Technologies</i> , <b>2012</b> , 18, 467-473	1.7	57
144	Graphene-Based Supercapacitors Using Eutectic Ionic Liquid Mixture Electrolyte. <i>Electrochimica Acta</i> , <b>2016</b> , 206, 446-451	6.7	56
143	Polypyrrole-Fe <sub>2</sub> O <sub>3</sub> nanohybrid materials for electrochemical storage. <i>Journal of Solid State Electrochemistry</i> , <b>2006</b> , 11, 398-406	2.6	56
142	Interlayer gap widened $\alpha$ -phase molybdenum trioxide as high-rate anodes for dual-ion-intercalation energy storage devices. <i>Nature Communications</i> , <b>2020</b> , 11, 1348	17.4	55
141	Steric effects in adsorption of ions from mixed electrolytes into microporous carbon. <i>Electrochemistry Communications</i> , <b>2012</b> , 15, 63-65	5.1	55
140	Sparsely Pillared Graphene Materials for High-Performance Supercapacitors: Improving Ion Transport and Storage Capacity. <i>ACS Nano</i> , <b>2019</b> , 13, 1443-1453	16.7	55
139	Non-aqueous gel polymer electrolyte with phosphoric acid ester and its application for quasi solid-state supercapacitors. <i>Journal of Power Sources</i> , <b>2015</b> , 274, 1147-1154	8.9	54
138	Investigating the n- and p-Type Electrolytic Charging of Colloidal Nanoplatelets. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 21795-21799	3.8	52
137	3D rGO aerogel with superior electrochemical performance for K <sup>+</sup> ion battery. <i>Energy Storage Materials</i> , <b>2019</b> , 19, 306-313	19.4	51
136	Modification of Al Current Collector/Active Material Interface for Power Improvement of Electrochemical Capacitor Electrodes. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, A649	3.9	51
135	Unraveling the Charge Storage Mechanism of Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene Electrode in Acidic Electrolyte. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 2873-2880	20.1	51
134	High capacitance of coarse-grained carbide derived carbon electrodes. <i>Journal of Power Sources</i> , <b>2016</b> , 306, 32-41	8.9	50
133	Ultrafast Nanocrystalline-TiO <sub>2</sub> (B)/Carbon Nanotube Hyperdispersion Prepared via Combined Ultracentrifugation and Hydrothermal Treatments for Hybrid Supercapacitors. <i>Advanced Materials</i> , <b>2016</b> , 28, 6751-7	24	50
132	MnO <sub>2</sub> -coated Ni nanorods: Enhanced high rate behavior in pseudo-capacitive supercapacitor. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 7454-7459	6.7	49
131	Fast Charging Materials for High Power Applications. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001128	21.8	48
130	The good reactivity of lithium with nanostructured copper phosphide. <i>Journal of Materials Chemistry</i> , <b>2008</b> , 18, 5956		48
129	A SAXS outlook on disordered carbonaceous materials for electrochemical energy storage. <i>Energy Storage Materials</i> , <b>2019</b> , 21, 162-173	19.4	47
128	Microporous Carbon-Based Electrical Double Layer Capacitor Operating at High Temperature in Ionic Liquid Electrolyte. <i>Electrochemical and Solid-State Letters</i> , <b>2011</b> , 14, A174		46

127	Facile and Scalable Preparation of Ruthenium Oxide-Based Flexible Micro-Supercapacitors. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1903136	21.8	46
126	High power density aqueous hybrid supercapacitor combining activated carbon and highly conductive spinel cobalt oxide. <i>Journal of Power Sources</i> , <b>2016</b> , 331, 277-284	8.9	45
125	Electrode optimisation for carbon power supercapacitors. <i>Journal of Power Sources</i> , <b>1999</b> , 79, 37-42	8.9	44
124	Electrochemical Method for Direct Deposition of Nanometric Bismuth and Its Electrochemical Properties vs Li. <i>Electrochemical and Solid-State Letters</i> , <b>2008</b> , 11, E5		43
123	Chemical synthesis and characterization of fluorinated polyphenylthiophenes: application to energy storage. <i>Synthetic Metals</i> , <b>2001</b> , 123, 311-319	3.6	42
122	MXenes as High-Rate Electrodes for Energy Storage. <i>Trends in Chemistry</i> , <b>2020</b> , 2, 654-664	14.8	40
121	Possible improvements in making carbon electrodes for organic supercapacitors. <i>Journal of Power Sources</i> , <b>1999</b> , 79, 238-241	8.9	40
120	Proton conducting Gel Polymer Electrolytes for supercapacitor applications. <i>Electrochimica Acta</i> , <b>2017</b> , 242, 31-37	6.7	38
119	The tin effect in lead-calcium alloys. <i>Journal of Power Sources</i> , <b>1997</b> , 67, 61-67	8.9	37
118	Sputtered Titanium Carbide Thick Film for High Areal Energy on Chip Carbon-Based Micro-Supercapacitors. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1606813	15.6	36
117	Charge Storage Mechanisms of Single-Layer Graphene in Ionic Liquid. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 16559-16563	16.4	36
116	Solvent-Free Electrolytes for Electrical Double Layer Capacitors. <i>Journal of the Electrochemical Society</i> , <b>2015</b> , 162, A5037-A5040	3.9	36
115	Multi-scale modelling of supercapacitors: From molecular simulations to a transmission line model. <i>Journal of Power Sources</i> , <b>2016</b> , 326, 680-685	8.9	36
114	Electrochemical behavior of high performance on-chip porous carbon films for micro-supercapacitors applications in organic electrolytes. <i>Journal of Power Sources</i> , <b>2016</b> , 328, 520-526	8.9	31
113	Understanding of carbon-based supercapacitors ageing mechanisms by electrochemical and analytical methods. <i>Journal of Power Sources</i> , <b>2017</b> , 366, 123-130	8.9	31
112	Recent Advances in Understanding the Capacitive Storage in Microporous Carbons. <i>Fuel Cells</i> , <b>2010</b> , 10, 819-824	2.9	31
111	Laser-scribed Ru organometallic complex for the preparation of RuO <sub>2</sub> micro-supercapacitor electrodes on flexible substrate. <i>Electrochimica Acta</i> , <b>2018</b> , 281, 816-821	6.7	30
110	Impact of the surface roughness on the electrical capacitance. <i>Microelectronics Journal</i> , <b>2006</b> , 37, 752-758	8.8	30

109	Self-supported binder-free hard carbon electrodes for sodium-ion batteries: insights into their sodium storage mechanisms. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 5558-5571	13	28
108	Electrodeposition of Arrays of Ru, Pt, and PtRu Alloy 1D Metallic Nanostructures. <i>Journal of the Electrochemical Society</i> , <b>2010</b> , 157, K59	3.9	28
107	<b>2017</b> ,		27
106	Original Conductive Nano-Co3O4 Investigated as Electrode Material for Hybrid Supercapacitors. <i>Electrochemical and Solid-State Letters</i> , <b>2011</b> , 14, A139		27
105	Effect of the carbon microporous structure on the capacitance of aqueous supercapacitors. <i>Energy Storage Materials</i> , <b>2019</b> , 21, 190-195	19.4	26
104	Anthraquinone modification of microporous carbide derived carbon films for on-chip micro-supercapacitors applications. <i>Electrochimica Acta</i> , <b>2017</b> , 246, 391-398	6.7	25
103	Electrodeposited Cu2Sb as anode material for 3-dimensional Li-ion microbatteries. <i>Journal of Materials Research</i> , <b>2010</b> , 25, 1485-1491	2.5	25
102	Alkali Ions Pre-Intercalated Layered MnO2 Nanosheet for Zinc-Ions Storage. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101287	21.8	25
101	Synthesis of T-Nb2O5 thin-films deposited by Atomic Layer Deposition for miniaturized electrochemical energy storage devices. <i>Energy Storage Materials</i> , <b>2019</b> , 16, 581-588	19.4	25
100	Electrochemical double layer capacitors: What is next beyond the corner?. <i>Current Opinion in Electrochemistry</i> , <b>2017</b> , 6, 115-119	7.2	24
99	Proton Ion Exchange Reaction in Li3IrO4: A Way to New H3+xIrO4 Phases Electrochemically Active in Both Aqueous and Nonaqueous Electrolytes. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702855	21.8	24
98	Characterization by electrochemical impedance spectroscopy of passive layers formed on lead-tin alloys, in tetraborate and sulfuric acid solutions. <i>Journal of Power Sources</i> , <b>1995</b> , 55, 63-71	8.9	24
97	Tracking Ionic Rearrangements and Interpreting Dynamic Volumetric Changes in Two-Dimensional Metal Carbide Supercapacitors: A Molecular Dynamics Simulation Study. <i>ChemSusChem</i> , <b>2018</b> , 11, 1892-1899	8.3	24
96	Ion Sieving Effects in Chemically Tuned Pillared Graphene Materials for Electrochemical Capacitors. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 3040-3047	9.6	23
95	Electrical Double-Layer Capacitors and Carbons for EDLCs <b>2013</b> , 131-165		23
94	Single Electrode Capacitances of Porous Carbons in Neat Ionic Liquid Electrolyte at 100°C: A Combined Experimental and Modeling Approach. <i>Journal of the Electrochemical Society</i> , <b>2015</b> , 162, A5091-A5093	3.9	23
93	Nanomaterials for Electrochemical Energy Storage: the Good and the Bad. <i>Acta Chimica Slovenica</i> , <b>2016</b> , 63, 417-23	1.9	23
92	Vertically Oriented Propylene Carbonate Molecules and Tetraethyl Ammonium Ions in Carbon Slit Pores. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 5752-5757	3.8	22

91	Preparation of activated carbon from <i>Turbinaria turbinata</i> seaweeds and its use as supercapacitor electrode materials. <i>Comptes Rendus Chimie</i> , <b>2013</b> , 16, 73-79	2.7	21
90	In situ redox conductivity, XPS and impedance spectroscopy studies of passive layers formed on lead-tin alloys. <i>Journal of Power Sources</i> , <b>1995</b> , 53, 163-173	8.9	21
89	X-ray photoelectronspectroscopy study of passive layers formed on lead-tin alloys. <i>Journal of Power Sources</i> , <b>1994</b> , 52, 31-39	8.9	21
88	Investigation of ion transport in chemically tuned pillared graphene materials through electrochemical impedance analysis. <i>Electrochimica Acta</i> , <b>2019</b> , 296, 882-890	6.7	21
87	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. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 1789-1798	9.5	20
86	Outstanding room-temperature capacitance of biomass-derived microporous carbons in ionic liquid electrolyte. <i>Electrochemistry Communications</i> , <b>2017</b> , 79, 5-8	5.1	19
85	Computational Insights into Charge Storage Mechanisms of Supercapacitors. <i>Energy and Environmental Materials</i> , <b>2020</b> , 3, 235-246	13	19
84	Hard carbon key properties allow for the achievement of high Coulombic efficiency and high volumetric capacity in Na-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 1743-1758	13	19
83	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. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 1488-1494	13	18
82	Magnetic Resonance Imaging of a Complete Supercapacitor Giving Additional Insight on the Role of Nanopores. <i>ACS Nano</i> , <b>2019</b> , 13, 12810-12815	16.7	18
81	Self supported nickel antimonides based electrodes for Li ion battery. <i>Solid State Ionics</i> , <b>2011</b> , 192, 298-303	3.3	18
80	An in situ study of the effect of tin on the passivation of lead-tin alloys. <i>Journal of Power Sources</i> , <b>1994</b> , 50, 141-152	8.9	18
79	Salt-template synthesis of mesoporous carbon monolith for ionogel-based supercapacitors. <i>Electrochemistry Communications</i> , <b>2018</b> , 96, 6-10	5.1	18
78	Li-ion storage properties of two-dimensional titanium-carbide synthesized via fast one-pot method in air atmosphere. <i>Nature Communications</i> , <b>2021</b> , 12, 5085	17.4	18
77	Titanium Carbide MXene Shows an Electrochemical Anomaly in Water-in-Salt Electrolytes. <i>ACS Nano</i> , <b>2021</b> , 15, 15274-15284	16.7	18
76	Materials for Electrochemical Capacitors <b>2017</b> , 495-561		17
75	Fast Electrochemical Storage Process in Sputtered NbO Porous Thin Films. <i>ACS Nano</i> , <b>2019</b> , 13, 5826-5836	16.7	17
74	Dense on Porous Solid LATP Electrolyte System: Preparation and Conductivity Measurement. <i>Journal of the American Ceramic Society</i> , <b>2017</b> , 100, 141-149	3.8	17

73	Spark plasma sintered carbon electrodes for electrical double layer capacitor applications. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 1620-1625	8.9	17
72	Designing ionic channels in novel carbons for electrochemical energy storage. <i>National Science Review</i> , <b>2020</b> , 7, 191-201	10.8	16
71	Advanced analytical techniques to characterize materials for electrochemical capacitors. <i>Current Opinion in Electrochemistry</i> , <b>2018</b> , 9, 18-25	7.2	16
70	Electrochemical kinetics of nanostructure LiFePO <sub>4</sub> /graphitic carbon electrodes. <i>Electrochemistry Communications</i> , <b>2016</b> , 72, 10-14	5.1	16
69	Cation-Disordered Li <sub>3</sub> VO <sub>4</sub> : Reversible Li Insertion/Deinsertion Mechanism for Quasi Li-Rich Layered Li <sub>1+x</sub> [V <sub>1/2</sub> Li <sub>1/2</sub> ]O <sub>2</sub> (x = 0.1). <i>Chemistry of Materials</i> , <b>2018</b> , 30, 4926-4934	9.6	16
68	Fundamental research on the role of alloying tin as a means to eliminate the passivation phenomena in lead/acid batteries.. <i>Journal of Power Sources</i> , <b>1998</b> , 73, 30-35	8.9	16
67	Tracking ionic fluxes in porous carbon electrodes from aqueous electrolyte mixture at various pH. <i>Electrochemistry Communications</i> , <b>2018</b> , 93, 119-122	5.1	16
66	Blue Energy and Desalination with Nanoporous Carbon Electrodes: Capacitance from Molecular Simulations to Continuous Models. <i>Physical Review X</i> , <b>2018</b> , 8,	9.1	15
65	Understanding the different (dis)charging steps of supercapacitors: influence of potential and solvation. <i>Electrochimica Acta</i> , <b>2016</b> , 206, 504-512	6.7	15
64	Screening Methodology for the Efficient Pairing of Ionic Liquids and Carbonaceous Electrodes Applied to Electric Energy Storage. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 864-872	3.8	15
63	Continuous transition from double-layer to Faradaic charge storage in confined electrolytes. <i>Nature Energy</i> , <b>2022</b> , 7, 222-228	62.3	15
62	On the development of an original mesoscopic model to predict the capacitive properties of carbon-carbon supercapacitors. <i>Electrochimica Acta</i> , <b>2019</b> , 327, 135022	6.7	14
61	Single electron transfer photoinduced oxidation of piperidine and pyrrolidine derivatives to the corresponding lactams. <i>Perkin Transactions II RSC</i> , <b>2000</b> , 1147-1153		14
60	Fast X-ray Nanotomography with Sub-10 nm Resolution as a Powerful Imaging Tool for Nanotechnology and Energy Storage Applications. <i>Advanced Materials</i> , <b>2021</b> , 33, e2008653	24	14
59	Effect of polarisation mode, time and potential on the properties of the passive layer on lead-tin alloys. <i>Journal of Power Sources</i> , <b>1997</b> , 64, 21-27	8.9	13
58	Multi electrode prismatic power prototype carbon/carbon supercapacitors. <i>Journal of Power Sources</i> , <b>1999</b> , 83, 162-169	8.9	13
57	Understanding ageing mechanisms of porous carbons in non-aqueous electrolytes for supercapacitors applications. <i>Journal of Power Sources</i> , <b>2019</b> , 434, 226734	8.9	12
56	Materials for electrochemical capacitors <b>2010</b> , 138-147		12

55	Electrophoretic silica-coating process on a nano-structured copper electrode. <i>Chemical Communications</i> , <b>2008</b> , 5004-6	5.8	12
54	Exfoliation and Delamination of TiCT MXene Prepared Molten Salt Etching Route. <i>ACS Nano</i> , <b>2021</b> ,	16.7	12
53	Effects of functional groups and anion size on the charging mechanisms in layered electrode materials. <i>Energy Storage Materials</i> , <b>2020</b> , 33, 460-469	19.4	12
52	Noncrystalline Nanocomposites as a Remedy for the Low Diffusivity of Multivalent Ions in Battery Cathodes. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 1011-1021	9.6	11
51	Silicon carbide with tunable ordered mesoporosity. <i>Microporous and Mesoporous Materials</i> , <b>2013</b> , 180, 172-177	5.3	11
50	Synthesis and Characterization of Well Aligned Ru Nanowires and Nanotubes. <i>ECS Transactions</i> , <b>2009</b> , 25, 3-11	1	11
49	In Situ Conductivity Study of the Corrosion Layers on Lead-Tin Alloys in Sulfuric Acid. <i>Journal of the Electrochemical Society</i> , <b>1997</b> , 144, 443-449	3.9	11
48	Stabilizing the Structure of LiCoPO <sub>4</sub> Nanocrystals via Addition of Fe <sup>3+</sup> : Formation of Fe <sup>3+</sup> Surface Layer, Creation of Diffusion-Enhancing Vacancies, and Enabling High-Voltage Battery Operation. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 6675-6683	9.6	11
47	Future Directions for Electrochemical Capacitors. <i>ACS Energy Letters</i> , 4311-4316	20.1	10
46	Understanding Battery Interfaces by Combined Characterization and Simulation Approaches: Challenges and Perspectives. <i>Advanced Energy Materials</i> , 2102687	21.8	10
45	Electrochemical Study of Conductive Nanometric Co <sub>3</sub> O <sub>4</sub> - Based Electrodes for Asymmetric Supercapacitors in Alkaline Electrolyte. <i>Journal of the Electrochemical Society</i> , <b>2016</b> , 163, A2004-A2010	3.9	9
44	Synthesis of nanosized MnO <sub>2</sub> prepared by the polyol method and its application in high power supercapacitors. <i>Materials for Renewable and Sustainable Energy</i> , <b>2013</b> , 2, 1	4.7	9
43	Preparation and characterization of electrolytic alumina deposit on austenitic stainless steel. <i>Science and Technology of Advanced Materials</i> , <b>2005</b> , 6, 519-524	7.1	9
42	Impact of biomass inorganic impurities on hard carbon properties and performance in Na-ion batteries. <i>Sustainable Materials and Technologies</i> , <b>2020</b> , 26, e00227	5.3	9
41	Design of Fe <sub>3</sub> O <sub>4</sub> raspberry decorated graphene nanocomposites with high performances in lithium-ion battery. <i>Journal of Energy Chemistry</i> , <b>2016</b> , 25, 272-277	12	9
40	Eco-Friendly Synthesis of Nitrogen-Doped Mesoporous Carbon for Supercapacitor Application. <i>Journal of Carbon Research</i> , <b>2018</b> , 4, 20	3.3	8
39	Ultrafast Synthesis of Calcium Vanadate for Superior Aqueous Calcium-Ion Battery. <i>Research</i> , <b>2019</b> , 2019, 6585686	7.8	7
38	Ultracentrifugation: An effective novel route to ultrafast nanomaterials for hybrid supercapacitors. <i>Current Opinion in Electrochemistry</i> , <b>2017</b> , 6, 120-126	7.2	6

37	What Can Text Mining Tell Us About Lithium-Ion Battery Researchers' Habits?. <i>Batteries and Supercaps</i> , <b>2021</b> , 4, 758-766	5.6	6
36	Hybrid Supercapacitors with Ionic Liquid Electrolytes. <i>ECS Transactions</i> , <b>2006</b> , 1, 55-59	1	5
35	Electrochemical Characterization of Single Layer Graphene/Electrolyte Interface: Effect of Solvent on the Interfacial Capacitance. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 13317-13322	16.4	5
34	TiC-carbide derived carbon electrolyte adsorption study by ways of X-ray scattering analysis. <i>Materials for Renewable and Sustainable Energy</i> , <b>2015</b> , 4, 17	4.7	4
33	Dual-Cation Electrolytes for High-Power and High-Energy LTO//AC Hybrid Capacitors. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 12230-12238	3.8	4
32	Enhanced Hybrid Supercapacitors Utilizing Nanostructured Metal Oxides <b>2017</b> , 247-264		4
31	Electrochemical Techniques <b>2013</b> , 111-130		4
30	Influence of carbonaceous electrodes on capacitance and breakdown voltage for hybrid capacitor. <i>Microelectronics Journal</i> , <b>2007</b> , 38, 642-648	1.8	4
29	<b>2015</b> ,		3
28	Electrochemical Energy Storage: The Benefits of Nanomaterials <b>2013</b> , 277-298		3
27	Power harvesting and management from vibrations: a multi-source strategy simulation for aircraft structure health monitoring <b>2008</b> ,		3
26	The path to high-rate energy storage goes through narrow channels. <i>Joule</i> , <b>2022</b> , 6, 28-30	27.8	3
25	Simulations of Ionic Liquids Confined in Surface-Functionalized Nanoporous Carbons: Implications for Energy Storage. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 4007-4015	5.6	3
24	Non - electrochemical Na <sup>+</sup> deintercalation from O <sub>3</sub> NaVO <sub>2</sub> . <i>Materials Research Bulletin</i> , <b>2020</b> , 121, 110585	5.1	3
23	Characterization of the mass transfer fluxes in a capacitive desalination cell by using Fe <sup>III</sup> (CN) <sub>6</sub> <sup>3-</sup> /Fe <sup>II</sup> (CN) <sub>6</sub> <sup>4-</sup> redox couple as an electrochemical probe. <i>Journal of Electroanalytical Chemistry</i> , <b>2019</b> , 842, 127-132	4.1	2
22	Perovskite-type SrVO as high-performance anode materials for Lithium-ion batteries. <i>Advanced Materials</i> , <b>2021</b> , e2107262	24	2
21	Confined water controls capacitance. <i>Nature Materials</i> , <b>2021</b> , 20, 1597-1598	27	2
20	Carbon-carbon supercapacitors: Beyond the average pore size or how electrolyte confinement and inaccessible pores affect the capacitance. <i>Journal of Chemical Physics</i> , <b>2021</b> , 155, 184703	3.9	2

19	MXenes for Supercapacitor Application <b>2019</b> , 349-365		2
18	Electrochemical Characterization of Single Layer Graphene/Electrolyte Interface: Effect of Solvent on the Interfacial Capacitance. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 13429-13434	3.6	2
17	Mesoscopic simulations of the NMR spectra of porous carbon based supercapacitors: electronic structure and adsorbent reorganisation effects. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 15925-15934	3.6	2
16	Practical Works on Nanotechnology: Middle School to Undergraduate Students. <i>IEEE Nanotechnology Magazine</i> , <b>2020</b> , 14, 21-28	1.7	1
15	Preparation of Carbonaceous Materials in Fused Carbonate Salts: Applications to Electrochemical Storages Devices <b>2013</b> , 331-354		1
14	Electrochemically Induced Deformation Determines the Rate of Lithium Intercalation in Bulk TiS <sub>2</sub> . <i>ACS Energy Letters</i> , 4173-4178	20.1	1
13	What Can Text Mining Tell Us About Lithium-Ion Battery Researchers' Habits?. <i>Batteries and Supercaps</i> , <b>2021</b> , 4, 689-689	5.6	1
12	An Artificial Interface for High Cell Voltage Aqueous-Based Electrochemical Capacitors. <i>Journal of the Electrochemical Society</i> , <b>2021</b> , 168, 070520	3.9	1
11	On-chip carbide derived carbon films for high performance micro-supercapacitors <b>2016</b> ,		1
10	Molten Salt-Shielded Synthesis (MS <sup>3</sup> ) of MXenes in Air. <i>Energy and Environmental Materials</i> ,	13	1
9	Tracking Ionic Rearrangements and Interpreting Dynamic Volumetric Changes in Two-Dimensional Metal Carbide Supercapacitors: A Molecular Dynamics Simulation Study. <i>ChemSusChem</i> , <b>2018</b> , 11, 1889-1889	8.2	0
8	MnO <sub>2</sub> -MXene Composite as Electrode for Supercapacitor. <i>Journal of the Electrochemical Society</i> , <b>2022</b> , 169, 030524	3.9	0
7	The effects of local graphitization on the charging mechanisms of microporous carbon supercapacitor electrodes. <i>Electrochemistry Communications</i> , <b>2022</b> , 137, 107258	5.1	0
6	Non-Intrusive Battery Health Monitoring. <i>E3S Web of Conferences</i> , <b>2017</b> , 16, 07006	0.5	
5	Electrochemical Energy Storage: The Benefits of Nanomaterials 155-176		
4	Give Energy to Your Study—Students Worldwide Gather in Europe To Design Future Materials for Energy Storage and Conversion. <i>Journal of Chemical Education</i> , <b>2011</b> , 88, 1203-1206	2.4	
3	Ink-jet printed carbon-based micro-supercapacitor for mobile self-powered modules. <i>Materials Research Society Symposia Proceedings</i> , <b>2008</b> , 1127, 1		
2	Rücktitelbild: Electrochemical Characterization of Single Layer Graphene/Electrolyte Interface: Effect of Solvent on the Interfacial Capacitance (Angew. Chem. 24/2021). <i>Angewandte Chemie</i> , <b>2021</b> , 133, 13800-13800	3.6	

- 1 Comment to the letter to the editor from Costentin et al. Entitled Ohmic drop correction in electrochemical techniques. Multiple potential step chrono-amperometry at the test bench *Energy Storage Materials*, **2020**, 24, 4-5 19.4