

Patrice Simon

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/2615548/patrice-simon-publications-by-year.pdf>
Version: 2024-04-11

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	The path to high-rate energy storage goes through narrow channels. <i>Joule</i> , 2022 , 6, 28-30	27.8	3
251	Continuous transition from double-layer to Faradaic charge storage in confined electrolytes. <i>Nature Energy</i> , 2022 , 7, 222-228	62.3	15
250	MnO ₂ -MXene Composite as Electrode for Supercapacitor. <i>Journal of the Electrochemical Society</i> , 2022 , 169, 030524	3.9	0
249	The effects of local graphitization on the charging mechanisms of microporous carbon supercapacitor electrodes. <i>Electrochemistry Communications</i> , 2022 , 137, 107258	5.1	0
248	Perovskite-type SrVO as high-performance anode materials for Lithium-ion batteries. <i>Advanced Materials</i> , 2021 , e2107262	24	2
247	Exfoliation and Delamination of TiCT MXene Prepared Molten Salt Etching Route. <i>ACS Nano</i> , 2021 ,	16.7	12
246	Confined water controls capacitance. <i>Nature Materials</i> , 2021 , 20, 1597-1598	27	2
245	Carbon-carbon supercapacitors: Beyond the average pore size or how electrolyte confinement and inaccessible pores affect the capacitance. <i>Journal of Chemical Physics</i> , 2021 , 155, 184703	3.9	2
244	Electrochemical Characterization of Single Layer Graphene/Electrolyte Interface: Effect of Solvent on the Interfacial Capacitance. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 13317-13322	16.4	5
243	Simulations of Ionic Liquids Confined in Surface-Functionalized Nanoporous Carbons: Implications for Energy Storage. <i>ACS Applied Nano Materials</i> , 2021 , 4, 4007-4015	5.6	3
242	Electrochemical Characterization of Single Layer Graphene/Electrolyte Interface: Effect of Solvent on the Interfacial Capacitance. <i>Angewandte Chemie</i> , 2021 , 133, 13429-13434	3.6	2
241	R&Ktitelbild: Electrochemical Characterization of Single Layer Graphene/Electrolyte Interface: Effect of Solvent on the Interfacial Capacitance (Angew. Chem. 24/2021). <i>Angewandte Chemie</i> , 2021 , 133, 13800-13800	3.6	
240	What Can Text Mining Tell Us About Lithium-Ion Battery Researchers' Habits?. <i>Batteries and Supercaps</i> , 2021 , 4, 689-689	5.6	1
239	Fast X-ray Nanotomography with Sub-10 nm Resolution as a Powerful Imaging Tool for Nanotechnology and Energy Storage Applications. <i>Advanced Materials</i> , 2021 , 33, e2008653	24	14
238	Alkali Ions Pre-Intercalated Layered MnO ₂ Nanosheet for Zinc-Ions Storage. <i>Advanced Energy Materials</i> , 2021 , 11, 2101287	21.8	25
237	An Artificial Interface for High Cell Voltage Aqueous-Based Electrochemical Capacitors. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 070520	3.9	1
236	Two-dimensional MXenes for electrochemical capacitor applications: Progress, challenges and perspectives. <i>Energy Storage Materials</i> , 2021 , 35, 630-660	19.4	71

235	What Can Text Mining Tell Us About Lithium-Ion Battery Researchers' Habits?. <i>Batteries and Supercaps</i> , 2021 , 4, 758-766	5.6	6
234	Li-ion storage properties of two-dimensional titanium-carbide synthesized via fast one-pot method in air atmosphere. <i>Nature Communications</i> , 2021 , 12, 5085	17.4	18
233	Titanium Carbide MXene Shows an Electrochemical Anomaly in Water-in-Salt Electrolytes. <i>ACS Nano</i> , 2021 , 15, 15274-15284	16.7	18
232	Mesoscopic simulations of the NMR spectra of porous carbon based supercapacitors: electronic structure and adsorbent reorganisation effects. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 15925-15934	3.6	2
231	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> , 2021 , 9, 1743-1758	13	19
230	Dual-Cation Electrolytes for High-Power and High-Energy LTO//AC Hybrid Capacitors. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 12230-12238	3.8	4
229	Practical Works on Nanotechnology: Middle School to Undergraduate Students. <i>IEEE Nanotechnology Magazine</i> , 2020 , 14, 21-28	1.7	1
228	MXenes as High-Rate Electrodes for Energy Storage. <i>Trends in Chemistry</i> , 2020 , 2, 654-664	14.8	40
227	Fast Charging Materials for High Power Applications. <i>Advanced Energy Materials</i> , 2020 , 10, 2001128	21.8	48
226	Interlayer gap widened α -phase molybdenum trioxide as high-rate anodes for dual-ion-intercalation energy storage devices. <i>Nature Communications</i> , 2020 , 11, 1348	17.4	55
225	Self-supported binder-free hard carbon electrodes for sodium-ion batteries: insights into their sodium storage mechanisms. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 5558-5571	13	28
224	Designing ionic channels in novel carbons for electrochemical energy storage. <i>National Science Review</i> , 2020 , 7, 191-201	10.8	16
223	Noncrystalline Nanocomposites as a Remedy for the Low Diffusivity of Multivalent Ions in Battery Cathodes. <i>Chemistry of Materials</i> , 2020 , 32, 1011-1021	9.6	11
222	Modifications of MXene layers for supercapacitors. <i>Nano Energy</i> , 2020 , 73, 104734	17.1	74
221	A general Lewis acidic etching route for preparing MXenes with enhanced electrochemical performance in non-aqueous electrolyte. <i>Nature Materials</i> , 2020 , 19, 894-899	27	368
220	Facile and Scalable Preparation of Ruthenium Oxide-Based Flexible Micro-Supercapacitors. <i>Advanced Energy Materials</i> , 2020 , 10, 1903136	21.8	46
219	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 & Interfaces</i> , 2020 , 12, 1789-1798	9.5	20
218	Effects of functional groups and anion size on the charging mechanisms in layered electrode materials. <i>Energy Storage Materials</i> , 2020 , 33, 460-469	19.4	12

217	Impact of biomass inorganic impurities on hard carbon properties and performance in Na-ion batteries. <i>Sustainable Materials and Technologies</i> , 2020 , 26, e00227	5.3	9
216	Unraveling the Charge Storage Mechanism of Ti ₃ C ₂ T _x MXene Electrode in Acidic Electrolyte. <i>ACS Energy Letters</i> , 2020 , 5, 2873-2880	20.1	51
215	Perspectives for electrochemical capacitors and related devices. <i>Nature Materials</i> , 2020 , 19, 1151-1163	27	493
214	Computational Insights into Charge Storage Mechanisms of Supercapacitors. <i>Energy and Environmental Materials</i> , 2020 , 3, 235-246	13	19
213	Non - electrochemical Na ⁺ deintercalation from O ₃ NaVO ₂ . <i>Materials Research Bulletin</i> , 2020 , 121, 110586	1	3
212	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	19.4	
211	Nanoporous carbon for electrochemical capacitive energy storage. <i>Chemical Society Reviews</i> , 2020 , 49, 3005-3039	58.5	169
210	Energy Storage Data Reporting in Perspective Guidelines for Interpreting the Performance of Electrochemical Energy Storage Systems. <i>Advanced Energy Materials</i> , 2019 , 9, 1902007	21.8	349
209	Charge Storage Mechanisms of Single-Layer Graphene in Ionic Liquid. <i>Journal of the American Chemical Society</i> , 2019 , 141, 16559-16563	16.4	36
208	Understanding ageing mechanisms of porous carbons in non-aqueous electrolytes for supercapacitors applications. <i>Journal of Power Sources</i> , 2019 , 434, 226734	8.9	12
207	Effect of the carbon microporous structure on the capacitance of aqueous supercapacitors. <i>Energy Storage Materials</i> , 2019 , 21, 190-195	19.4	26
206	3D Macroscopic Architectures from Self-Assembled MXene Hydrogels. <i>Advanced Functional Materials</i> , 2019 , 29, 1903960	15.6	207
205	Fast Electrochemical Storage Process in Sputtered NbO Porous Thin Films. <i>ACS Nano</i> , 2019 , 13, 5826-5836	16.7	17
204	A SAXS outlook on disordered carbonaceous materials for electrochemical energy storage. <i>Energy Storage Materials</i> , 2019 , 21, 162-173	19.4	47
203	Characterization of the mass transfer fluxes in a capacitive desalination cell by using Fe ^{III} (CN) ₆ ³⁻ /Fe ^{II} (CN) ₆ ⁴⁻ redox couple as an electrochemical probe. <i>Journal of Electroanalytical Chemistry</i> , 2019 , 842, 127-132	4.1	2
202	3D rGO aerogel with superior electrochemical performance for K ⁺ ion battery. <i>Energy Storage Materials</i> , 2019 , 19, 306-313	19.4	51
201	Influences from solvents on charge storage in titanium carbide MXenes. <i>Nature Energy</i> , 2019 , 4, 241-248	62.3	229
200	Magnetic Resonance Imaging of a Complete Supercapacitor Giving Additional Insight on the Role of Nanopores. <i>ACS Nano</i> , 2019 , 13, 12810-12815	16.7	18

199	On the development of an original mesoscopic model to predict the capacitive properties of carbon-carbon supercapacitors. <i>Electrochimica Acta</i> , 2019 , 327, 135022	6.7	14
198	Ultrafast Synthesis of Calcium Vanadate for Superior Aqueous Calcium-Ion Battery. <i>Research</i> , 2019 , 2019, 6585686	7.8	7
197	MXenes for Supercapacitor Application 2019 , 349-365		2
196	Synthesis of T-Nb ₂ O ₅ thin-films deposited by Atomic Layer Deposition for miniaturized electrochemical energy storage devices. <i>Energy Storage Materials</i> , 2019 , 16, 581-588	19.4	25
195	Electrochemical study of pseudocapacitive behavior of Ti ₃ C ₂ T _x MXene material in aqueous electrolytes. <i>Energy Storage Materials</i> , 2019 , 18, 456-461	19.4	60
194	Investigation of ion transport in chemically tuned pillared graphene materials through electrochemical impedance analysis. <i>Electrochimica Acta</i> , 2019 , 296, 882-890	6.7	21
193	Sparsely Pillared Graphene Materials for High-Performance Supercapacitors: Improving Ion Transport and Storage Capacity. <i>ACS Nano</i> , 2019 , 13, 1443-1453	16.7	55
192	Advanced analytical techniques to characterize materials for electrochemical capacitors. <i>Current Opinion in Electrochemistry</i> , 2018 , 9, 18-25	7.2	16
191	Blue Energy and Desalination with Nanoporous Carbon Electrodes: Capacitance from Molecular Simulations to Continuous Models. <i>Physical Review X</i> , 2018 , 8,	9.1	15
190	Ion Sieving Effects in Chemically Tuned Pillared Graphene Materials for Electrochemical Capacitors. <i>Chemistry of Materials</i> , 2018 , 30, 3040-3047	9.6	23
189	Materials for supercapacitors: When Li-ion battery power is not enough. <i>Materials Today</i> , 2018 , 21, 419-436	13.68	234
188	Proton Ion Exchange Reaction in Li ₃ IrO ₄ : A Way to New H ₃ +xIrO ₄ Phases Electrochemically Active in Both Aqueous and Nonaqueous Electrolytes. <i>Advanced Energy Materials</i> , 2018 , 8, 1702855	21.8	24
187	Cation-Disordered Li ₃ VO ₄ : Reversible Li Insertion/Deinsertion Mechanism for Quasi Li-Rich Layered Li _{1+x} [V _{1/2} Li _{1/2}]O ₂ (x = 0.1). <i>Chemistry of Materials</i> , 2018 , 30, 4926-4934	9.6	16
186	Eco-Friendly Synthesis of Nitrogen-Doped Mesoporous Carbon for Supercapacitor Application. <i>Journal of Carbon Research</i> , 2018 , 4, 20	3.3	8
185	Laser-scribed Ru organometallic complex for the preparation of RuO ₂ micro-supercapacitor electrodes on flexible substrate. <i>Electrochimica Acta</i> , 2018 , 281, 816-821	6.7	30
184	Hard carbons derived from green phenolic resins for Na-ion batteries. <i>Carbon</i> , 2018 , 139, 248-257	10.4	80
183	Tracking Ionic Rearrangements and Interpreting Dynamic Volumetric Changes in Two-Dimensional Metal Carbide Supercapacitors: A Molecular Dynamics Simulation Study. <i>ChemSusChem</i> , 2018 , 11, 1892-1899	8.2	24
182	Stabilizing the Structure of LiCoPO ₄ Nanocrystals via Addition of Fe ³⁺ : Formation of Fe ³⁺ Surface Layer, Creation of Diffusion-Enhancing Vacancies, and Enabling High-Voltage Battery Operation. <i>Chemistry of Materials</i> , 2018 , 30, 6675-6683	9.6	11

181	Salt-template synthesis of mesoporous carbon monolith for ionogel-based supercapacitors. <i>Electrochemistry Communications</i> , 2018 , 96, 6-10	5.1	18
180	Direct Laser Writing of Graphene Made from Chemical Vapor Deposition for Flexible, Integratable Micro-Supercapacitors with Ultrahigh Power Output. <i>Advanced Materials</i> , 2018 , 30, e1801384	24	137
179	Tracking ionic fluxes in porous carbon electrodes from aqueous electrolyte mixture at various pH. <i>Electrochemistry Communications</i> , 2018 , 93, 119-122	5.1	16
178	Tracking Ionic Rearrangements and Interpreting Dynamic Volumetric Changes in Two-Dimensional Metal Carbide Supercapacitors: A Molecular Dynamics Simulation Study. <i>ChemSusChem</i> , 2018 , 11, 1889-1889	8.3	0
177	Two-Dimensional MXene with Controlled Interlayer Spacing for Electrochemical Energy Storage. <i>ACS Nano</i> , 2017 , 11, 2393-2396	16.7	123
176	Proton conducting Gel Polymer Electrolytes for supercapacitor applications. <i>Electrochimica Acta</i> , 2017 , 242, 31-37	6.7	38
175	Anthraquinone modification of microporous carbide derived carbon films for on-chip micro-supercapacitors applications. <i>Electrochimica Acta</i> , 2017 , 246, 391-398	6.7	25
174	Outstanding room-temperature capacitance of biomass-derived microporous carbons in ionic liquid electrolyte. <i>Electrochemistry Communications</i> , 2017 , 79, 5-8	5.1	19
173	Sputtered Titanium Carbide Thick Film for High Areal Energy on Chip Carbon-Based Micro-Supercapacitors. <i>Advanced Functional Materials</i> , 2017 , 27, 1606813	15.6	36
172	Materials for Electrochemical Capacitors 2017 , 495-561		17
171	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> , 2017 , 5, 1488-1494	13	18
170	Ultracentrifugation: An effective novel route to ultrafast nanomaterials for hybrid supercapacitors. <i>Current Opinion in Electrochemistry</i> , 2017 , 6, 120-126	7.2	6
169	Electrochemical double layer capacitors: What is next beyond the corner?. <i>Current Opinion in Electrochemistry</i> , 2017 , 6, 115-119	7.2	24
168	Enhanced Hybrid Supercapacitors Utilizing Nanostructured Metal Oxides 2017 , 247-264		4
167	Non-Intrusive Battery Health Monitoring. <i>E3S Web of Conferences</i> , 2017 , 16, 07006	0.5	
166	Partial breaking of the Coulombic ordering of ionic liquids confined in carbon nanopores. <i>Nature Materials</i> , 2017 , 16, 1225-1232	27	166
165	Understanding of carbon-based supercapacitors ageing mechanisms by electrochemical and analytical methods. <i>Journal of Power Sources</i> , 2017 , 366, 123-130	8.9	31
164	Ultra-high-rate pseudocapacitive energy storage in two-dimensional transition metal carbides. <i>Nature Energy</i> , 2017 , 2,	62.3	1071

163	Dense on Porous Solid LATP Electrolyte System: Preparation and Conductivity Measurement. <i>Journal of the American Ceramic Society</i> , 2017 , 100, 141-149	3.8	17
162	2017 ,		27
161	Electrochemical and in-situ X-ray diffraction studies of Ti ₃ C ₂ T _x MXene in ionic liquid electrolyte. <i>Electrochemistry Communications</i> , 2016 , 72, 50-53	5.1	92
160	Electrochemical kinetics of nanostructure LiFePO ₄ /graphitic carbon electrodes. <i>Electrochemistry Communications</i> , 2016 , 72, 10-14	5.1	16
159	Electrochemical behavior of high performance on-chip porous carbon films for micro-supercapacitors applications in organic electrolytes. <i>Journal of Power Sources</i> , 2016 , 328, 520-526	8.9	31
158	Increase in Capacitance by Subnanometer Pores in Carbon. <i>ACS Energy Letters</i> , 2016 , 1, 1262-1265	20.1	133
157	High power density aqueous hybrid supercapacitor combining activated carbon and highly conductive spinel cobalt oxide. <i>Journal of Power Sources</i> , 2016 , 331, 277-284	8.9	45
156	Electrochemical Study of Conductive Nanometric Co ₃ O ₄ - Based Electrodes for Asymmetric Supercapacitors in Alkaline Electrolyte. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A2004-A2010	3.9	9
155	Graphene-Based Supercapacitors Using Eutectic Ionic Liquid Mixture Electrolyte. <i>Electrochimica Acta</i> , 2016 , 206, 446-451	6.7	56
154	High capacitance of coarse-grained carbide derived carbon electrodes. <i>Journal of Power Sources</i> , 2016 , 306, 32-41	8.9	50
153	On-chip and freestanding elastic carbon films for micro-supercapacitors. <i>Science</i> , 2016 , 351, 691-5	33.3	522
152	Ionogel-based solid-state supercapacitor operating over a wide range of temperature. <i>Electrochimica Acta</i> , 2016 , 206, 490-495	6.7	65
151	Understanding the different (dis)charging steps of supercapacitors: influence of potential and solvation. <i>Electrochimica Acta</i> , 2016 , 206, 504-512	6.7	15
150	Capacitance of two-dimensional titanium carbide (MXene) and MXene/carbon nanotube composites in organic electrolytes. <i>Journal of Power Sources</i> , 2016 , 306, 510-515	8.9	182
149	Nanomaterials for Electrochemical Energy Storage: the Good and the Bad. <i>Acta Chimica Slovenica</i> , 2016 , 63, 417-23	1.9	23
148	Ultrafast Nanocrystalline-TiO ₂ (B)/Carbon Nanotube Hyperdispersion Prepared via Combined Ultracentrifugation and Hydrothermal Treatments for Hybrid Supercapacitors. <i>Advanced Materials</i> , 2016 , 28, 6751-7	24	50
147	On-chip carbide derived carbon films for high performance micro-supercapacitors 2016 ,		1
146	Ultrafast charge/discharge characteristics of a nanosized core-shell structured LiFePO ₄ material for hybrid supercapacitor applications. <i>Energy and Environmental Science</i> , 2016 , 9, 2143-2151	35.4	99

145	Design of Fe ₃ O ₄ raspberry decorated graphene nanocomposites with high performances in lithium-ion battery. <i>Journal of Energy Chemistry</i> , 2016 , 25, 272-277	12	9
144	Multi-scale modelling of supercapacitors: From molecular simulations to a transmission line model. <i>Journal of Power Sources</i> , 2016 , 326, 680-685	8.9	36
143	Capacitance of Ti ₃ C ₂ T _x MXene in ionic liquid electrolyte. <i>Journal of Power Sources</i> , 2016 , 326, 575-579	8.9	163
142	Enhanced Electrochemical Performance of Ultracentrifugation-Derived nc-Li ₃ VO ₄ /MWCNT Composites for Hybrid Supercapacitors. <i>ACS Nano</i> , 2016 , 10, 5398-404	16.7	63
141	Relationship between the carbon nano-onions (CNOs) surface chemistry/defects and their capacitance in aqueous and organic electrolytes. <i>Carbon</i> , 2016 , 105, 628-637	10.4	58
140	Capacitance of Nanoporous Carbon-Based Supercapacitors Is a Trade-Off between the Concentration and the Separability of the Ions. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 4015-4021	6.4	62
139	Efficient storage mechanisms for building better supercapacitors. <i>Nature Energy</i> , 2016 , 1,	62.3	1256
138	Solvent-Free Electrolytes for Electrical Double Layer Capacitors. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A5037-A5040	3.9	36
137	In situ NMR and electrochemical quartz crystal microbalance techniques reveal the structure of the electrical double layer in supercapacitors. <i>Nature Materials</i> , 2015 , 14, 812-9	27	233
136	NMR Study of Ion Dynamics and Charge Storage in Ionic Liquid Supercapacitors. <i>Journal of the American Chemical Society</i> , 2015 , 137, 7231-42	16.4	148
135	Investigating the n- and p-Type Electrolytic Charging of Colloidal Nanoplatelets. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 21795-21799	3.8	52
134	TiC-carbide derived carbon electrolyte adsorption study by ways of X-ray scattering analysis. <i>Materials for Renewable and Sustainable Energy</i> , 2015 , 4, 17	4.7	4
133	Confinement, Desolvation, And Electrosorption Effects on the Diffusion of Ions in Nanoporous Carbon Electrodes. <i>Journal of the American Chemical Society</i> , 2015 , 137, 12627-32	16.4	116
132	Non-aqueous gel polymer electrolyte with phosphoric acid ester and its application for quasi solid-state supercapacitors. <i>Journal of Power Sources</i> , 2015 , 274, 1147-1154	8.9	54
131	2015 ,		3
130	Two-Dimensional Vanadium Carbide (MXene) as Positive Electrode for Sodium-Ion Capacitors. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2305-9	6.4	294
129	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> , 2015 , 162, A5091-A5095	3.9	23
128	Anionic redox chemistry in Na-rich Na ₂ Ru _{1-x} Sn _y O ₃ positive electrode material for Na-ion batteries. <i>Electrochemistry Communications</i> , 2015 , 53, 29-32	5.1	83

127	Graphene-like carbide derived carbon for high-power supercapacitors. <i>Nano Energy</i> , 2015 , 12, 197-206	17.1	101
126	Pseudocapacitive oxide materials for high-rate electrochemical energy storage. <i>Energy and Environmental Science</i> , 2014 , 7, 1597	35.4	3208
125	Capacitive deionization concept based on suspension electrodes without ion exchange membranes. <i>Electrochemistry Communications</i> , 2014 , 43, 18-21	5.1	91
124	Electrochemical Kinetics of Nanostructured Nb ₂ O ₅ Electrodes. <i>Journal of the Electrochemical Society</i> , 2014 , 161, A718-A725	3.9	188
123	Screening Methodology for the Efficient Pairing of Ionic Liquids and Carbonaceous Electrodes Applied to Electric Energy Storage. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 864-872	3.8	15
122	On the dynamics of charging in nanoporous carbon-based supercapacitors. <i>ACS Nano</i> , 2014 , 8, 1576-83	16.7	151
121	Nanoarchitected graphene-based supercapacitors for next-generation energy-storage applications. <i>Chemistry - A European Journal</i> , 2014 , 20, 13838-52	4.8	245
120	Electrochemical quartz crystal microbalance (EQCM) study of ion dynamics in nanoporous carbons. <i>Journal of the American Chemical Society</i> , 2014 , 136, 8722-8	16.4	192
119	Ion counting in supercapacitor electrodes using NMR spectroscopy. <i>Faraday Discussions</i> , 2014 , 176, 49-68	6.6	75
118	High capacitance of surface-modified 2D titanium carbide in acidic electrolyte. <i>Electrochemistry Communications</i> , 2014 , 48, 118-122	5.1	308
117	Energy applications of ionic liquids. <i>Energy and Environmental Science</i> , 2014 , 7, 232-250	35.4	1244
116	Materials science. Where do batteries end and supercapacitors begin?. <i>Science</i> , 2014 , 343, 1210-1	33.3	3680
115	Capacitive energy storage in nanostructured carbon-electrolyte systems. <i>Accounts of Chemical Research</i> , 2013 , 46, 1094-103	24.3	1112
114	Structure and Electrochemical Performance of Carbide-Derived Carbon Nanopowders. <i>Advanced Functional Materials</i> , 2013 , 23, 1081-1089	15.6	153
113	Preparation of Carbonaceous Materials in Fused Carbonate Salts: Applications to Electrochemical Storage Devices 2013 , 331-354		1
112	Silicon carbide with tunable ordered mesoporosity. <i>Microporous and Mesoporous Materials</i> , 2013 , 180, 172-177	5.3	11
111	Synthesis of nanosized MnO ₂ prepared by the polyol method and its application in high power supercapacitors. <i>Materials for Renewable and Sustainable Energy</i> , 2013 , 2, 1	4.7	9
110	On-chip micro-supercapacitors for operation in a wide temperature range. <i>Electrochemistry Communications</i> , 2013 , 36, 53-56	5.1	94

109	Highly confined ions store charge more efficiently in supercapacitors. <i>Nature Communications</i> , 2013 , 4, 2701	17.4	328
108	Cation intercalation and high volumetric capacitance of two-dimensional titanium carbide. <i>Science</i> , 2013 , 341, 1502-5	33.3	2510
107	Micro-supercapacitors from carbide derived carbon (CDC) films on silicon chips. <i>Journal of Power Sources</i> , 2013 , 225, 240-244	8.9	120
106	Simulating Supercapacitors: Can We Model Electrodes As Constant Charge Surfaces?. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 264-8	6.4	170
105	Lithium conducting solid electrolyte Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ obtained via solution chemistry. <i>Journal of the European Ceramic Society</i> , 2013 , 33, 1145-1153	6	107
104	Preparation of activated carbon from <i>Turbinaria turbinata</i> seaweeds and its use as supercapacitor electrode materials. <i>Comptes Rendus Chimie</i> , 2013 , 16, 73-79	2.7	21
103	Electrical Double-Layer Capacitors and Carbons for EDLCs 2013 , 131-165		23
102	Electrochemical Techniques 2013 , 111-130		4
101	High-rate electrochemical energy storage through Li ⁺ intercalation pseudocapacitance. <i>Nature Materials</i> , 2013 , 12, 518-22	27	3039
100	Outstanding performance of activated graphene based supercapacitors in ionic liquid electrolyte from 80 to 80 °C. <i>Nano Energy</i> , 2013 , 2, 403-411	17.1	276
99	Nuclear magnetic resonance study of ion adsorption on microporous carbide-derived carbon. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 7722-30	3.6	65
98	Electrochemical Energy Storage: The Benefits of Nanomaterials 2013 , 277-298		3
97	Vertically Oriented Propylene Carbonate Molecules and Tetraethyl Ammonium Ions in Carbon Slit Pores. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 5752-5757	3.8	22
96	Ordered mesoporous silicon carbide-derived carbon for high-power supercapacitors. <i>Electrochemistry Communications</i> , 2013 , 34, 109-112	5.1	65
95	In situ NMR spectroscopy of supercapacitors: insight into the charge storage mechanism. <i>Journal of the American Chemical Society</i> , 2013 , 135, 18968-80	16.4	124
94	Steric effects in adsorption of ions from mixed electrolytes into microporous carbon. <i>Electrochemistry Communications</i> , 2012 , 15, 63-65	5.1	55
93	MXene: a promising transition metal carbide anode for lithium-ion batteries. <i>Electrochemistry Communications</i> , 2012 , 16, 61-64	5.1	963
92	On the origin of the extra capacity at low potential in materials for Li batteries reacting through conversion reaction. <i>Electrochimica Acta</i> , 2012 , 61, 13-18	6.7	195

91	A Non-Aqueous Asymmetric Cell with a Ti ₂ C-Based Two-Dimensional Negative Electrode. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A1368-A1373	3.9	270
90	Characterization of commercial supercapacitors for low temperature applications. <i>Journal of Power Sources</i> , 2012 , 219, 235-239	8.9	69
89	Non-Aqueous Li-Based Redox Flow Batteries. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A1360-A1367	3.9	87
88	On the molecular origin of supercapacitance in nanoporous carbon electrodes. <i>Nature Materials</i> , 2012 , 11, 306-10	27	728
87	Wafer-level fabrication process for fully encapsulated micro-supercapacitors with high specific energy. <i>Microsystem Technologies</i> , 2012 , 18, 467-473	1.7	57
86	Capacitive Energy Storage from 0 to 100 °C Using an Ionic Liquid Electrolyte. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 2396-2401	6.4	308
85	Real-time NMR studies of electrochemical double-layer capacitors. <i>Journal of the American Chemical Society</i> , 2011 , 133, 19270-3	16.4	125
84	3D lithium ion batteries from fundamentals to fabrication. <i>Journal of Materials Chemistry</i> , 2011 , 21, 9876		201
83	Microporous Carbon-Based Electrical Double Layer Capacitor Operating at High Temperature in Ionic Liquid Electrolyte. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, A174		46
82	Materials science. True performance metrics in electrochemical energy storage. <i>Science</i> , 2011 , 334, 917-833	3.3	1781
81	Electrochemical Kinetic Study of LiFePO ₄ Using Cavity Microelectrode. <i>Journal of the Electrochemical Society</i> , 2011 , 158, A1090	3.9	90
80	Continuous carbide-derived carbon films with high volumetric capacitance. <i>Energy and Environmental Science</i> , 2011 , 4, 135-138	35.4	157
79	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> , 2011 , 88, 1203-1206	2.4	
78	Spark plasma sintered carbon electrodes for electrical double layer capacitor applications. <i>Journal of Power Sources</i> , 2011 , 196, 1620-1625	8.9	17
77	Self supported nickel antimonides based electrodes for Li ion battery. <i>Solid State Ionics</i> , 2011 , 192, 298-303	3.3	18
76	Original Conductive Nano-Co ₃ O ₄ Investigated as Electrode Material for Hybrid Supercapacitors. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, A139		27
75	Ultrahigh-power micrometre-sized supercapacitors based on onion-like carbon. <i>Nature Nanotechnology</i> , 2010 , 5, 651-4	28.7	2188
74	Electrodeposited Cu ₂ Sb as anode material for 3-dimensional Li-ion microbatteries. <i>Journal of Materials Research</i> , 2010 , 25, 1485-1491	2.5	25

73	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> , 2010 , 368, 3457-67	3	199
72	Electrodeposition of Arrays of Ru, Pt, and PtRu Alloy 1D Metallic Nanostructures. <i>Journal of the Electrochemical Society</i> , 2010 , 157, K59	3.9	28
71	Materials for electrochemical capacitors 2010 , 138-147		12
70	Monolithic carbide-derived carbon films for micro-supercapacitors. <i>Science</i> , 2010 , 328, 480-3	33.3	1099
69	Qualitative Electrochemical Impedance Spectroscopy study of ion transport into sub-nanometer carbon pores in Electrochemical Double Layer Capacitor electrodes. <i>Electrochimica Acta</i> , 2010 , 55, 7489-7494	6.7	131
68	Recent Advances in Understanding the Capacitive Storage in Microporous Carbons. <i>Fuel Cells</i> , 2010 , 10, 819-824	2.9	31
67	Nanoarchitected 3D cathodes for Li-ion microbatteries. <i>Advanced Materials</i> , 2010 , 22, 4978-81	24	137
66	Elaboration of a microstructured inkjet-printed carbon electrochemical capacitor. <i>Journal of Power Sources</i> , 2010 , 195, 1266-1269	8.9	375
65	MnO ₂ -coated Ni nanorods: Enhanced high rate behavior in pseudo-capacitive supercapacitor. <i>Electrochimica Acta</i> , 2010 , 55, 7454-7459	6.7	49
64	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> , 2009 , 156, A7	3.9	197
63	High rate capability pure Sn-based nano-architected electrode assembly for rechargeable lithium batteries. <i>Journal of Power Sources</i> , 2009 , 188, 578-582	8.9	141
62	Solvent effect on the ion adsorption from ionic liquid electrolyte into sub-nanometer carbon pores. <i>Electrochimica Acta</i> , 2009 , 54, 7025-7032	6.7	156
61	Self-supported three-dimensional nanoelectrodes for microbattery applications. <i>Nano Letters</i> , 2009 , 9, 3230-3	11.5	210
60	Synthesis and Characterization of Well Aligned Ru Nanowires and Nanotubes. <i>ECS Transactions</i> , 2009 , 25, 3-11	1	11
59	Materials for electrochemical capacitors 2009 , 320-329		136
58	Materials for electrochemical capacitors. <i>Nature Materials</i> , 2008 , 7, 845-54	27	12536
57	Relation between the ion size and pore size for an electric double-layer capacitor. <i>Journal of the American Chemical Society</i> , 2008 , 130, 2730-1	16.4	1755
56	Electrophoretic silica-coating process on a nano-structured copper electrode. <i>Chemical Communications</i> , 2008 , 5004-6	5.8	12

55	Electrochemical Method for Direct Deposition of Nanometric Bismuth and Its Electrochemical Properties vs Li. <i>Electrochemical and Solid-State Letters</i> , 2008 , 11, E5		43
54	Ink-jet printed carbon-based micro-supercapacitor for mobile self-powered modules. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1127, 1		
53	Power harvesting and management from vibrations: a multi-source strategy simulation for aircraft structure health monitoring 2008 ,		3
52	The good reactivity of lithium with nanostructured copper phosphide. <i>Journal of Materials Chemistry</i> , 2008 , 18, 5956		48
51	Desolvation of ions in subnanometer pores and its effect on capacitance and double-layer theory. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 3392-5	16.4	487
50	Desolvation of Ions in Subnanometer Pores and Its Effect on Capacitance and Double-Layer Theory. <i>Angewandte Chemie</i> , 2008 , 120, 3440-3443	3.6	115
49	Direct electrodeposition of aluminium nano-rods. <i>Electrochemistry Communications</i> , 2008 , 10, 1467-1470	5.1	77
48	Materials science. Electrochemical capacitors for energy management. <i>Science</i> , 2008 , 321, 651-2	33.3	3660
47	New Materials and New Configurations for Advanced Electrochemical Capacitors. <i>Electrochemical Society Interface</i> , 2008 , 17, 34-37	3.6	211
46	Nanostructured Carbons: Double-Layer Capacitance and More. <i>Electrochemical Society Interface</i> , 2008 , 17, 38-43	3.6	209
45	High-Rate, Long-Life NiSn Nanostructured Electrodes for Lithium-Ion Batteries. <i>Advanced Materials</i> , 2007 , 19, 1632-1635	24	354
44	Influence of carbonaceous electrodes on capacitance and breakdown voltage for hybrid capacitor. <i>Microelectronics Journal</i> , 2007 , 38, 642-648	1.8	4
43	Long-term cycling behavior of asymmetric activated carbon/MnO ₂ aqueous electrochemical supercapacitor. <i>Journal of Power Sources</i> , 2007 , 173, 633-641	8.9	404
42	High temperature carbon/carbon supercapacitor using ionic liquid as electrolyte. <i>Journal of Power Sources</i> , 2007 , 165, 922-927	8.9	485
41	Activated carbon/carbon nanotube composite porous film for supercapacitor applications. <i>Materials Research Bulletin</i> , 2006 , 41, 478-484	5.1	84
40	Hybrid Supercapacitors with Ionic Liquid Electrolytes. <i>ECS Transactions</i> , 2006 , 1, 55-59	1	5
39	Modification of Al Current Collector/Active Material Interface for Power Improvement of Electrochemical Capacitor Electrodes. <i>Journal of the Electrochemical Society</i> , 2006 , 153, A649	3.9	51
38	Anomalous increase in carbon capacitance at pore sizes less than 1 nanometer. <i>Science</i> , 2006 , 313, 1760-3	33.3	2937

37	High rate capabilities Fe ₃ O ₄ -based Cu nano-architected electrodes for lithium-ion battery applications. <i>Nature Materials</i> , 2006 , 5, 567-73	27	1803
36	TiO ₂ (B)/activated carbon non-aqueous hybrid system for energy storage. <i>Journal of Power Sources</i> , 2006 , 158, 571-577	8.9	119
35	Impact of the surface roughness on the electrical capacitance. <i>Microelectronics Journal</i> , 2006 , 37, 752-758	8.8	30
34	Polypyrrole-Fe ₂ O ₃ nanohybrid materials for electrochemical storage. <i>Journal of Solid State Electrochemistry</i> , 2006 , 11, 398-406	2.6	56
33	Electrode surface treatment and electrochemical impedance spectroscopy study on carbon/carbon supercapacitors. <i>Applied Physics A: Materials Science and Processing</i> , 2006 , 82, 639-646	2.6	117
32	Combining Electrochemistry and Metallurgy for New Electrode Designs in Li-Ion Batteries. <i>Chemistry of Materials</i> , 2005 , 17, 5041-5047	9.6	62
31	High power density electrodes for Carbon supercapacitor applications. <i>Electrochimica Acta</i> , 2005 , 50, 4174-4181	6.7	297
30	Preparation and characterization of electrolytic alumina deposit on austenitic stainless steel. <i>Science and Technology of Advanced Materials</i> , 2005 , 6, 519-524	7.1	9
29	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> , 2005 , 50, 2233-2237	6.7	157
28	Influence of carbon nanotubes addition on carbon-carbon supercapacitor performances in organic electrolyte. <i>Journal of Power Sources</i> , 2005 , 139, 371-378	8.9	195
27	Modification of Al current collector surface by sol-gel deposit for carbon-carbon supercapacitor applications. <i>Electrochimica Acta</i> , 2004 , 49, 905-912	6.7	343
26	Li ₄ Ti ₅ O ₁₂ /poly(methyl)thiophene asymmetric hybrid electrochemical device. <i>Journal of Power Sources</i> , 2004 , 125, 95-102	8.9	118
25	Activated Carbon/Conducting Polymer Hybrid Supercapacitors. <i>Journal of the Electrochemical Society</i> , 2003 , 150, A645	3.9	156
24	Electrochemical Characteristics and Impedance Spectroscopy Studies of Carbon-Carbon Supercapacitors. <i>Journal of the Electrochemical Society</i> , 2003 , 150, A292	3.9	1431
23	A Nonaqueous Asymmetric Hybrid Li ₄ Ti ₅ O ₁₂ /Poly(fluorophenylthiophene) Energy Storage Device. <i>Journal of the Electrochemical Society</i> , 2002 , 149, A302	3.9	99
22	Studies and characterisations of various activated carbons used for carbon/carbon supercapacitors. <i>Journal of Power Sources</i> , 2001 , 101, 109-116	8.9	1002
21	Hybrid Supercapacitors Based on Activated Carbons and Conducting Polymers. <i>Journal of the Electrochemical Society</i> , 2001 , 148, A1130	3.9	95
20	Chemical synthesis and characterization of fluorinated polyphenylthiophenes: application to energy storage. <i>Synthetic Metals</i> , 2001 , 123, 311-319	3.6	42

19	Single electron transfer photoinduced oxidation of piperidine and pyrrolidine derivatives to the corresponding lactams. <i>Perkin Transactions II RSC</i> , 2000 , 1147-1153		14
18	Polythiophene-based supercapacitors. <i>Journal of Power Sources</i> , 1999 , 80, 142-148	8.9	274
17	Electrode compositions for carbon power supercapacitors. <i>Journal of Power Sources</i> , 1999 , 80, 149-155	8.9	58
16	Possible improvements in making carbon electrodes for organic supercapacitors. <i>Journal of Power Sources</i> , 1999 , 79, 238-241	8.9	40
15	Multi electrode prismatic power prototype carbon/carbon supercapacitors. <i>Journal of Power Sources</i> , 1999 , 83, 162-169	8.9	13
14	Electrode optimisation for carbon power supercapacitors. <i>Journal of Power Sources</i> , 1999 , 79, 37-42	8.9	44
13	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> , 1998 , 73, 30-35	8.9	16
12	In Situ Conductivity Study of the Corrosion Layers on Lead-Tin Alloys in Sulfuric Acid. <i>Journal of the Electrochemical Society</i> , 1997 , 144, 443-449	3.9	11
11	Effect of polarisation mode, time and potential on the properties of the passive layer on lead-tin alloys. <i>Journal of Power Sources</i> , 1997 , 64, 21-27	8.9	13
10	The tin effect in lead-calcium alloys. <i>Journal of Power Sources</i> , 1997 , 67, 61-67	8.9	37
9	In situ redox conductivity, XPS and impedance spectroscopy studies of passive layers formed on lead-tin alloys. <i>Journal of Power Sources</i> , 1995 , 53, 163-173	8.9	21
8	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> , 1995 , 55, 63-71	8.9	24
7	An in situ study of the effect of tin on the passivation of lead-tin alloys. <i>Journal of Power Sources</i> , 1994 , 50, 141-152	8.9	18
6	X-ray photoelectronspectroscopy study of passive layers formed on lead-tin alloys. <i>Journal of Power Sources</i> , 1994 , 52, 31-39	8.9	21
5	Electrochemical Energy Storage: The Benefits of Nanomaterials155-176		
4	Future Directions for Electrochemical Capacitors. <i>ACS Energy Letters</i> ,4311-4316	20.1	10
3	Electrochemically Induced Deformation Determines the Rate of Lithium Intercalation in Bulk TiS ₂ . <i>ACS Energy Letters</i> ,4173-4178	20.1	1
2	Molten Salt-Shielded Synthesis (MS 3) of MXenes in Air. <i>Energy and Environmental Materials</i> ,	13	1

- 1 Understanding Battery Interfaces by Combined Characterization and Simulation Approaches: Challenges and Perspectives. *Advanced Energy Materials*, 2102687 21.8 10