Krzysztof Fic

List of Publications by Year in descending order

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66 papers	3,785 citations	186265 28 h-index	128289 60 g-index
68 all docs	68 docs citations	68 times ranked	4506 citing authors

#	Article	IF	Citations
1	Advanced characterization techniques for electrochemical capacitors. Advances in Inorganic Chemistry, 2022, , 151-207.	1.0	2
2	Gold nanoparticles for power retention in electrochemical capacitors with KSCN-based aqueous electrolyte. Journal of Power Sources Advances, 2022, 14, 100087.	5.1	0
3	Operando monitoring of activated carbon electrodes operating with aqueous electrolytes. Energy Storage Materials, 2022, 49, 518-528.	18.0	9
4	High frequency response of adenine-derived carbon in aqueous electrochemical capacitor. Electrochimica Acta, 2022, 424, 140649.	5.2	1
5	Performance evaluation of electrochemical capacitors with activated carbon spheres as electrode material and aqueous electrolyte. Journal of Power Sources, 2022, 542, 231714.	7.8	4
6	Link between Alkali Metals in Salt Templates and in Electrolytes for Improved Carbon-Based Electrochemical Capacitors. ACS Applied Materials & Interfaces, 2021, 13, 2584-2599.	8.0	20
7	Peculiar role of the electrolyte viscosity in the electrochemical capacitor performance. Journal of Materials Chemistry A, 2021, 9, 8644-8654.	10.3	18
8	Antiâ€“corrosive siloxane coatings for improved longâ€“term performance of supercapacitors with an aqueous electrolyte. Electrochimica Acta, 2021, 372, 137840.	5.2	18
9	New insight into ion dynamics in nanoporous carbon materials: An application of the step potential electrochemical spectroscopy (SPECS) technique and electrochemical dilatometry. Electrochimica Acta, 2021, 377, 138115.	5.2	6
10	Enhancing capacitor lifetime by alternate constant polarization. Journal of Power Sources, 2021, 506, 230131.	7.8	7
11	Deep Eutectic Solvents for Highâ€Temperature Electrochemical Capacitors. ChemElectroChem, 2021, 8, 4028-4037.	3.4	8
12	Specific carbon/iodide interactions in electrochemical capacitors monitored by EQCM technique. Energy and Environmental Science, 2021, 14, 2381-2393.	30.8	25
13	Novel Type of Li-Ion Capacitor with Improved Energy/Power Performance. ECS Meeting Abstracts, 2021, MA2021-02, 451-451.	0.0	0
14	Interfacial aspects induced by saturated aqueous electrolytes in electrochemical capacitor applications. Electrochimica Acta, 2020, 334, 135572.	5.2	23
15	Agar-based aqueous electrolytes for electrochemical capacitors with reduced self-discharge. Electrochimica Acta, 2020, 332, 135435.	5.2	54
16	Three-Dimensional Architectures in Electrochemical Capacitor Applications â€“ Insights, Opinions, and Perspectives. Frontiers in Energy Research, 2020, 8, .	2.3	10
17	Regulating the Hidden Solvationâ€Ionâ€Exchange in Concentrated Electrolytes for Stable and Safe Lithium Metal Batteries. Advanced Energy Materials, 2020, 10, 2000901.	19.5	65
18	Electrochemical capacitors operating in aqueous electrolyte with volumetric characteristics improved by sustainable templating of electrode materials. Electrochimica Acta, 2020, 338, 135788.	5.2	20

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19	Redox Activity of Bromides in Carbonâ€Based Electrochemical Capacitors. Batteries and Supercaps, 2020, 3, 1080-1090.	4.7	5
20	(Invited) Influence of Current Collector on the Long-Term Performance of Electrochemical Capacitors. ECS Meeting Abstracts, 2020, MA2020-02, 612-612.	0.0	0
21	(Invited) Demystifying the Electrode/Electrolyte Interface in Carbon-Based Electrochemical Capacitors with Specs Technique and Electrochemical Dilatometry. ECS Meeting Abstracts, 2020, MA2020-02, 611-611.	0.0	0
22	Towards more Durable Electrochemical Capacitors by Elucidating the Ageing Mechanisms under Different Testing Procedures. ChemElectroChem, 2019, 6, 566-573.	3.4	21
23	Revisited insights into charge storage mechanisms in electrochemical capacitors with Li2SO4-based electrolyte. Energy Storage Materials, 2019, 22, 1-14.	18.0	43
24	Mechanisms of the performance fading of carbon-based electrochemical capacitors operating in a LiNO3 electrolyte. Journal of Power Sources, 2019, 438, 227029.	7.8	27
25	Electrochemical capacitor with water-based electrolyte operating at wide temperature range. Journal of Power Sources, 2019, 414, 183-191.	7.8	29
26	Selenocyanate-based ionic liquid as redox-active electrolyte for hybrid electrochemical capacitors. Electrochimica Acta, 2019, 314, 1-8.	5.2	15
27	Redox activity of selenocyanate anion in electrochemical capacitor application. Synthetic Metals, 2019, 253, 62-72.	3.9	22
28	Ageing mechanisms in electrochemical capacitors with aqueous redox-active electrolytes. Electrochimica Acta, 2019, 311, 211-220.	5.2	30
29	Polypyrroleâ€“Nickel Hydroxide Hybrid Nanowires as Future Materials for Energy Storage. Nanomaterials, 2019, 9, 307.	4.1	12
30	Supercapacitors (electrochemical capacitors). , 2019, , 383-427.		6
31	Self-buffered pH at carbon surfaces in aqueous supercapacitors. Carbon, 2018, 129, 758-765.	10.3	56
32	Sustainable materials for electrochemical capacitors. Materials Today, 2018, 21, 437-454.	14.2	255
33	Effect of benzoquinone additives on the performance of symmetric carbon/carbon capacitors â€“ electrochemical impedance study. Journal of Energy Storage, 2018, 18, 340-348.	8.1	6
34	New Trends in Electrochemical Capacitors. Advances in Inorganic Chemistry, 2018, 72, 247-286.	1.0	9
35	Thiocyanates as attractive redox-active electrolytes for high-energy and environmentally-friendly electrochemical capacitors. Physical Chemistry Chemical Physics, 2017, 19, 7923-7935.	2.8	34
36	Comparative operando study of degradation mechanisms in carbon-based electrochemical capacitors with Li2SO4 and LiNO3 electrolytes. Carbon, 2017, 120, 281-293.	10.3	46

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37	Electrochemical performance of silicon nanostructures in low-temperature ionic liquids for microelectronic applications. Journal of Materials Chemistry A, 2017, 5, 22708-22716.	10.3	14
38	Lithium rhenium(<scp>vii</scp>) oxide as a novel material for graphite pre-lithiation in high performance lithium-ion capacitors. Journal of Materials Chemistry A, 2016, 4, 12609-12615.	10.3	77
39	Carbon-based electrochemical capacitors with acetate aqueous electrolytes. Electrochimica Acta, 2016, 215, 179-186.	5.2	57
40	Influence of aqueous electrolyte concentration on parasitic reactions in high-voltage electrochemical capacitors. Energy Storage Materials, 2016, 5, 111-115.	18.0	39
41	Enhancement of the carbon electrode capacitance by brominated hydroquinones. Journal of Power Sources, 2016, 326, 587-594.	7.8	52
42	Use of sacrificial lithium nickel oxide for loading graphitic anode in Li-ion capacitors. Electrochimica Acta, 2016, 206, 440-445.	5.2	43
43	Ageing phenomena in high-voltage aqueous supercapacitors investigated by in situ gas analysis. Energy and Environmental Science, 2016, 9, 623-633.	30.8	204
44	Around the thermodynamic limitations of supercapacitors operating in aqueous electrolytes. Electrochimica Acta, 2016, 206, 496-503.	5.2	66
45	Hybrid aqueous capacitors with improved energy/power performance. Progress in Natural Science: Materials International, 2015, 25, 642-649.	4.4	29
46	Interfacial Redox Phenomena for Enhanced Aqueous Supercapacitors. Journal of the Electrochemical Society, 2015, 162, A5140-A5147.	2.9	75
47	Towards sustainable power sources: chitin-bound carbon electrodes for electrochemical capacitors. Journal of Materials Chemistry A, 2015, 3, 22923-22930.	10.3	22
48	Continuous fast Fourier transform admittance voltammetry as a new approach for studying the change in morphology of polyaniline for supercapacitors application. RSC Advances, 2015, 5, 84076-84083.	3.6	15
49	Electrode/Electrolyte Interface with Various Redox Couples. ECS Transactions, 2014, 61, 1-8.	0.5	4
50	The effect of halide ion concentration on capacitor performance. Journal of Applied Electrochemistry, 2014, 44, 439-445.	2.9	40
51	Strategies for enhancing the performance of carbon/carbon supercapacitors in aqueous electrolytes. Electrochimica Acta, 2014, 128, 210-217.	5.2	48
52	Electrochemical capacitors as attractive power sources. Solid State Ionics, 2014, 265, 61-67.	2.7	28
53	Redox-active electrolyte for supercapacitor application. Faraday Discussions, 2014, 172, 179-198.	3.2	177
54	Quinone-Decorated Carbon Materials for Capacitive Energy Storage Applications. Materials Research Society Symposia Proceedings, 2014, 1679, 12.	0.1	0

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55	Quinone/hydroquinone redox couple as a source of enormous capacitance of activated carbon electrodes. Materials Research Society Symposia Proceedings, 2013, 1505, 1.	0.1	3
56	Unusual energy enhancement in carbon-based electrochemical capacitors. Journal of Materials Chemistry, 2012, 22, 24213.	6.7	115
57	Novel insight into neutral medium as electrolyte for high-voltage supercapacitors. Energy and Environmental Science, 2012, 5, 5842-5850.	30.8	695
58	Electrochemistry Serving People and Nature: Highâ€Energy Ecocapacitors based on Redoxâ€Active Electrolytes. ChemSusChem, 2012, 5, 1181-1185.	6.8	148
59	Effect of surfactants on capacitance properties of carbon electrodes. Electrochimica Acta, 2012, 60, 206-212.	5.2	45
60	Correlation of hydrogen capacity in carbon material with the parameters of electrosorption. Open Chemistry, 2011, 9, 20-24.	1.9	9
61	Carbon nanotubes and their composites in electrochemical applications. Energy and Environmental Science, 2011, 4, 1592.	30.8	535
62	Alkali metal iodide/carbon interface as a source of pseudocapacitance. Electrochemistry Communications, 2011, 13, 38-41.	4.7	166
63	Effect of surfactants on capacitance properties of carbon electrodes. Materials Research Society Symposia Proceedings, 2011, 1333, 110701.	0.1	2
64	Hybrid materials for supercapacitor application. Journal of Solid State Electrochemistry, 2010, 14, 811-816.	2.5	70
65	Electrochemical properties of supercapacitors operating in aqueous electrolyte with surfactants. Electrochimica Acta, 2010, 55, 7484-7488.	5.2	97
66	Redox Mediated Electrolytes in Electrochemical Capacitors. , 0, , .		0