Grzegorz Lota

List of Publications by Citations

88 papers	5,467 citations	32 h-index	73 g-index
99 ext. papers	5,935 ext. citations	5.7 avg, IF	5.87 L-index

#	Paper	IF	Citations
88	Novel insight into neutral medium as electrolyte for high-voltage supercapacitors. *Energy and Environmental Science*, **2012**, 5, 5842-5850	35.4	590
87	Carbon nanotubes and their composites in electrochemical applications. *Energy and Environmental Science*, **2011**, 4, 1592	35.4	476
86	Templated mesoporous carbons for supercapacitor application. *Electrochimica Acta*, **2005**, 50, 2799-2805	6.7	362
85	Electrochemical capacitors based on highly porous carbons prepared by KOH activation. *Electrochimica Acta*, **2004**, 49, 515-523	6.7	359
84	Effect of nitrogen in carbon electrode on the supercapacitor performance. *Chemical Physics Letters*, **2005**, 404, 53-58	2.5	306
83	Optimisation of supercapacitors using carbons with controlled nanotexture and nitrogen content. *Electrochimica Acta*, **2006**, 51, 2209-2214	6.7	273
82	Effect of pore size distribution of coal-based activated carbons on double layer capacitance. *Electrochimica Acta*, **2005**, 50, 1197-1206	6.7	272
81	A Self-Supporting Electrode for Supercapacitors Prepared by One-Step Pyrolysis of Carbon Nanotube/Polyacrylonitrile Blends. *Advanced Materials*, **2005**, 17, 2380-2384	24	271
80	Nanotubes based composites rich in nitrogen for supercapacitor application. *Electrochemistry Communications*, **2007**, 9, 1828-1832	5.1	214
79	Striking capacitance of carbon/iodide interface. *Electrochemistry Communications*, **2009**, 11, 87-90	5.1	211
78	Improvement of the structural and chemical properties of a commercial activated carbon for its application in electrochemical capacitors. *Electrochimica Acta*, **2008**, 53, 2210-2216	6.7	204
77	Room-temperature phosphonium ionic liquids for supercapacitor application. *Applied Physics Letters*, **2005**, 86, 164104	3.4	148
76	Alkali metal iodide/carbon interface as a source of pseudocapacitance. *Electrochemistry Communications*, **2011**, 13, 38-41	5.1	147
75	Electrochemistry serving people and nature: high-energy ecocapacitors based on redox-active electrolytes. *ChemSusChem*, **2012**, 5, 1181-5	8.3	126
74	Carbon nanotubes with PtRu catalyst for methanol fuel cell. *Electrochemistry Communications*, **2006**, 8, 129-132	5.1	117
73	Electrochemical performance of a hybrid lithium-ion capacitor with a graphite anode preloaded from lithium bis(trifluoromethane)sulfonimide-based electrolyte. *Electrochimica Acta*, **2012**, 86, 282-286	6.7	85
72	Electrochemical properties of supercapacitors operating in aqueous electrolyte with surfactants. *Electrochimica Acta*, **2010**, 55, 7484-7488	6.7	69

71	Hybrid materials for supercapacitor application. *Journal of Solid State Electrochemistry*, **2010**, 14, 811-816	2.6	68
70	Saccharide-based graphitic carbon nanocoils as supports for PtRu nanoparticles for methanol electrooxidation. *Journal of Power Sources*, **2007**, 171, 546-551	8.9	62
69	Synthesis and properties of trigeminal tricationic ionic liquids. *Chemistry - A European Journal*, **2007**, 13, 3106-12	4.8	60
68	Novel nanostructured hematite□spongin composite developed using an extreme biomimetic approach. *RSC Advances*, **2015**, 5, 79031-79040	3.7	57
67	Carbon materials modified by plasma treatment as electrodes for supercapacitors. *Journal of Power Sources*, **2010**, 195, 7535-7539	8.9	57
66	Anti-corrosive properties of silane coatings deposited on anodised aluminium. *Electrochimica Acta*, **2016**, 220, 1-10	6.7	49
65	Synthesis of nanostructured chitin□hematite composites under extreme biomimetic conditions. *RSC Advances*, **2014**, 4, 61743-61752	3.7	49
64	The effect of lignosulfonates as electrolyte additives on the electrochemical performance of supercapacitors. *Electrochemistry Communications*, **2011**, 13, 470-473	5.1	47
63	Supercapacitors Based on Nickel Oxide/Carbon Materials Composites. *International Journal of Electrochemistry*, **2011**, 2011, 1-6	2.4	44
62	Extreme biomimetics: A carbonized 3D spongin scaffold as a novel support for nanostructured manganese oxide(IV) and its electrochemical applications. *Nano Research*, **2018**, 11, 4199-4214	10	38
61	Effect of surfactants on capacitance properties of carbon electrodes. *Electrochimica Acta*, **2012**, 60, 206-212	6.7	38
60	High performance supercapacitor from chromium oxide-nanotubes based electrodes. *Chemical Physics Letters*, **2007**, 434, 73-77	2.5	38
59	Humic acids as pseudocapacitive electrolyte additive for electrochemical double layer capacitors. *Journal of Power Sources*, **2014**, 255, 230-234	8.9	33
58	Tuning electronic property and surface reconstruction of amorphous iron borides via W-P co-doping for highly efficient oxygen evolution. *Applied Catalysis B: Environmental*, **2021**, 288, 120037	21.8	33
57	The influence of current collector corrosion on the performance of electrochemical capacitors. *Journal of Power Sources*, **2017**, 368, 18-29	8.9	32
56	The application of activated carbon modified by ozone treatment for energy storage. *Journal of Solid State Electrochemistry*, **2016**, 20, 2857-2864	2.6	32
55	Capacitance of Fe3O4/rGO nanocomposites in an aqueous hybrid electrochemical storage device. *Journal of Power Sources*, **2015**, 293, 42-50	8.9	30
54	Carbon/polypyrrole composites for electrochemical capacitors. *Synthetic Metals*, **2015**, 203, 44-48	3.6	29

53	Boron-Doped Polygonal Carbon Nano-Onions: Synthesis and Applications in Electrochemical Energy Storage. *Chemistry - A European Journal*, **2017**, 23, 7132-7141	4.8	27
52	Pseudocapacitance Effects for Enhancement of Capacitor Performance. *Fuel Cells*, **2010**, 10, 848-855	2.9	25
51	The capacitance properties of activated carbon obtained from chitosan as the electrode material for electrochemical capacitors. *Materials Letters*, **2016**, 173, 72-75	3.3	23
50	Fuel cell testing of PtRu catalysts supported on differently prepared and pretreated carbon nanotubes. *Electrochimica Acta*, **2013**, 98, 94-103	6.7	20
49	Removal of herbicidal ionic liquids by electrochemical advanced oxidation processes combined with biological treatment. *Environmental Technology (United Kingdom)*, **2017**, 38, 1093-1099	2.6	19
48	Nickel Coatings Electrodeposited from Watts Type Baths Containing Quaternary Ammonium Sulphate Salts. *International Journal of Electrochemical Science*, **2017**, 3350-3360	2.2	17
47	The impact of solvents on the singlet and triplet states of selected fluorine corroles - absorption, fluorescence, and optoacoustic studies. *Physical Chemistry Chemical Physics*, **2016**, 18, 7216-28	3.6	17
46	Highly amorphous PbO2 as an electrode in hybrid electrochemical capacitors. *Current Applied Physics*, **2017**, 17, 66-71	2.6	17
45	Improvement of the Structural and Chemical Properties of Carbon Nano-onions for Electrocatalysis. *ChemNanoMat*, **2017**, 3, 583-590	3.5	16
44	Effects of addition of different carbon materials on the electrochemical performance of nickel hydroxide electrode. *Journal of Power Sources*, **2010**, 195, 7511-7516	8.9	16
43	Polysulphides reversible faradaic reactions in supercapacitor application. *Electrochemistry Communications*, **2016**, 68, 28-31	5.1	15
42	The modified activated carbon treated with a low-temperature iodine plasma used as electrode material for electrochemical capacitors. *Materials Letters*, **2016**, 175, 96-100	3.3	14
41	Ionogels by thiol-ene photopolymerization in ionic liquids: Formation, morphology and properties. *Polymer*, **2019**, 160, 272-281	3.9	13
40	Carbon Fiber and Nickel Coated Carbon Fiber-Silica Aerogel Nanocomposite as Low-Frequency Microwave Absorbing Materials. *Materials*, **2020**, 13,	3.5	11
39	Enhancing the performance of polypyrrole composites as electrode materials for supercapacitors by carbon nanotubes additives. *Journal of Applied Polymer Science*, **2020**, 137, 48867	2.9	11
38	Electrochemical Capacitors Based on Electrodes Made of Lignocellulosic Waste Materials. *Waste and Biomass Valorization*, **2020**, 11, 3863-3871	3.2	11
37	Positive electrode material in lead-acid car battery modified by protic ammonium ionic liquid. *Journal of Energy Storage*, **2019**, 26, 100996	7.8	10
36	Electrochemical properties of positive electrode in lead-acid battery modified by ammonium-based ionic liquids. *Journal of Solid State Electrochemistry*, **2018**, 22, 919-930	2.6	10

35	Correlation of hydrogen capacity in carbon material with the parameters of electrosorption. *Open Chemistry*, **2011**, 9, 20-24	1.6	8
34	Lithium insertion/deinsertion of boron doped graphitic carbons synthesized by different procedure. *Journal of Physics and Chemistry of Solids*, **2008**, 69, 1179-1181	3.9	8
33	Corrosion Protection of Stainless Steel by Triethoxyoctylsilane and Tetraethoxysilane. *International Journal of Electrochemical Science*, **2016**, 8256-8269	2.2	8
32	Electrochemical supercapacitor with thiourea-based aqueous electrolyte. *Electrochemistry Communications*, **2018**, 97, 32-36	5.1	8
31	Electrocatalytic properties of a cerium/nickel coating deposited using a deep eutectic solvent. *Electrochemistry Communications*, **2019**, 107, 106538	5.1	7
30	Hybrid electrochemical and biological treatment of herbicidal ionic liquids comprising the MCPA anion. *Ecotoxicology and Environmental Safety*, **2019**, 181, 172-179	7	7
29	Corrosion-protective coatings based on fluorocarbosilane. *Progress in Organic Coatings*, **2018**, 123, 374-383	4.8	7
28	Anti‐corrosive siloxane coatings for improved long‐term performance of supercapacitors with an aqueous electrolyte. *Electrochimica Acta*, **2021**, 372, 137840	6.7	7
27	Taguchi method in experimental procedures focused on corrosion process of positive current collector in lithium-ion batteries. *Electrochimica Acta*, **2020**, 360, 137011	6.7	6
26	Corrosion of aluminium current collector in lithium-ion batteries: A review. *Journal of Energy Storage*, **2021**, 43, 103226	7.8	6
25	Persulfate treatment as a method of modifying carbon electrode material for aqueous electrochemical capacitors. *Journal of Solid State Electrochemistry*, **2017**, 21, 1079-1088	2.6	5
24	The Rapeseed Oil Based Organofunctional Silane for Stainless Steel Protective Coatings. *Materials*, **2020**, 13,	3.5	4
23	Correlation between partial inhibition of hydrogen evolution using thiourea and catalytic activity of AB5-type hydrogen storage alloy towards borohydride electrooxidation. *Journal of Alloys and Compounds*, **2020**, 829, 154553	5.7	4
22	The Influence of Carbon Material Modification on The Pseudocapacitive Effect. *Materials Today: Proceedings*, **2019**, 6, 36-41	1.4	4
21	Electrochemical properties of modified negative electrode for Ni-MH cell. *Current Applied Physics*, **2020**, 20, 106-113	2.6	4
20	Diffusion dialysis and extraction integrated system for recovery of cobalt(II) from industrial effluent. *Journal of Water Process Engineering*, **2021**, 39, 101754	6.7	4
19	The Effect of the Substituent Length in Protic Ionic Liquid Additive on the Corrosion Process in the Lead‐Acid Battery. *International Journal of Electrochemical Science*, **2018**, 4390-4400	2.2	4
18	The modification of anode material for direct borohydride fuel cell. *Ionics*, **2016**, 22, 2539-2544	2.7	3

17	Quinone/hydroquinone redox couple as a source of enormous capacitance of activated carbon electrodes. *Materials Research Society Symposia Proceedings*, **2013**, 1505, 1		3
16	Limiting ac frequency and dc current of electrochemical double layer capacitors. *Journal of Power Sources*, **2015**, 280, 289-292	8.9	3
15	Synthesis and electrochemical properties of carbon nanotubes obtained by pyrolysis of acetylene using AB5 alloy. *Journal of Solid State Electrochemistry*, **2010**, 14, 2209-2212	2.6	3
14	Ni□a composite coating obtained using deep eutectic solvent and its electrocatalytic activity. *Chemical Papers*, **2020**, 74, 1691-1696	1.9	3
13	Control of hydrogen release during borohydride electrooxidation with porous carbon materials.. *RSC Advances*, **2021**, 11, 15639-15655	3.7	3
12	Graphene and Graphene Composites in Electrochemical Capacitors and Li-Ion Batteries. *ECS Transactions*, **2015**, 70, 27-36	1	2
11	Effect of surfactants on capacitance properties of carbon electrodes. *Materials Research Society Symposia Proceedings*, **2011**, 1333, 110701		2
10	Lignin-based dual component additives as effective electrode material for energy management systems. *International Journal of Biological Macromolecules*, **2020**, 165, 268-278	7.9	2
9	Partial inhibition of borohydride hydrolysis using porous activated carbon as an effective method to improve the electrocatalytic activity of the DBFC anode. *Sustainable Energy and Fuels*, **2021**, 5, 4401-4413	5.8	2
8	Mixed Diffusion-Kinetic Control of H2O2 Oxidation at an Oxide-Covered Platinum Electrode in Alkaline Electrolyte: Implications for Oxygen Electroreduction Studies with a Rotating Ring Disk Electrode. *ChemElectroChem*, **2021**, 8, 839-849	4.3	2
7	Effect of Alkyltrimethylammonium Ions on Corrosion and Electrochemical Behavior of Pb-Ca-Sn Alloy. *International Journal of Electrochemical Science*, **2018**, 11058-11073	2.2	2
6	Ionic Liquid Modified Electrochemical Capacitor with Long-Term Performance. *ChemElectroChem*, **2021**, 8, 3685-3694	4.3	0
5	Long-Chain Ionic Liquids Based on Monoquaternary DABCO Cations and TFSI Anions: Towards Stable Electrolytes for Electrochemical Capacitors. *ChemPlusChem*, **2020**, 85, 2679-2688	2.8	0
4	Highly anti□orrosive treatment of low□arbon steel. *Ceramics International*, **2021**, 47, 24770-24770	5.1	0
3	Ozonation with ammoxidation as a method of obtaining O, N-doped carbon electrode material to electrochemical capacitors. *Electrochimica Acta*, **2022**, 413, 140130	6.7	0
2	Carbon Nanotubes for Energy Storage Application **2014**, 249-280		
1	Materials under research: Nanomaterials, aerogels, biomaterials, composites, inks **2022**, 3-31		