David Aradilla

List of Publications by Year
in descending order

52 papers	1,771 citations	257357 24 h-index	265120 42 g-index
52 all docs	52 docs citations	52 times ranked	2090 citing authors

#	Article	IF	Citations
1	Multi-scale quantification and modeling of aged nanostructured silicon-based composite anodes. Communications Chemistry, 2020, 3, .	2.0	30
2	Deciphering the Influence of Electrolytes on the Energy Storage Mechanism of Vertically-Oriented Graphene Nanosheet Electrodes by Using Advanced Electrogravimetric Methods. Nanomaterials, 2020, 10, 2451.	1.9	0
3	Charge Storage Properties of Nanostructured Poly (3,4â€“ethylenedioxythiophene) Electrodes Revealed by Advanced Electrogravimetry. Nanomaterials, 2019, 9, 962.	1.9	4
4	Multiscale Multiphase Lithiation and Delithiation Mechanisms in a Composite Electrode Unraveled by Simultaneous<i>Operando</i>Small-Angle and Wide-Angle X-Ray Scattering. ACS Nano, 2019, 13, 11538-11551.	7.3	40
5	Scalable chemical synthesis of doped silicon nanowires for energy applications. Nanoscale, 2019, 11, 22504-22514.	2.8	25
6	Beyond conventional supercapacitors: Hierarchically conducting polymer-coated 3D nanostructures for integrated on-chip micro-supercapacitors employing ionic liquid electrolytes. Synthetic Metals, 2019, 247, 131-143.	2.1	22
7	Understanding the energy storage mechanisms of poly(3,4-ethylenedioxythiophene)-coated silicon nanowires by electrochemical quartz crystal microbalance. Materials Letters, 2019, 240, 59-61.	1.3	13
8	Ion Sieving Effects in Chemically Tuned Pillared Graphene Materials for Electrochemical Capacitors. Chemistry of Materials, 2018, 30, 3040-3047.	3.2	37
9	A new high performance ionic liquid mixture electrolyte for large temperature range supercapacitor applications (âˆ’70â€¯Â°C toÂ80â€¯Â°C) operating at 3.5V cell voltage. Electrochimica Acta, 2018, 267, 15-19.	2.6	64
10	Plasma Heavily Nitrogen-Doped Vertically Oriented Graphene Nanosheets (N-VOGNs) for High Volumetric Performance On-Chip Supercapacitors in Ionic Liquid. Current Smart Materials, 2018, 3, 32-39.	0.5	1
11	Unveiling the ionic exchange mechanisms in vertically-oriented graphene nanosheet supercapacitor electrodes with electrochemical quartz crystal microbalance and ac-electrogravimetry. Electrochemistry Communications, 2018, 93, 5-9.	2.3	22
12	Powering electrodes for high performance aqueous micro-supercapacitors: Diamond-coated silicon nanowires operating at a wide cell voltage of 3 V. Electrochimica Acta, 2017, 242, 173-179.	2.6	36
13	New electrolyte mixture of propylene carbonate and butyltrimethylammonium bis(trifluoromethylsulfonyl)imide (N1114 TFSI) for high performance silicon nanowire (SiNW)-based supercapacitor applications. Electrochimica Acta, 2017, 254, 368-374.	2.6	18
14	One-step synthesis of highly reduced graphene hydrogels for high power supercapacitor applications. Journal of Power Sources, 2017, 360, 538-547.	4.0	69
15	Solvent effects on the properties of hyperbranched polythiophenes. Physical Chemistry Chemical Physics, 2016, 18, 24610-24619.	1.3	0
16	Silicon nanowires and nanotrees: elaboration and optimization of new 3D architectures for high performance on-chip supercapacitors. RSC Advances, 2016, 6, 81017-81027.	1.7	38
17	Designing 3D Multihierarchical Heteronanostructures for High-Performance On-Chip Hybrid Supercapacitors: Poly(3,4-(ethylenedioxy)thiophene)-Coated Diamond/Silicon Nanowire Electrodes in an Aprotic Ionic Liquid. ACS Applied Materials & Interfaces, 2016, 8, 18069-18077.	4.0	64
18	A step forward into hierarchically nanostructured materials for high performance micro-supercapacitors: Diamond-coated SiNW electrodes in protic ionic liquid electrolyte. Electrochemistry Communications, 2016, 63, 34-38.	2.3	39

#	Article	IF	Citations
19	An innovative 3-D nanoforest heterostructure made of polypyrrole coated silicon nanotrees for new high performance hybrid micro-supercapacitors. Journal of Materials Chemistry A, 2015, 3, 13978-13985.	5.2	63
20	3D hierarchical assembly of ultrathin MnO2 nanoflakes on silicon nanowires for high performance micro-supercapacitors in Li- doped ionic liquid. Scientific Reports, 2015, 5, 9771.	1.6	150
21	Pulse electropolymerization synthesis of PPy(DBS) nanoparticle layers. Journal of Solid State Electrochemistry, 2015, 19, 655-661.	1.2	5
22	SiNWs-based electrochemical double layer micro-supercapacitors with wide voltage window (4 V) and long cycling stability using a protic ionic liquid electrolyte. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2015, 6, 015004.	0.7	10
23	Vertically aligned graphene nanosheets on silicon using an ionic liquid electrolyte: towards high performance on-chip micro-supercapacitors. Journal of Materials Chemistry A, 2015, 3, 19254-19262.	5.2	71
24	Diamond-coated silicon nanowires for enhanced micro-supercapacitor with ionic liquids. , 2015, , .		3
25	Diamond-coated silicon wires for supercapacitor applications in ionic liquids. Diamond and Related Materials, 2015, 51, 1-6.	1.8	75
26	Properties of oligothiophene polycations. Journal of Physical Organic Chemistry, 2014, 27, 867-875.	0.9	2
27	All-polythiophene rechargeable batteries. Organic Electronics, 2014, 15, 40-46.	1.4	49
28	High performance of symmetric micro-supercapacitors based on silicon nanowires using N-methyl-N-propylpyrrolidinium bis(trifluoromethylsulfonyl)imide as electrolyte. Nano Energy, 2014, 9, 273-281.	8.2	71
29	Novel hybrid micro-supercapacitor based on conducting polymer coated silicon nanowires for electrochemical energy storage. RSC Advances, 2014, 4, 26462-26467.	1.7	63
30	Synergy of the redox pair in the capacitive properties of nanometric poly(3,4-ethylenedioxythiophene). Organic Electronics, 2013, 14, 131-142.	1.4	6
31	Polypyrrole derivatives as solvent vapor sensors. RSC Advances, 2013, 3, 20545.	1.7	6
32	Nanometric ultracapacitors fabricated using multilayer of conducting polymers on self-assembled octanethiol monolayers. Organic Electronics, 2013, 14, 1483-1495.	1.4	16
33	Capacitive Composites Made of Conducting Polymer and Lysozyme: Toward the Biocondenser. Journal of Physical Chemistry C, 2013, 117, 6607-6619.	1.5	16
34	New insights into the characterization of poly(3-chlorothiophene) for electrochromic devices. Polymer Chemistry, 2012, 3, 436-449.	1.9	18
35	Properties of poly(3-halidethiophene)s. Physical Chemistry Chemical Physics, 2012, 14, 10050.	1.3	8
36	Hybrid polythiopheneâ€“clay exfoliated nanocomposites for ultracapacitor devices. Journal of Materials Chemistry, 2012, 22, 13110.	6.7	49

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37	A Conducting Polymer/Protein Composite with Bactericidal and Electroactive Properties. Macromolecular Materials and Engineering, 2012, 297, 427-436.	1.7	15
38	Ultraporous poly(3,4-ethylenedioxythiophene) for nanometric electrochemical supercapacitor. Thin Solid Films, 2012, 520, 4402-4409.	0.8	40
39	Symmetric Supercapacitors Based on Multilayers of Conducting Polymers. Journal of Physical Chemistry C, 2011, 115, 8430-8438.	1.5	139
40	Structural and Electronic Properties of Poly[<i>N</i>-(2-cyanoalkyl)pyrrole]s Bearing Small Alkyl Groups. Journal of Physical Chemistry B, 2011, 115, 2882-2889.	1.2	7
41	Poly(3,4-ethylenedioxythiophene) on self-assembled alkanethiol monolayers for corrosion protection. Polymer Chemistry, 2011, 2, 2548.	1.9	25
42	Water absorption in polyaniline emeraldine base. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 1322-1331.	2.4	21
43	Different properties for poly(3,4â€ethylenedioxythiophene) films derived from single or multiple polymerization steps. Journal of Applied Polymer Science, 2011, 121, 1982-1991.	1.3	17
44	Characterization and Properties of Poly[<i>N</i>â€(2â€cyanoethyl)pyrrole]. Macromolecular Chemistry and Physics, 2010, 211, 1663-1672.	1.1	19
45	Morphology and growing of nanometric multilayered films formed by alternated layers of poly(3,4-ethylenedioxythiophene) and poly(N-methylpyrrole). Thin Solid Films, 2010, 518, 4203-4210.	0.8	31
46	Conducting poly(3,4-ethylenedioxythiophene)-montmorillonite exfoliated nanocomposites. European Polymer Journal, 2010, 46, 977-983.	2.6	23
47	Properties of nanometric and micrometric multilayered films made of three conducting polymers. European Polymer Journal, 2010, 46, 2222-2228.	2.6	15
48	From Poly(3,4-ethylenedioxythiophene) to Poly(3,4-phenylenedioxythiophene): Impact of the Substitution of the Ethylene Bridge by the Phenyl Ring on the Molecular Properties. Journal of Physical Chemistry B, 2010, 114, 3494-3499.	1.2	10
49	Properties of nanometric and submicrometric multilayered films of poly(3,4-ethylenedioxythiophene) and poly(N-methylpyrrole). European Polymer Journal, 2008, 44, 1323-1330.	2.6	35
50	Application of multilayered particles formed by poly(3,4â€ethylenedioxythiophene) and poly(<i>N</i>â€methylpyrrole) as antiâ€corrosive additives of conventional organic coatings. Materials and Corrosion - Werkstoffe Und Korrosion, 2007, 58, 867-872.	0.8	15
51	Electroactivity, electrochemical stability and electrical conductivity of multilayered films containing poly(3,4-ethylendioxythiophene) and poly(N-methylpyrrole). European Polymer Journal, 2007, 43, 1876-1882.	2.6	40
52	Cellular adhesion and proliferation on poly(3,4-ethylenedioxythiophene): Benefits in the electroactivity of the conducting polymer. European Polymer Journal, 2007, 43, 2342-2349.	2.6	116