

David Aradilla

List of Publications by Year in descending order

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52
papers

1,771
citations

257101

24
h-index

264894

42
g-index

52
all docs

52
docs citations

52
times ranked

2090
citing authors

#	ARTICLE	IF	CITATIONS
1	3D hierarchical assembly of ultrathin MnO ₂ nanoflakes on silicon nanowires for high performance micro-supercapacitors in Li-doped ionic liquid. <i>Scientific Reports</i> , 2015, 5, 9771.	1.6	150
2	Symmetric Supercapacitors Based on Multilayers of Conducting Polymers. <i>Journal of Physical Chemistry C</i> , 2011, 115, 8430-8438.	1.5	139
3	Cellular adhesion and proliferation on poly(3,4-ethylenedioxythiophene): Benefits in the electroactivity of the conducting polymer. <i>European Polymer Journal</i> , 2007, 43, 2342-2349.	2.6	116
4	Diamond-coated silicon wires for supercapacitor applications in ionic liquids. <i>Diamond and Related Materials</i> , 2015, 51, 1-6.	1.8	75
5	High performance of symmetric micro-supercapacitors based on silicon nanowires using N-methyl-N-propylpyrrolidinium bis(trifluoromethylsulfonyl)imide as electrolyte. <i>Nano Energy</i> , 2014, 9, 273-281.	8.2	71
6	Vertically aligned graphene nanosheets on silicon using an ionic liquid electrolyte: towards high performance on-chip micro-supercapacitors. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19254-19262.	5.2	71
7	One-step synthesis of highly reduced graphene hydrogels for high power supercapacitor applications. <i>Journal of Power Sources</i> , 2017, 360, 538-547.	4.0	69
8	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. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 18069-18077.	4.0	64
9	A new high performance ionic liquid mixture electrolyte for large temperature range supercapacitor applications (−70°C to 80°C) operating at 3.5V cell voltage. <i>Electrochimica Acta</i> , 2018, 267, 15-19.	2.6	64
10	Novel hybrid micro-supercapacitor based on conducting polymer coated silicon nanowires for electrochemical energy storage. <i>RSC Advances</i> , 2014, 4, 26462-26467.	1.7	63
11	An innovative 3-D nanoforest heterostructure made of polypyrrole coated silicon nanotrees for new high performance hybrid micro-supercapacitors. <i>Journal of Materials Chemistry A</i> , 2015, 3, 13978-13985.	5.2	63
12	Hybrid polythiophene-clay exfoliated nanocomposites for ultracapacitor devices. <i>Journal of Materials Chemistry</i> , 2012, 22, 13110.	6.7	49
13	All-polythiophene rechargeable batteries. <i>Organic Electronics</i> , 2014, 15, 40-46.	1.4	49
14	Electroactivity, electrochemical stability and electrical conductivity of multilayered films containing poly(3,4-ethylenedioxythiophene) and poly(N-methylpyrrole). <i>European Polymer Journal</i> , 2007, 43, 1876-1882.	2.6	40
15	Ultraporous poly(3,4-ethylenedioxythiophene) for nanometric electrochemical supercapacitor. <i>Thin Solid Films</i> , 2012, 520, 4402-4409.	0.8	40
16	Multiscale Multiphase Lithiation and Delithiation Mechanisms in a Composite Electrode Unraveled by Simultaneous <i>Operando</i> Small-Angle and Wide-Angle X-Ray Scattering. <i>ACS Nano</i> , 2019, 13, 11538-11551.	7.3	40
17	A step forward into hierarchically nanostructured materials for high performance micro-supercapacitors: Diamond-coated SiNW electrodes in protic ionic liquid electrolyte. <i>Electrochemistry Communications</i> , 2016, 63, 34-38.	2.3	39
18	Silicon nanowires and nanotrees: elaboration and optimization of new 3D architectures for high performance on-chip supercapacitors. <i>RSC Advances</i> , 2016, 6, 81017-81027.	1.7	38

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19	Ion Sieving Effects in Chemically Tuned Pillared Graphene Materials for Electrochemical Capacitors. <i>Chemistry of Materials</i> , 2018, 30, 3040-3047.	3.2	37
20	Powering electrodes for high performance aqueous micro-supercapacitors: Diamond-coated silicon nanowires operating at a wide cell voltage of 3 V. <i>Electrochimica Acta</i> , 2017, 242, 173-179.	2.6	36
21	Properties of nanometric and submicrometric multilayered films of poly(3,4-ethylenedioxythiophene) and poly(N-methylpyrrole). <i>European Polymer Journal</i> , 2008, 44, 1323-1330.	2.6	35
22	Morphology and growing of nanometric multilayered films formed by alternated layers of poly(3,4-ethylenedioxythiophene) and poly(N-methylpyrrole). <i>Thin Solid Films</i> , 2010, 518, 4203-4210.	0.8	31
23	Multi-scale quantification and modeling of aged nanostructured silicon-based composite anodes. <i>Communications Chemistry</i> , 2020, 3, .	2.0	30
24	Poly(3,4-ethylenedioxythiophene) on self-assembled alkanethiol monolayers for corrosion protection. <i>Polymer Chemistry</i> , 2011, 2, 2548.	1.9	25
25	Scalable chemical synthesis of doped silicon nanowires for energy applications. <i>Nanoscale</i> , 2019, 11, 22504-22514.	2.8	25
26	Conducting poly(3,4-ethylenedioxythiophene)-montmorillonite exfoliated nanocomposites. <i>European Polymer Journal</i> , 2010, 46, 977-983.	2.6	23
27	Unveiling the ionic exchange mechanisms in vertically-oriented graphene nanosheet supercapacitor electrodes with electrochemical quartz crystal microbalance and ac-electrogravimetry. <i>Electrochemistry Communications</i> , 2018, 93, 5-9.	2.3	22
28	Beyond conventional supercapacitors: Hierarchically conducting polymer-coated 3D nanostructures for integrated on-chip micro-supercapacitors employing ionic liquid electrolytes. <i>Synthetic Metals</i> , 2019, 247, 131-143.	2.1	22
29	Water absorption in polyaniline emeraldine base. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2011, 49, 1322-1331.	2.4	21
30	Characterization and Properties of Poly[2-cyanoethylpyrrole]. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 1663-1672.	1.1	19
31	New insights into the characterization of poly(3-chlorothiophene) for electrochromic devices. <i>Polymer Chemistry</i> , 2012, 3, 436-449.	1.9	18
32	New electrolyte mixture of propylene carbonate and butyltrimethylammonium bis(trifluoromethylsulfonyl)imide (N1114 TFSI) for high performance silicon nanowire (SiNW)-based supercapacitor applications. <i>Electrochimica Acta</i> , 2017, 254, 368-374.	2.6	18
33	Different properties for poly(3,4-ethylenedioxythiophene) films derived from single or multiple polymerization steps. <i>Journal of Applied Polymer Science</i> , 2011, 121, 1982-1991.	1.3	17
34	Nanometric ultracapacitors fabricated using multilayer of conducting polymers on self-assembled octanethiol monolayers. <i>Organic Electronics</i> , 2013, 14, 1483-1495.	1.4	16
35	Capacitive Composites Made of Conducting Polymer and Lysozyme: Toward the Biocondenser. <i>Journal of Physical Chemistry C</i> , 2013, 117, 6607-6619.	1.5	16
36	Application of multilayered particles formed by poly(3,4-ethylenedioxythiophene) and poly(N-methylpyrrole) as anti-corrosive additives of conventional organic coatings. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2007, 58, 867-872.	0.8	15

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37	Properties of nanometric and micrometric multilayered films made of three conducting polymers. <i>European Polymer Journal</i> , 2010, 46, 2222-2228.	2.6	15
38	A Conducting Polymer/Protein Composite with Bactericidal and Electroactive Properties. <i>Macromolecular Materials and Engineering</i> , 2012, 297, 427-436.	1.7	15
39	Understanding the energy storage mechanisms of poly(3,4-ethylenedioxythiophene)-coated silicon nanowires by electrochemical quartz crystal microbalance. <i>Materials Letters</i> , 2019, 240, 59-61.	1.3	13
40	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. <i>Journal of Physical Chemistry B</i> , 2010, 114, 3494-3499.	1.2	10
41	SiNWs-based electrochemical double layer micro-supercapacitors with wide voltage window (4 V) and long cycling stability using a protic ionic liquid electrolyte. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2015, 6, 015004.	0.7	10
42	Properties of poly(3-halidethiophene)s. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 10050.	1.3	8
43	Structural and Electronic Properties of Poly[2-(2-cyanoalkyl)pyrrole]s Bearing Small Alkyl Groups. <i>Journal of Physical Chemistry B</i> , 2011, 115, 2882-2889.	1.2	7
44	Synergy of the redox pair in the capacitive properties of nanometric poly(3,4-ethylenedioxythiophene). <i>Organic Electronics</i> , 2013, 14, 131-142.	1.4	6
45	Polypyrrole derivatives as solvent vapor sensors. <i>RSC Advances</i> , 2013, 3, 20545.	1.7	6
46	Pulse electropolymerization synthesis of PPy(DBS) nanoparticle layers. <i>Journal of Solid State Electrochemistry</i> , 2015, 19, 655-661.	1.2	5
47	Charge Storage Properties of Nanostructured Poly(3,4-ethylenedioxythiophene) Electrodes Revealed by Advanced Electrogravimetry. <i>Nanomaterials</i> , 2019, 9, 962.	1.9	4
48	Diamond-coated silicon nanowires for enhanced micro-supercapacitor with ionic liquids. , 2015, , .		3
49	Properties of oligothiophene polycations. <i>Journal of Physical Organic Chemistry</i> , 2014, 27, 867-875.	0.9	2
50	Plasma Heavily Nitrogen-Doped Vertically Oriented Graphene Nanosheets (N-VOGNs) for High Volumetric Performance On-Chip Supercapacitors in Ionic Liquid. <i>Current Smart Materials</i> , 2018, 3, 32-39.	0.5	1
51	Solvent effects on the properties of hyperbranched polythiophenes. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 24610-24619.	1.3	0
52	Deciphering the Influence of Electrolytes on the Energy Storage Mechanism of Vertically-Oriented Graphene Nanosheet Electrodes by Using Advanced Electrogravimetric Methods. <i>Nanomaterials</i> , 2020, 10, 2451.	1.9	0