Waldemar Alejandro MarmisollÃ©

List of Publications by Year
in descending order

63 papers	2,053 citations	218592 26 h-index	265120 42 g-index
66 all docs	66 docs citations	66 times ranked	1845 citing authors

#	Article	IF	Citations
1	Molecular Design of Solidâ€State Nanopores: Fundamental Concepts and Applications. Advanced Materials, 2019, 31, e1901483.	11.1	130
2	Practical use of polymer brushes in sustainable energy applications: interfacial nanoarchitectonics for high-efficiency devices. Chemical Society Reviews, 2019, 48, 814-849.	18.7	122
3	Acetylcholine biosensor based on the electrochemical functionalization of graphene field-effect transistors. Biosensors and Bioelectronics, 2020, 148, 111796.	5.3	99
4	Nanofluidic Diodes with Dynamic Rectification Properties Stemming from Reversible Electrochemical Conversions in Conducting Polymers. Journal of the American Chemical Society, 2015, 137, 15382-15385.	6.6	94
5	Shape matters: Enhanced osmotic energy harvesting in bullet-shaped nanochannels. Nano Energy, 2020, 71, 104612.	8.2	80
6	Recent developments in the layer-by-layer assembly of polyaniline and carbon nanomaterials for energy storage and sensing applications. From synthetic aspects to structural and functional characterization. Nanoscale, 2016, 8, 9890-9918.	2.8	74
7	An Allâ€Plastic Fieldâ€Effect Nanofluidic Diode Gated by a Conducting Polymer Layer. Advanced Materials, 2017, 29, 1700972.	11.1	68
8	Nanofluidic osmotic power generators â€“ advanced nanoporous membranes and nanochannels for blue energy harvesting. Chemical Science, 2021, 12, 12874-12910.	3.7	60
9	Phosphateâ€Responsive Biomimetic Nanofluidic Diodes Regulated by Polyamineâ€“Phosphate Interactions: Insights into Their Functional Behavior from Theory and Experiment. Small, 2018, 14, e1702131.	5.2	57
10	Self-Assembled Monolayers of NH₂-Terminated Thiolates: Order, p<i>K</i>_a, and Specific Adsorption. Langmuir, 2013, 29, 5351-5359.	1.6	54
11	Specific methionine oxidation of cytochrome c in complexes with zwitterionic lipids by hydrogen peroxide: potential implications for apoptosis. Chemical Science, 2015, 6, 705-713.	3.7	52
12	Redox-Driven Reversible Gating of Solid-State Nanochannels. ACS Applied Materials & Interfaces, 2019, 11, 30001-30009.	4.0	49
13	Biomimetic solid-state nanochannels for chemical and biological sensing applications. TrAC - Trends in Analytical Chemistry, 2021, 144, 116425.	5.8	47
14	Supramolecular Surface Chemistry: Substrateâ€Independent, Phosphateâ€Driven Growth of Polyamineâ€Based Multifunctional Thin Films. Advanced Functional Materials, 2015, 25, 4144-4152.	7.8	45
15	Highly-organized stacked multilayers <i>via</i> layer-by-layer assembly of lipid-like surfactants and polyelectrolytes. Stratified supramolecular structures for (bio)electrochemical nanoarchitectonics. Soft Matter, 2018, 14, 1939-1952.	1.2	41
16	Amine-Phosphate Specific Interactions within Nanochannels: Binding Behavior and Nanoconfinement Effects. Journal of Physical Chemistry C, 2019, 123, 28997-29007.	1.5	39
17	Polyaniline for Improved Blue Energy Harvesting: Highly Rectifying Nanofluidic Diodes Operating in Hypersaline Conditions via One-Step Functionalization. ACS Applied Materials & Interfaces, 2020, 12, 28148-28157.	4.0	39
18	Integration of Biorecognition Elements on PEDOT Platforms through Supramolecular Interactions. Advanced Materials Interfaces, 2017, 4, 1700502.	1.9	38

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19	Layer-by-layer integration of conducting polymers and metal organic frameworks onto electrode surfaces: enhancement of the oxygen reduction reaction through electrocatalytic nanoarchitectonics. Molecular Systems Design and Engineering, 2019, 4, 893-900.	1.7	38
20	Layer-by-layer assembly of iron oxide-decorated few-layer graphene/PANI:PSS composite films for high performance supercapacitors operating in neutral aqueous electrolytes. Electrochimica Acta, 2018, 283, 1178-1187.	2.6	36
21	Protonâ€Gated Rectification Regimes in Nanofluidic Diodes Switched by Chemical Effectors. Small, 2018, 14, e1703144.	5.2	34
22	Metalâ€Organic Frameworks Help Conducting Polymers Optimize the Efficiency of the Oxygen Reduction Reaction in Neutral Solutions. Advanced Materials Interfaces, 2016, 3, 1600047.	1.9	33
23	Functionalization Strategies of PEDOT and PEDOT:PSS Films for Organic Bioelectronics Applications. Chemosensors, 2021, 9, 212.	1.8	33
24	Dangerous liaisons: anion-induced protonation in phosphateâ€“polyamine interactions and their implications for the charge states of biologically relevant surfaces. Physical Chemistry Chemical Physics, 2017, 19, 8612-8620.	1.3	31
25	Phosphate mediated adsorption and electron transfer of cytochrome c. A time-resolved SERR spectroelectrochemical study. Physical Chemistry Chemical Physics, 2013, 15, 5386-5394.	1.3	28
26	Layer-by-layer assemblies of highly connected polyelectrolyte capped-Pt nanoparticles for electrocatalysis of hydrogen evolution reaction. Applied Surface Science, 2017, 416, 24-32.	3.1	28
27	Biofunctionalization of Grapheneâ€Based FET Sensors through Heterobifunctional Nanoscaffolds: Technology Validation toward Rapid COVIDâ€19 Diagnostics and Monitoring. Advanced Materials Interfaces, 2022, 9, 2102526.	1.9	26
28	Self-assembled peptide dendrigraft supraparticles with potential application in pH/enzyme-triggered multistage drug release. Colloids and Surfaces B: Biointerfaces, 2020, 190, 110895.	2.5	25
29	PEDOT:Tosylateâ€Polyamineâ€Based Organic Electrochemical Transistors for Highâ€Performance Bioelectronics. Advanced Electronic Materials, 2021, 7, 2100059.	2.6	25
30	Acidâ€“base equilibrium in conducting polymers. The case of reduced polyaniline. Journal of Electroanalytical Chemistry, 2014, 734, 10-17.	1.9	23
31	Polyamine Colloids Crossâ€Linked with Phosphate Ions: Towards Understanding the Solution Phase Behavior. ChemPhysChem, 2019, 20, 1044-1053.	1.0	23
32	A formal representation of the anodic voltammetric response of polyaniline. Journal of Electroanalytical Chemistry, 2011, 655, 17-22.	1.9	22
33	Polyanilines with Pendant Amino Groups as Electrochemically Active Copolymers at Neutral pH. ChemElectroChem, 2015, 2, 2011-2019.	1.7	22
34	Electrochemically addressable nanofluidic devices based on PET nanochannels modified with electropolymerized poly-<i>o</i>-aminophenol films. Nanoscale, 2020, 12, 6002-6011.	2.8	22
35	Coupling between proton binding and redox potential in electrochemically active macromolecules. The example of Polyaniline. Journal of Electroanalytical Chemistry, 2013, 707, 43-51.	1.9	21
36	Effect of Gold Nanoparticles on the Structure and Electronâ€Transfer Characteristics of Glucose Oxidase Redox Polyelectrolyteâ€Surfactant Complexes. Chemistry - A European Journal, 2014, 20, 13366-13374.	1.7	21

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37	Highly sensitive urine glucose detection with graphene field-effect transistors functionalized with electropolymerized nanofilms. Sensors & Diagnostics, 2022, 1, 139-148.	1.9	21
38	Amine-appended polyaniline as a water dispersible electroactive polyelectrolyte and its integration into functional self-assembled multilayers. Electrochimica Acta, 2016, 210, 435-444.	2.6	20
39	Reversible modulation of the redox activity in conducting polymer nanofilms induced by hydrophobic collapse of a surface-grafted polyelectrolyte. Journal of Colloid and Interface Science, 2018, 518, 92-101.	5.0	20
40	Electrochemical nanoarchitectonics through polyaminobenzylamineâ€“dodecyl phosphate complexes: redox activity and mesoscopic organization in self-assembled nanofilms. Physical Chemistry Chemical Physics, 2018, 20, 7570-7578.	1.3	20
41	Continuous assembly of supramolecular polyamineâ€“phosphate networks on surfaces: preparation and permeability properties of nanofilms. Soft Matter, 2019, 15, 1640-1650.	1.2	20
42	High-sensitivity detection of dopamine by biomimetic nanofluidic diodes derivatized with poly(3-aminobenzylamine). Nanoscale, 2020, 12, 18390-18399.	2.8	20
43	Self-assembled phosphate-polyamine networks as biocompatible supramolecular platforms to modulate cell adhesion. Biomaterials Science, 2018, 6, 2230-2247.	2.6	19
44	Layerâ€byâ€Layer Formation of Polyamineâ€Salt Aggregate/Polyelectrolyte Multilayers. Loading and Controlled Release of Probe Molecules from Selfâ€Assembled Supramolecular Networks. Macromolecular Chemistry and Physics, 2019, 220, 1900094.	1.1	19
45	Insulin Delivery from Glucoseâ€Responsive, Selfâ€Assembled, Polyamine Nanoparticles: Smart â€œSenseâ€andâ€Treatâ€• Nanocarriers Made Easy. Chemistry - A European Journal, 2020, 26, 2456-2463.	1.7	18
46	Flexible conducting platforms based on PEDOT and graphite nanosheets for electrochemical biosensing applications. Applied Surface Science, 2020, 525, 146440.	3.1	18
47	Modulation of Hydrophilic/Hydrophobic Character of Porous Environments in Metalâ€“Organic Frameworks via Direct Polymer Capping Probed by NMR Diffusion Measurements. Journal of Physical Chemistry C, 2019, 123, 21076-21082.	1.5	17
48	Electrochemical Aging of Poly(aniline) and Its Ring Substituted Derivatives. Journal of Physical Chemistry B, 2008, 112, 10800-10805.	1.2	16
49	About the capacitive currents in conducting polymers: the case of polyaniline. Journal of Solid State Electrochemistry, 2019, 23, 1947-1965.	1.2	15
50	PEDOT-polyamine composite films for bioelectrochemical platforms - flexible and easy to derivatize. Materials Science and Engineering C, 2020, 109, 110575.	3.8	15
51	Surface Engineering of Graphene through Heterobifunctional Supramolecular-Covalent Scaffolds for Rapid COVID-19 Biomarker Detection. ACS Applied Materials & Interfaces, 2021, 13, 43696-43707.	4.0	13
52	Electrochemically induced ageing of polyaniline. An electrochemical impedance spectroscopy study. Journal of Electroanalytical Chemistry, 2012, 673, 65-71.	1.9	12
53	The coupling among electron transfer, deformation, screening and binding in electrochemically active macromolecules. Physical Chemistry Chemical Physics, 2010, 12, 7536.	1.3	11
54	Multitasking polyamine/ferrioxalate nano-sized assemblies: thermo-, photo-, and redox-responsive soft materials made easy. Chemical Communications, 2019, 55, 14653-14656.	2.2	11

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55	Borate-driven ionic rectifiers based on sugar-bearing single nanochannels. Nanoscale, 2021, 13, 11232-11241.	2.8	11
56	PEDOT-Based Stackable Paper Electrodes for Metal-Free Supercapacitors. ACS Applied Energy Materials, 2021, 4, 9283-9293.	2.5	11
57	Electrochemically induced ageing of polyaniline monitored by the changes in its voltammetric response. Journal of Electroanalytical Chemistry, 2011, 660, 26-30.	1.9	9
58	Powering Up the Oxygen Reduction Reaction through the Integration of O₂-Adsorbing Metalâ€“Organic Frameworks on Nanocomposite Electrodes. ACS Applied Energy Materials, 0, , .	2.5	9
59	Redox-active polyamine-salt aggregates as multistimuli-responsive soft nanoparticles. Physical Chemistry Chemical Physics, 2020, 22, 7440-7450.	1.3	9
60	Nanoarchitectonics of metal organic frameworks and PEDOT layer-by-layer electrodes for boosting oxygen reduction reaction. Materials Advances, 2021, 2, 7731-7740.	2.6	8
61	Effect of the potential on the electrochemically induced ageing of polyaniline films. Journal of Electroanalytical Chemistry, 2012, 669, 42-49.	1.9	5
62	An experimental study of the intrinsic fluorescence emission and Electrochemically Induced Ageing in poly-o-methylaniline films. Electrochimica Acta, 2013, 109, 894-900.	2.6	2
63	Nanoarchitectonics of conjugated polymers in supercapacitor applications. , 2022, , 175-218.		1