

Ismael DÃ-ez-PÃ©rez

List of Publications by Year in descending order

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88
papers

6,009
citations

61984

43
h-index

71685

76
g-index

90
all docs

90
docs citations

90
times ranked

6249
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrostatic catalysis of a Diels-Alder reaction. <i>Nature</i> , 2016, 531, 88-91.	27.8	596
2	Rectification and stability of a single molecular diode with controlled orientation. <i>Nature Chemistry</i> , 2009, 1, 635-641.	13.6	517
3	Imaging the electrocatalytic activity of single nanoparticles. <i>Nature Nanotechnology</i> , 2012, 7, 668-672.	31.5	273
4	Harnessing electrostatic catalysis in single molecule, electrochemical and chemical systems: a rapidly growing experimental tool box. <i>Chemical Society Reviews</i> , 2018, 47, 5146-5164.	38.1	207
5	Transition from Tunneling to Hopping in Single Molecular Junctions by Measuring Length and Temperature Dependence. <i>Journal of the American Chemical Society</i> , 2010, 132, 11658-11664.	13.7	195
6	Measurement and Statistical Analysis of Single-Molecule Current-Voltage Characteristics, Transition Voltage Spectroscopy, and Tunneling Barrier Height. <i>Journal of the American Chemical Society</i> , 2011, 133, 19189-19197.	13.7	181
7	Catalytic Turnover of [FeFe]-Hydrogenase Based on Single-Molecule Imaging. <i>Journal of the American Chemical Society</i> , 2012, 134, 1577-1582.	13.7	172
8	Folding and Hydrodynamic Forces in J-Aggregates of 5-Phenyl-10,15,20-tris(4-sulfophenyl)porphyrin. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 8032-8035.	13.8	157
9	Observation of Electrochemically Controlled Quantum Interference in a Single Anthraquinone-Based Norbornylogous Bridge Molecule. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 3203-3206.	13.8	150
10	Large Conductance Switching in a Single-Molecule Device through Room Temperature Spin-Dependent Transport. <i>Nano Letters</i> , 2016, 16, 218-226.	9.1	148
11	Measuring the Spin-Polarization Power of a Single Chiral Molecule. <i>Small</i> , 2017, 13, 1602519.	10.0	143
12	Fine structure study of A β 1-42 fibrillogenesis with atomic force microscopy. <i>FASEB Journal</i> , 2005, 19, 1344-1346.	0.5	141
13	Controlling single-molecule conductance through lateral coupling of π orbitals. <i>Nature Nanotechnology</i> , 2011, 6, 226-231.	31.5	138
14	Multi-Responsive Photo- and Chemo-Electrical Single-Molecule Switches. <i>Nano Letters</i> , 2014, 14, 7064-7070.	9.1	134
15	Gate-controlled electron transport in coronenes as a bottom-up approach towards graphene transistors. <i>Nature Communications</i> , 2010, 1, 31.	12.8	104
16	Direct Observation of the Valence Band Edge by in Situ ECSTM-ECTS in p-Type Cu ₂ O Layers Prepared by Copper Anodization. <i>Journal of Physical Chemistry C</i> , 2009, 113, 1028-1036.	3.1	99
17	Single-molecule electrical contacts on silicon electrodes under ambient conditions. <i>Nature Communications</i> , 2017, 8, 15056.	12.8	93
18	Transistor-like Behavior of Single Metalloprotein Junctions. <i>Nano Letters</i> , 2012, 12, 2679-2684.	9.1	90

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19	Control of neurotransmitter release by an internal gel matrix in synaptic vesicles. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3485-3490.	7.1	88
20	2-D Self-assembly of the bis(phthalocyaninato)terbium(iii) single-molecule magnet studied by scanning tunnelling microscopy. Chemical Communications, 2006, , 2866-2868.	4.1	86
21	Bioengineering a Single-Protein Junction. Journal of the American Chemical Society, 2017, 139, 15337-15346.	13.7	84
22	Self-Assembly of a Cyclobutane β^2 -Tetrapeptide To Form Nanosized Structures. Organic Letters, 2007, 9, 3643-3645.	4.6	81
23	Inelastic Transport and Low-Bias Rectification in a Single-Molecule Diode. ACS Nano, 2011, 5, 8331-8339.	14.6	78
24	A Chirality-Based Quantum Leap. ACS Nano, 2022, 16, 4989-5035.	14.6	74
25	Formation of Studtite during the Oxidative Dissolution of UO ₂ by Hydrogen Peroxide: A SFM Study. Environmental Science & Technology, 2004, 38, 6656-6661.	10.0	71
26	Controlling Formation of Single-Molecule Junctions by Electrochemical Reduction of Diazonium Terminal Groups. Journal of the American Chemical Society, 2013, 135, 3319-3322.	13.7	71
27	Chemically and Mechanically Controlled Single-Molecule Switches Using Spiropyrans. ACS Applied Materials & Interfaces, 2019, 11, 36886-36894.	8.0	69
28	Ambipolar Transport in an Electrochemically Gated Single-Molecule Field-Effect Transistor. ACS Nano, 2012, 6, 7044-7052.	14.6	67
29	Single Molecular Switches: Electrochemical Gating of a Single Anthraquinone-Based Norbornylogous Bridge Molecule. Journal of Physical Chemistry C, 2012, 116, 21093-21097.	3.1	66
30	Metal-“Single-Molecule”-Semiconductor Junctions Formed by a Radical Reaction Bridging Gold and Silicon Electrodes. Journal of the American Chemical Society, 2019, 141, 14788-14797.	13.7	62
31	Electron Transport in Single Molecules Measured by a Distance-Modulation Assisted Break Junction Method. Nano Letters, 2008, 8, 1960-1964.	9.1	61
32	Growth of ordered anodic SnO ₂ nanochannel layers and their use for H ₂ gas sensing. Journal of Materials Chemistry A, 2014, 2, 915-920.	10.3	60
33	Chiral shape and enantioselective growth of colloidal particles of self-assembled meso-tetra(phenyl) Tj ETQq1 1 0.784314 rgBT/Overl	4.1	59
34	Folding and self-assembling with β^2 -oligomers based on (1R,2S)-2-aminocyclobutane-1-carboxylic acid. Organic and Biomolecular Chemistry, 2010, 8, 564-575.	2.8	59
35	High conductance values in π -folded molecular junctions. Nature Communications, 2017, 8, 15195.	12.8	54
36	Current-Voltage Characteristics and Transition Voltage Spectroscopy of Individual Redox Proteins. Journal of the American Chemical Society, 2012, 134, 20218-20221.	13.7	53

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37	Electrochemically-gated single-molecule electrical devices. <i>Electrochimica Acta</i> , 2013, 110, 741-753.	5.2	53
38	Oxidative dissolution of chalcopyrite by <i>Acidithiobacillus ferrooxidans</i> analyzed by electrochemical impedance spectroscopy and atomic force microscopy. <i>Bioelectrochemistry</i> , 2004, 64, 79-84.	4.6	50
39	Direct Measurement of Electron Transfer Distance Decay Constants of Single Redox Proteins by Electrochemical Tunneling Spectroscopy. <i>ACS Nano</i> , 2011, 5, 2060-2066.	14.6	48
40	Highly Conductive Single-Molecule Wires with Controlled Orientation by Coordination of Metalloporphyrins. <i>Nano Letters</i> , 2014, 14, 4751-4756.	9.1	48
41	An Ideal Spin Filter: Long-Range, High-Spin Selectivity in Chiral Helicoidal 3-Dimensional Metal Organic Frameworks. <i>Nano Letters</i> , 2020, 20, 8476-8482.	9.1	47
42	Tin passivation in alkaline media: Formation of SnO microcrystals as hydroxyl etching product. <i>Electrochimica Acta</i> , 2013, 111, 837-845.	5.2	45
43	Conductance Switching in Single Wired Redox Proteins. <i>Small</i> , 2014, 10, 2537-2541.	10.0	44
44	In situ studies of metal passive films. <i>Current Opinion in Solid State and Materials Science</i> , 2006, 10, 144-152.	11.5	42
45	Preparation of Reliable Probes for Electrochemical Tunneling Spectroscopy. <i>Analytical Chemistry</i> , 2004, 76, 5218-5222.	6.5	41
46	Metal-Controlled Magnetoresistance at Room Temperature in Single-Molecule Devices. <i>Journal of the American Chemical Society</i> , 2017, 139, 5768-5778.	13.7	41
47	Control over Near-Ballistic Electron Transport through Formation of Parallel Pathways in a Single-Molecule Wire. <i>Journal of the American Chemical Society</i> , 2019, 141, 240-250.	13.7	39
48	Interaction of Water with Self-Assembled Monolayers of Alkylsilanes on Mica. <i>Langmuir</i> , 2004, 20, 1284-1290.	3.5	37
49	Electronic barriers in the iron oxide film govern its passivity and redox behavior: Effect of electrode potential and solution pH. <i>Electrochemistry Communications</i> , 2006, 8, 1595-1602.	4.7	37
50	The spontaneous formation of single-molecule junctions via terminal alkynes. <i>Nanotechnology</i> , 2015, 26, 381001.	2.6	35
51	Fine-Tuning of Single-Molecule Conductance by Tweaking Both Electronic Structure and Conformation of Side Substituents. <i>Chemistry - A European Journal</i> , 2015, 21, 7716-7720.	3.3	33
52	Molecular Packing Changes of Octadecylamine Monolayers on Mica Induced by Pressure and Humidity. <i>Langmuir</i> , 2003, 19, 762-765.	3.5	30
53	The iron passive film breakdown in chloride media may be mediated by transient chloride-induced surface states located within the band gap. <i>Electrochemistry Communications</i> , 2006, 8, 627-632.	4.7	30
54	Controlled Thermal Annealing Tunes the Photoelectrochemical Properties of Nanochanneled Tin Oxide Structures. <i>ChemElectroChem</i> , 2014, 1, 1133-1137.	3.4	30

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55	Nanoscale charge transfer in redox proteins and DNA: Towards biomolecular electronics. <i>Electrochimica Acta</i> , 2014, 140, 83-95.	5.2	29
56	Charge transport at the proteinâ€“electrode interface in the emerging field of BioMolecular Electronics. <i>Current Opinion in Electrochemistry</i> , 2021, 28, 100734.	4.8	29
57	Tuning the electrical conductance of metalloporphyrin supramolecular wires. <i>Scientific Reports</i> , 2016, 6, 37352.	3.3	27
58	Can Electron Transport through a Blue-Copper Azurin Be Coherent? An Ab Initio Study. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1693-1702.	3.1	25
59	Conductance Maps by Electrochemical Tunneling Spectroscopy To Fingerprint the Electrode Electronic Structure. <i>Analytical Chemistry</i> , 2006, 78, 7325-7329.	6.5	23
60	Characterization of bornite (Cu ₅ FeS ₄) electrodes in the presence of the bacterium <i>Acidithiobacillus ferrooxidans</i> . <i>Journal of the Brazilian Chemical Society</i> , 2003, 14, 637-644.	0.6	22
61	Building Nanoscale Molecular Wires Exploiting Electrocatalytic Interactions. <i>Electrochimica Acta</i> , 2015, 179, 611-617.	5.2	19
62	<i>Ab initio</i> electronic structure calculations of entire blue copper azurins. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 30392-30402.	2.8	19
63	Tuning Singleâ€“Molecule Conductance in Metalloporphyrinâ€“Based Wires via Supramolecular Interactions. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19193-19201.	13.8	19
64	Mechanical Tuning of Throughâ€“Molecule Conductance in a Conjugated Calix[4]pyrrole. <i>ChemistrySelect</i> , 2018, 3, 6473-6478.	1.5	18
65	An electrochemical study of tin oxide thin film in borate buffer solutions. <i>Journal of the Brazilian Chemical Society</i> , 2003, 14, 523-529.	0.6	17
66	Tuning Structure and Dynamics of Blue Copper Azurin Junctions via Single Amino-Acid Mutations. <i>Biomolecules</i> , 2019, 9, 611.	4.0	16
67	Mechanical Deformation and Electronic Structure of a Blue Copper Azurin in a Solid-State Junction. <i>Biomolecules</i> , 2019, 9, 506.	4.0	16
68	Electrochemically Grown Tin Oxide Thin Films:â€“ In Situ Characterization of Electronic Properties and Growth Mechanism. <i>Journal of Physical Chemistry B</i> , 2004, 108, 8173-8181.	2.6	15
69	Differential Electrochemical Conductance Imaging at the Nanoscale. <i>Small</i> , 2017, 13, 1700958.	10.0	14
70	Self-Assembly of Drugâ€“Polymer Complexes: A Spontaneous Nanoencapsulation Process Monitored by Atomic Force Microscopy**This work was presented in part at the 13th International Symposium on Microencapsulation, September 5â€“7, 2001, Angers, France.. <i>Journal of Pharmaceutical Sciences</i> , 2003, 92, 77-83.	3.3	13
71	Dielectric properties of self-assembled layers of octadecylamine on mica in dry and humid environments. <i>Journal of Chemical Physics</i> , 2005, 123, 104706.	3.0	12
72	An Intramolecular Oâ€“N Migration Reaction on Gold Surfaces: Toward the Preparation of Well-Defined Amyloid Surfaces. <i>ACS Nano</i> , 2009, 3, 3091-3097.	14.6	11

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73	Tuning Single-Molecule Conductance by Controlled Electric Field-Induced trans-to-cis Isomerisation. Applied Sciences (Switzerland), 2021, 11, 3317.	2.5	11
74	Room-Temperature Spin-Dependent Transport in Metalloporphyrin-Based Supramolecular Wires. Angewandte Chemie - International Edition, 2021, 60, 25958-25965.	13.8	9
75	Electrochemically Gated Long-Distance Charge Transport in Photosystem...I. Angewandte Chemie - International Edition, 2019, 58, 13280-13284.	13.8	8
76	Surface thermodynamic properties of monolayers versus reconstitution of a membrane protein in solid-supported bilayers. Colloids and Surfaces B: Biointerfaces, 2005, 44, 93-98.	5.0	7
77	Sequential atomic force microscopy imaging of a spontaneous nanoencapsulation process. International Journal of Pharmaceutics, 2002, 242, 291-294.	5.2	6
78	Time-Lapse Atomic Force Microscopy Observations of the Morphology, Growth Rate, and Spontaneous Alignment of Nanofibers Containing a Peptide-Amphiphile from the Hepatitis G Virus (NS3 Protein). Journal of Physical Chemistry B, 2010, 114, 620-625.	2.6	5
79	Role of Ring <i>Ortho</i> Substituents on the Configuration of Carotenoid Polyene Chains. Organic Letters, 2018, 20, 493-496.	4.6	5
80	Tuning Single-Molecule Conductance in Metalloporphyrin-Based Wires via Supramolecular Interactions. Angewandte Chemie, 2020, 132, 19355-19363.	2.0	5
81	Room-Temperature Spin-Dependent Transport in Metalloporphyrin-Based Supramolecular Wires. Angewandte Chemie, 2021, 133, 26162-26169.	2.0	5
82	Measuring energies with an Atomic Force Microscope. Europhysics Letters, 2006, 74, 110-116.	2.0	4
83	Formation of an epitaxial monolayer on graphite upon short-time surface contact with highly diluted aqueous solutions of 1-monostearoylglycerol. Thin Solid Films, 2007, 515, 5391-5394.	1.8	3
84	Electrochemistry of Tin in Borate Buffer Solutions: An in-situ Raman study.. Materials Research Society Symposia Proceedings, 2003, 781, 131.	0.1	1
85	Interaction of lipidated GBV-C/HGV NS3 (513-522) and (505-514) peptides with phospholipids monolayer. An AFM study. Colloids and Surfaces B: Biointerfaces, 2010, 75, 25-33.	5.0	1
86	Diving in Solid/Liquid Nanointerfaces. Imaging & Microscopy, 2007, 9, 61-62.	0.1	0
87	Electrochemically Gated Long-Distance Charge Transport in Photosystem...I. Angewandte Chemie, 2019, 131, 13414-13418.	2.0	0
88	The NJ Tao We Knew. ACS Sensors, 2021, 6, 285-289.	7.8	0