Reinier Oropesa-NuÃ±ez

List of Publications by Year
in descending order

48 papers	2,065 citations	236833 25 h-index	233338 45 g-index
49 all docs	49 docs citations	49 times ranked	3364 citing authors

#	Article	IF	Citations
1	MoS₂ Quantum Dot/Graphene Hybrids for Advanced Interface Engineering of a CH₃NH₃PbI₃ Perovskite Solar Cell with an Efficiency of over 20%. ACS Nano, 2018, 12, 10736-10754.	7.3	201
2	Scalable Production of Graphene Inks via Wetâ€Jet Milling Exfoliation for Screenâ€Printed Microâ€Supercapacitors. Advanced Functional Materials, 2019, 29, 1807659.	7.8	174
3	Engineered MoSe₂â€Based Heterostructures for Efficient Electrochemical Hydrogen Evolution Reaction. Advanced Energy Materials, 2018, 8, 1703212.	10.2	152
4	Carbon Nanotube-Supported MoSe₂ Holey Flake:Mo₂C Ball Hybrids for Bifunctional pH-Universal Water Splitting. ACS Nano, 2019, 13, 3162-3176.	7.3	120
5	Physico-chemical studies of molecular interactions between non-ionic surfactants and bovine serum albumin. Colloids and Surfaces B: Biointerfaces, 2010, 75, 282-289.	2.5	93
6	Solution-Processed Hybrid Graphene Flake/2H-MoS₂ Quantum Dot Heterostructures for Efficient Electrochemical Hydrogen Evolution. Chemistry of Materials, 2017, 29, 5782-5786.	3.2	93
7	Liquidâ€Phase Exfoliated Indiumâ€“Selenide Flakes and Their Application in Hydrogen Evolution Reaction. Small, 2018, 14, e1800749.	5.2	90
8	WS₂â€“Graphite Dual-Ion Batteries. Nano Letters, 2018, 18, 7155-7164.	4.5	88
9	Solutionâ€Processed GaSe Nanoflakeâ€Based Films for Photoelectrochemical Water Splitting and Photoelectrochemicalâ€Type Photodetectors. Advanced Functional Materials, 2020, 30, 1909572.	7.8	81
10	Dopedâ€MoSe₂ Nanoflakes/3d Metal Oxideâ€“Hydr(Oxy)Oxides Hybrid Catalysts for pHâ€Universal Electrochemical Hydrogen Evolution Reaction. Advanced Energy Materials, 2018, 8, 1801764.	10.2	67
11	Integration of two-dimensional materials-based perovskite solar panels into a stand-alone solar farm. Nature Energy, 2022, 7, 597-607.	19.8	66
12	Scalable spray-coated graphene-based electrodes for high-power electrochemical double-layer capacitors operating over a wide range of temperature. Energy Storage Materials, 2021, 34, 1-11.	9.5	61
13	TaS₂, TaSe₂, and Their Heterogeneous Films as Catalysts for the Hydrogen Evolution Reaction. ACS Catalysis, 2020, 10, 3313-3325.	5.5	60
14	Liquid-Phase Exfoliated GeSe Nanoflakes for Photoelectrochemical-Type Photodetectors and Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 48598-48613.	4.0	56
15	Niobium disulphide (NbS₂)-based (heterogeneous) electrocatalysts for an efficient hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 25593-25608.	5.2	50
16	Two-Dimensional Gallium Sulfide Nanoflakes for UV-Selective Photoelectrochemical-type Photodetectors. Journal of Physical Chemistry C, 2021, 125, 11857-11866.	1.5	41
17	Extending the Colloidal Transition Metal Dichalcogenide Library to ReS₂ Nanosheets for Application in Gas Sensing and Electrocatalysis. Small, 2019, 15, e1904670.	5.2	38
18	Graphene-Based Electrodes in a Vanadium Redox Flow Battery Produced by Rapid Low-Pressure Combined Gas Plasma Treatments. Chemistry of Materials, 2021, 33, 4106-4121.	3.2	35

#	Article	IF	Citations
19	Amyloid and membrane complexity: The toxic interplay revealed by AFM. Seminars in Cell and Developmental Biology, 2018, 73, 82-94.	2.3	34
20	A Short-Chain Multibranched Perfluoroalkyl Thiol for More Sustainable Hydrophobic Coatings. ACS Sustainable Chemistry and Engineering, 2018, 6, 9734-9743.	3.2	34
21	3D porous polyurethanes featured by different mechanical properties: Characterization and interaction with skeletal muscle cells. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 75, 147-159.	1.5	32
22	Single-/Few-Layer Graphene as Long-Lasting Electrocatalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 5373-5379.	2.5	28
23	Flexible Graphene/Carbon Nanotube Electrochemical Doubleâ€Layer Capacitors with Ultrahigh Areal Performance. ChemPlusChem, 2019, 84, 882-892.	1.3	28
24	ITO nanoparticles break optical transparency/high-areal capacitance trade-off for advanced aqueous supercapacitors. Journal of Materials Chemistry A, 2017, 5, 25177-25186.	5.2	26
25	Octapod-Shaped CdSe Nanocrystals Hosting Pt with High Mass Activity for the Hydrogen Evolution Reaction. Chemistry of Materials, 2020, 32, 2420-2429.	3.2	26
26	Molecular insights into cell toxicity of a novel familial amyloidogenic variant of Î²2â€microglobulin. Journal of Cellular and Molecular Medicine, 2016, 20, 1443-1456.	1.6	23
27	Inverted perovskite solar cells with enhanced lifetime and thermal stability enabled by a metallic tantalum disulfide buffer layer. Nanoscale Advances, 2021, 3, 3124-3135.	2.2	23
28	Interaction of toxic and non-toxic HypF-N oligomers with lipid bilayers investigated at high resolution with atomic force microscopy. Oncotarget, 2016, 7, 44991-45004.	0.8	23
29	Topochemical Transformation of Two-Dimensional VSe₂ into Metallic Nonlayered VO₂ for Water Splitting Reactions in Acidic and Alkaline Media. ACS Nano, 2022, 16, 351-367.	7.3	23
30	â€œIon slidingâ€•on graphene: a novel concept to boost supercapacitor performance. Nanoscale Horizons, 2019, 4, 1077-1091.	4.1	22
31	Functionalized metallic transition metal dichalcogenide (TaS₂) for nanocomposite membranes in direct methanol fuel cells. Journal of Materials Chemistry A, 2021, 9, 6368-6381.	5.2	22
32	A two-fold engineering approach based on Bi₂Te₃ flakes towards efficient and stable inverted perovskite solar cells. Materials Advances, 2020, 1, 450-462.	2.6	21
33	Microwaveâ€Induced Structural Engineering and Pt Trapping in 6Râ€TaS₂ for the Hydrogen Evolution Reaction. Small, 2020, 16, e2003372.	5.2	18
34	Insights into the Formation of DNAâ€“Magnetic Nanoparticle Hybrid Structures: Correlations between Morphological Characterization and Output from Magnetic Biosensor Measurements. ACS Sensors, 2020, 5, 3510-3519.	4.0	14
35	Hybrid Organic/Inorganic Photocathodes Based on WS₂ Flakes as Hole Transporting Layer Material. Small Structures, 2021, 2, 2000098.	6.9	14
36	Quantitative Measurement of the Affinity of Toxic and Nontoxic Misfolded Protein Oligomers for Lipid Bilayers and of its Modulation by Lipid Composition and Trodusquemine. ACS Chemical Neuroscience, 2021, 12, 3189-3202.	1.7	13

#	Article	IF	Citations
37	Tunable Friction Behavior of Photochromic Fibrillar Surfaces. Langmuir, 2015, 31, 6072-6077.	1.6	12
38	Water-dispersible few-layer graphene flakes for selective and rapid ion mercury (Hg²⁺)-rejecting membranes. Materials Advances, 2020, 1, 387-402.	2.6	11
39	Spontaneous Formation of Photochromic Coatings Made of Reversible Microfibrils and Nanofibrils on an Elastomer Substrate. Langmuir, 2014, 30, 13058-13064.	1.6	9
40	Toxic HypF-N Oligomers Selectively Bind the Plasma Membrane to Impair Cell Adhesion Capability. Biophysical Journal, 2018, 114, 1357-1367.	0.2	8
41	Sulfonated NbS₂-based proton-exchange membranes for vanadium redox flow batteries. Nanoscale, 2022, 14, 6152-6161.	2.8	8
42	Wafer-sized WS₂ monolayer deposition by sputtering. Nanoscale, 2022, 14, 6331-6338.	2.8	6
43	Transition metal dichalcogenides as catalysts for the hydrogen evolution reaction: The emblematic case of â€œinertâ€•ZrSe₂ as catalyst for electrolyzers. Nano Select, 2022, 3, 1069-1081.	1.9	6
44	Formation of Visible Aggregates between Rolling Circle Amplification Products and Magnetic Nanoparticles as a Strategy for Point-of-Care Diagnostics. ACS Omega, 2021, 6, 32970-32976.	1.6	5
45	Evaluating the Performance of a Magnetic Nanoparticle-Based Detection Method Using Circle-to-Circle Amplification. Biosensors, 2021, 11, 173.	2.3	4
46	Impact of Experimental Parameters on Cellâ€“Cell Force Spectroscopy Signature. Sensors, 2021, 21, 1069.	2.1	3
47	Correlative nanoscopy: super resolved fluorescence and atomic force microscopy towards nanoscale manipulation and multimodal investigations. Microscopy and Microanalysis, 2015, 21, 2351-2352.	0.2	2
48	Selective Interaction between Toxic Amyloid Oligomers and the Cell Membrane Revealed by Innovative AFM Applications. Biophysical Journal, 2016, 110, 498a.	0.2	0