Eduardo Gracia-Espino

List of Publications by Year
in descending order

61 papers	2,776 citations	201674 27 h-index	175258 52 g-index
61 all docs	61 docs citations	61 times ranked	5126 citing authors

#	Article	IF	Citations
1	Synergistic Effects between Atomically Dispersed Feâ^'Nâ^'C and Câ^'Sâ^'C for the Oxygen Reduction Reaction in Acidic Media. Angewandte Chemie - International Edition, 2017, 56, 13800-13804.	13.8	409
2	Atomically FeN2 moieties dispersed on mesoporous carbon: A new atomic catalyst for efficient oxygen reduction catalysis. Nano Energy, 2017, 35, 9-16.	16.0	289
3	Formation of nitrogen-doped graphene nanoscrolls by adsorption of magnetic Î³-Fe2O3 nanoparticles. Nature Communications, 2013, 4, 2319.	12.8	135
4	Stabilizing Active Edge Sites in Semicrystalline Molybdenum Sulfide by Anchorage on Nitrogenâ€Doped Carbon Nanotubes for Hydrogen Evolution Reaction. Advanced Functional Materials, 2016, 26, 6766-6776.	14.9	110
5	Effects of 45-nm silver nanoparticles on coronary endothelial cells and isolated rat aortic rings. Toxicology Letters, 2009, 191, 305-313.	0.8	109
6	Synergistic Effects between Atomically Dispersed Feâ^'Nâ^'C and Câ^'Sâ^'C for the Oxygen Reduction Reaction in Acidic Media. Angewandte Chemie, 2017, 129, 13988-13992.	2.0	88
7	Oxygen Reduction Reactions on Singleâ€or Fewâ€Atom Discrete Active Sites for Heterogeneous Catalysis. Advanced Energy Materials, 2020, 10, 1902084.	19.5	82
8	Electrical Transport and Field-Effect Transistors Using Inkjet-Printed SWCNT Films Having Different Functional Side Groups. ACS Nano, 2010, 4, 3318-3324.	14.6	79
9	Stable Sulfurâ€Intercalated 1Tâ€² MoS₂ on Graphitic Nanoribbons as Hydrogen Evolution Electrocatalyst. Advanced Functional Materials, 2018, 28, 1802744.	14.9	79
10	Small palladium islands embedded in palladiumâ€"tungsten bimetallic nanoparticles form catalytic hotspots for oxygen reduction. Nature Communications, 2014, 5, 5253.	12.8	77
11	Sn/Be Sequentially co-doped Hematite Photoanodes for Enhanced Photoelectrochemical Water Oxidation: Effect of Be2+ as co-dopant. Scientific Reports, 2016, 6, 23183.	3.3	75
12	Hydroxyl-Functionalized and N-Doped Multiwalled Carbon Nanotubes Decorated with Silver Nanoparticles Preserve Cellular Function. ACS Nano, 2011, 5, 2458-2466.	14.6	71
13	Improved Oxygen Reduction Performance of Ptâ€"Ni Nanoparticles by Adhesion on Nitrogen-Doped Graphene. Journal of Physical Chemistry C, 2014, 118, 2804-2811.	3.1	65
14	Cationic Vacancy Defects in Iron Phosphide: A Promising Route toward Efficient and Stable Hydrogen Evolution by Electrochemical Water Splitting. ChemSusChem, 2017, 10, 4544-4551.	6.8	63
15	Photocatalytic reduction of CO2 with H2O over modified TiO2 nanofibers: Understanding the reduction pathway. Nano Research, 2016, 9, 1956-1968.	10.4	62
16	Ultrasmall Abundant Metal-Based Clusters as Oxygen-Evolving Catalysts. Journal of the American Chemical Society, 2019, 141, 232-239.	13.7	56
17	Understanding the Interface of Six-Shell Cuboctahedral and Icosahedral Palladium Clusters on Reduced Graphene Oxide: Experimental and Theoretical Study. Journal of the American Chemical Society, 2014, 136, 6626-6633.	13.7	55
18	Effect of tetravalent dopants on hematite nanostructure for enhanced photoelectrochemical water splitting. Applied Surface Science, 2018, 427, 1203-1212.	6.1	51

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19	Influence of Sb⁵⁺as a Double Donor on Hematite (Fe³⁺) Photoanodes for Surface-Enhanced Photoelectrochemical Water Oxidation. ACS Applied Materials & Interfaces, 2018, 10, 16467-16473.	8.0	50
20	Hydrogen Evolution Reaction Activity of Heterogeneous Materials: A Theoretical Model. Journal of Physical Chemistry C, 2020, 124, 20911-20921.	3.1	48
21	Behind the Synergistic Effect Observed on Phosphorusâ€"Nitrogen Codoped Graphene during the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2016, 120, 27849-27857.	3.1	45
22	Nitrogen Doping Mechanism in Small Diameter Single-Walled Carbon Nanotubes: Impact on Electronic Properties and Growth Selectivity. Journal of Physical Chemistry C, 2013, 117, 25805-25816.	3.1	44
23	Hierarchical self-assembled structures based on nitrogen-doped carbon nanotubes as advanced negative electrodes for Li-ion batteries and 3D microbatteries. Journal of Power Sources, 2015, 279, 581-592.	7.8	41
24	Reduction free room temperature synthesis of a durable and efficient Pd/ordered mesoporous carbon composite electrocatalyst for alkaline direct alcohols fuel cell. RSC Advances, 2014, 4, 676-682.	3.6	37
25	Comprehensive Study of an Earth-Abundant Bifunctional 3D Electrode for Efficient Water Electrolysis in Alkaline Medium. ACS Applied Materials & Interfaces, 2015, 7, 28148-28155.	8.0	36
26	Nitrogenâ€Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport. Advanced Functional Materials, 2013, 23, 3755-3762.	14.9	31
27	Fe-substituted cobalt-phosphate polyoxometalates as enhanced oxygen evolution catalysts in acidic media. Chinese Journal of Catalysis, 2020, 41, 853-857.	14.0	29
28	Toward a Lowâ€Cost Artificial Leaf: Driving Carbonâ€Based and Bifunctional Catalyst Electrodes with Solutionâ€Processed Perovskite Photovoltaics. Advanced Energy Materials, 2016, 6, 1600738.	19.5	28
29	Loop formation in graphitic nanoribbon edges using furnace heating or Joule heating. Journal of Vacuum Science & Technology B, 2009, 27, 1996.	1.3	26
30	C₆₀/Collapsed Carbon Nanotube Hybrids: A Variant of Peapods. Nano Letters, 2015, 15, 829-834.	9.1	26
31	Controlling the Emission Zone by Additives for Improved Lightâ€Emitting Electrochemical Cells. Advanced Materials, 2022, 34, e2107849.	21.0	26
32	Nanoparticulate Double-Heterojunction Photocatalysts Comprising TiO_{2(Anatase)}/WO₃/TiO_{2(Rutile)} with Enhanced Photocatalytic Activity toward the Degradation of Methyl Orange under Near-Ultraviolet and Visible Light. ACS Omega, 2021, 6, 11840-11848.	3.5	25
33	Electron transport study on functionalized armchair graphene nanoribbons: DFT calculations. RSC Advances, 2016, 6, 21954-21960.	3.6	24
34	Doping (10, 0)-Semiconductor Nanotubes with Nitrogen and Vacancy Defects. Materials Express, 2011, 1, 127-135.	0.5	22
35	Yttria stabilized and surface activated platinum (PtxYOy) nanoparticles through rapid microwave assisted synthesis for oxygen reduction reaction. Nano Energy, 2018, 46, 141-149.	16.0	21
36	Novel Nanocarbons for Adsorption. , 2012, , 3-34.		18

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37	Atomistic understanding of the origin of high oxygen reduction electrocatalytic activity of cuboctahedral Pt₃Coâ€“Pt coreâ€“shell nanoparticles. Catalysis Science and Technology, 2016, 6, 1393-1401.	4.1	17
38	Theoretical Analysis of Surface Active Sites in Defective 2H and 1Tâ€² MoS₂ Polymorphs for Hydrogen Evolution Reaction: Quantifying the Total Activity of Point Defects. Advanced Theory and Simulations, 2020, 3, 1900213.	2.8	17
39	Electrostatically Driven Nanoballoon Actuator. Nano Letters, 2016, 16, 6787-6791.	9.1	16
40	Surface activation of graphene nanoribbons for oxygen reduction reaction by nitrogen doping and defect engineering: An ab initio study. Carbon, 2018, 137, 349-357.	10.3	16
41	Highly Soluble CsPbBr₃ Perovskite Quantum Dots for Solution-Processed Light-Emission Devices. ACS Applied Nano Materials, 2021, 4, 1162-1174.	5.0	16
42	Microwave-assisted synthesis of multimetal oxygen-evolving catalysts. Electrochemistry Communications, 2017, 81, 116-119.	4.7	15
43	Elucidating Deviating Temperature Behavior of Organic Lightâ€Emitting Diodes and Lightâ€Emitting Electrochemical Cells. Advanced Optical Materials, 2021, 9, 2001405.	7.3	15
44	Î²-Mo₂C Nanoparticles Produced by Carburization of Molybdenum Oxides with Carbon Black under Microwave Irradiation for Electrocatalytic Hydrogen Evolution Reaction. ACS Applied Nano Materials, 2021, 4, 12270-12277.	5.0	15
45	Solid-state synthesis of few-layer cobalt-doped MoS₂ with CoMoS phase on nitrogen-doped graphene driven by microwave irradiation for hydrogen electrocatalysis. RSC Advances, 2020, 10, 34323-34332.	3.6	14
46	Carbon nanodots: A metal-free, easy-to-synthesize, and benign emitter for light-emitting electrochemical cells. Nano Research, 2022, 15, 5610-5618.	10.4	14
47	Spontaneous twisting of a collapsed carbon nanotube. Nano Research, 2017, 10, 1942-1949.	10.4	12
48	Biotin molecules on nitrogen-doped carbon nanotubes enhance the uniform anchoring and formation of Ag nanoparticles. Carbon, 2015, 88, 51-59.	10.3	10
49	Fabrication of One-Dimensional Zigzag [6,6]-Phenyl-C₆₁-Butyric Acid Methyl Ester Nanoribbons from Two-Dimensional Nanosheets. ACS Nano, 2015, 9, 10516-10522.	14.6	10
50	Self-Assembly Synthesis of Decorated Nitrogen-Doped Carbon Nanotubes with ZnO Nanoparticles: Anchoring Mechanism and the Effects of Sulfur. Journal of Physical Chemistry C, 2015, 119, 741-747.	3.1	9
51	Temperature Dependence of Sensors Based on Silver-Decorated Nitrogen-Doped Multiwalled Carbon Nanotubes. Journal of Sensors, 2016, 2016, 1-10.	1.1	9
52	Magnetically Collected Platinum/Nickel Alloy Nanoparticles as Catalysts for Hydrogen Evolution. ACS Applied Nano Materials, 2021, 4, 12957-12965.	5.0	9
53	Electrical transport through single-wall carbon nanotubeâ€“anodic aluminum oxideâ€“aluminum heterostructures. Nanotechnology, 2010, 21, 035707.	2.6	6
54	Novel Carbon-Based Nanomaterials. , 2013, , 61-87.		5

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55	Oxidatively induced exposure of active surface area during microwave assisted formation of Pt₃Co nanoparticles for oxygen reduction reaction. RSC Advances, 2019, 9, 17979-17987.	3.6	4
56	Microwave-Induced Structural Ordering of Resilient Nanostructured L1₀-FePt Catalysts for Oxygen Reduction Reaction. ACS Applied Energy Materials, 2020, 3, 9785-9791.	5.1	4
57	Tunable Two-Dimensional Patterning of a Semiconducting and Nanometer-Thin C60 Fullerene Film Using a Spatial Light Modulator. ACS Applied Nano Materials, 2020, 3, 5463-5472.	5.0	4
58	Self-diffraction properties in nanotubes (CNTs). Proceedings of SPIE, 2009, , .	0.8	3
59	Coronene-Based Graphene Nanoribbons Insulated by Boron Nitride Nanotubes: Electronic Properties of the Hybrid Structure. ACS Omega, 2018, 3, 12930-12935.	3.5	3
60	Calorimetric measurements on Li4C60and Na4C60. Journal of Chemical Physics, 2015, 142, 164706.	3.0	1
61	Photovoltaics: Toward a Lowâ€Cost Artificial Leaf: Driving Carbonâ€Based and Bifunctional Catalyst Electrodes with Solutionâ€Processed Perovskite Photovoltaics (Adv. Energy Mater. 20/2016). Advanced Energy Materials, 2016, 6, .	19.5	0