Juan Herranz

List of Publications by Year in descending order

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61 papers	6,471 citations	172457 29 h-index	182427 51 g-index
62 all docs	62 docs citations	62 times ranked	7877 citing authors

#	Article	IF	Citations
1	Electrochemical Surface Area Quantification, CO₂ Reduction Performance, and Stability Studies of Unsupported Three-Dimensional Au Aerogels versus Carbon-Supported Au Nanoparticles. ACS Materials Au, 2022, 2, 278-292.	6.0	18
2	Timeâ€Resolved Potentialâ€Induced Changes in Fe/N/Câ€Catalysts Studied by In Situ Modulation Excitation Xâ€Ray Absorption Spectroscopy. Advanced Energy Materials, 2022, 12, .	19.5	33
3	Potential Pitfalls in the Operando XAS Study of Oxygen Evolution Electrocatalysts. ACS Energy Letters, 2022, 7, 1735-1740.	17.4	21
4	Green chemistry and first-principles theory enhance catalysis: synthesis and 6-fold catalytic activity increase of sub-5 nm Pd and Pt@Pd nanocubes. Nanoscale, 2022, 14, 10155-10168.	5.6	4
5	Effect of Low and Sub-Freezing Temperature on the PEFC Performance of Unsupported Pt-Ni Aerogel Cathode Catalyst Layers. ECS Meeting Abstracts, 2022, MA2022-01, 1461-1461.	0.0	1
6	Electrochemical Surface Area Quantification, CO₂ Reduction Performance and Stability Studies of Au and Au-Cu Aerogels. ECS Meeting Abstracts, 2022, MA2022-01, 2087-2087.	0.0	0
7	Interplay between Surface-Adsorbed CO and Bulk Pd-Hydride at CO₂ Electroreduction Conditions. ECS Meeting Abstracts, 2022, MA2022-01, 2095-2095.	0.0	0
8	Oxygen Evolution Reaction on Ir-Oxide Based Materials Studied By Modulation Excitation X-Ray Absorption Spectroscopy. ECS Meeting Abstracts, 2022, MA2022-01, 2075-2075.	0.0	0
9	CO₂ Electroreduction on Unsupported PdPt Aerogels: Effects of Alloying and Surface Composition on Product Selectivity. ACS Applied Energy Materials, 2022, 5, 8460-8471.	5.1	16
10	Effect of Catalyst Aggregate Size on the Mass Transport Properties of Non-Noble Metal Catalyst Layers in PEMFC Cathodes. ECS Meeting Abstracts, 2022, MA2022-01, 1460-1460.	0.0	0
11	Effect of Cobalt Speciation and the Graphitization of the Carbon Matrix on the CO₂ Electroreduction Activity of Co/N-Doped Carbon Materials. ACS Applied Materials & Interfaces, 2021, 13, 15122-15131.	8.0	13
12	Potentialâ€Induced Spin Changes in Fe/N/C Electrocatalysts Assessed by In Situ Xâ€ray Emission Spectroscopy. Angewandte Chemie, 2021, 133, 11813-11818.	2.0	5
13	Potentialâ€Induced Spin Changes in Fe/N/C Electrocatalysts Assessed by In Situ Xâ€ray Emission Spectroscopy. Angewandte Chemie - International Edition, 2021, 60, 11707-11712.	13.8	36
14	An Online Gas Chromatography Cell Setup for Accurate CO₂-Electroreduction Product Quantification. Journal of the Electrochemical Society, 2021, 168, 064504.	2.9	12
15	⁵⁷Fe-Enrichment effect on the composition and performance of Fe-based O₂-reduction electrocatalysts. Physical Chemistry Chemical Physics, 2021, 23, 9147-9157.	2.8	10
16	Electrochemical Surface Area Quantification, CO2 Reduction Performance and Stability Studies of Au and Au-Cu Aerogels. ECS Meeting Abstracts, 2021, MA2021-02, 830-830.	0.0	0
17	Agglomerate Size Effect on the PEMFC Performance of a Non-Noble Metal Oxygen Reduction Catalyst. ECS Meeting Abstracts, 2021, MA2021-02, 1142-1142.	0.0	0
18	Electrochemical CO2 Reduction to CO in Forward-Bias Bipolar Membrane Co-Electrolyzers. ECS Meeting Abstracts, 2021, MA2021-02, 818-818.	0.0	0

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19	X-Ray Absorption Spectroscopy Studies of Ir-Oxide Based Oxygen Evolution Catalysts Revisited. ECS Meeting Abstracts, 2021, MA2021-02, 1932-1932.	0.0	1
20	Low Temperature PEFC Performance of Unsupported Pt-Ni Aerogel Cathode Catalyst Layers. ECS Meeting Abstracts, 2021, MA2021-02, 1299-1299.	0.0	1
21	CO2 Electroreduction on Unsupported Pdpt Aerogels: Effects of Alloying and Surface Composition. ECS Meeting Abstracts, 2021, MA2021-02, 828-828.	0.0	0
22	Disclosing Pt-Bimetallic Alloy Nanoparticle Surface Lattice Distortion with Electrochemical Probes. ACS Energy Letters, 2020, 5, 162-169.	17.4	35
23	Co-electrolysis of CO2 and H2O: From electrode reactions to cell-level development. Current Opinion in Electrochemistry, 2020, 23, 89-95.	4.8	32
24	On the Oxidation State of Cu₂O upon Electrochemical CO₂ Reduction: An XPS Study. ChemPhysChem, 2019, 20, 3120-3127.	2.1	40
25	Operando X-ray characterization of high surface area iridium oxides to decouple their activity losses for the oxygen evolution reaction. Energy and Environmental Science, 2019, 12, 3038-3052.	30.8	90
26	Fe-Based O₂-Reduction Catalysts Synthesized Using Na₂CO₃ as a Pore-Inducing Agent. ACS Applied Energy Materials, 2019, 2, 1469-1479.	5.1	16
27	Structure Sensitivity in Hydrogenation Reactions on Pt/C in Aqueousâ€phase. ChemCatChem, 2019, 11, 575-582.	3.7	47
28	Unsupported Pt₃Ni Aerogels as Corrosion Resistant PEFC Anode Catalysts under Gross Fuel Starvation Conditions. Journal of the Electrochemical Society, 2018, 165, F3001-F3006.	2.9	19
29	Tomographic Analysis and Modeling of Polymer Electrolyte Fuel Cell Unsupported Catalyst Layers. Journal of the Electrochemical Society, 2018, 165, F7-F16.	2.9	15
30	Surface distortion as a unifying concept and descriptor in oxygen reduction reaction electrocatalysis. Nature Materials, 2018, 17, 827-833.	27.5	344
31	Combining SAXS and XAS To Study the Operando Degradation of Carbon-Supported Pt-Nanoparticle Fuel Cell Catalysts. ACS Catalysis, 2018, 8, 7000-7015.	11.2	58
32	Effect of Acid Washing on the Oxygen Reduction Reaction Activity of Pt-Cu Aerogel Catalysts. Electrochimica Acta, 2017, 233, 210-217.	5.2	24
33	Numerical Partitioning Model for the KouteckÃ½-Levich Analysis of Electrochemical Flow Cells with a Combined Channel/Wall-Jet Geometry. Journal of the Electrochemical Society, 2017, 164, E3448-E3456.	2.9	7
34	State-of-the-art Nanofabrication in Catalysis. Chimia, 2017, 71, 160-169.	0.6	7
35	Unsupported Ptâ€Ni Aerogels with Enhanced High Current Performance and Durability in Fuel Cell Cathodes. Angewandte Chemie, 2017, 129, 10847-10850.	2.0	15
36	Unsupported Ptâ€Ni Aerogels with Enhanced High Current Performance and Durability in Fuel Cell Cathodes. Angewandte Chemie - International Edition, 2017, 56, 10707-10710.	13.8	65

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37	Nanostructuring Noble Metals as Unsupported Electrocatalysts for Polymer Electrolyte Fuel Cells. Advanced Energy Materials, 2017, 7, 1700548.	19.5	76
38	Durability of Unsupported Pt-Ni Aerogels in PEFC Cathodes. Journal of the Electrochemical Society, 2017, 164, F1136-F1141.	2.9	23
39	Pt-Ni Aerogels as Unsupported Electrocatalysts for the Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2016, 163, F998-F1003.	2.9	74
40	Interfacial effects on the catalysis of the hydrogen evolution, oxygen evolution and CO2-reduction reactions for (co-)electrolyzer development. Nano Energy, 2016, 29, 4-28.	16.0	104
41	Aqueous phase electrocatalysis and thermal catalysis for the hydrogenation of phenol at mild conditions. Applied Catalysis B: Environmental, 2016, 182, 236-246.	20.2	103
42	Electrochemical COâ„ Reduction â€“ A Critical View on Fundamentals, Materials and Applications. Chimia, 2015, 69, 769.	0.6	130
43	Reactivity of the Ionic Liquid Pyr₁₄TFSI with Superoxide Radicals Generated from KO₂or by Contact of O₂with Li₇Ti₅O₁₂. Journal of the Electrochemical Society, 2015, 162, A905-A914.	2.9	34
44	Bulk-Palladium and Palladium-on-Gold Electrocatalysts for the Oxidation of Hydrogen in Alkaline Electrolyte. Journal of the Electrochemical Society, 2015, 162, F178-F189.	2.9	80
45	(Invited) Hydrogen Oxidation and Evolution Reaction (HOR/HER) on Pt Electrodes in Acid vs. Alkaline Electrolytes: Mechanism, Activity and Particle Size Effects. ECS Transactions, 2014, 64, 1069-1080.	0.5	76
46	Kinetics of the Hydrogen Oxidation/Evolution Reaction on Polycrystalline Platinum in Alkaline Electrolyte Reaction Order with Respect to Hydrogen Pressure. Journal of the Electrochemical Society, 2014, 161, F1448-F1457.	2.9	213
47	New insights into the electrochemical hydrogen oxidation and evolution reaction mechanism. Energy and Environmental Science, 2014, 7, 2255-2260.	30.8	1,220
48	Nanosized Carbonâ€Supported Manganese Oxide Phases as Lithiumâ€“Oxygen Battery Cathode Catalysts. ChemCatChem, 2013, 5, 3358-3373.	3.7	20
49	Oxygen reduction activities compared in rotating-disk electrode and proton exchange membrane fuel cells for highly active FeNC catalysts. Electrochimica Acta, 2013, 87, 619-628.	5.2	114
50	Comparing Hydrogen Oxidation and Evolution Reaction Kinetics on Polycrystalline Platinum in 0.1 M and 1 M KOH. ECS Transactions, 2013, 50, 2163-2174.	0.5	55
51	Stability of Electrolyte Solutions for Non-Aqueous Li-O2 Cells and Effect of Impurities On Cell Cycling Behavior. ECS Meeting Abstracts, 2013, , .	0.0	0
52	Binuclear rhenium(i) complexes for the photocatalytic reduction of CO2. Dalton Transactions, 2012, 41, 5026.	3.3	80
53	Structure of the catalytic sites in Fe/N/C-catalysts for O2-reduction in PEM fuel cells. Physical Chemistry Chemical Physics, 2012, 14, 11673.	2.8	622
54	Using Rotating Ring Disc Electrode Voltammetry to Quantify the Superoxide Radical Stability of Aprotic Liâ€“Air Battery Electrolytes. Journal of Physical Chemistry C, 2012, 116, 19084-19094.	3.1	160

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55	Unveiling N-Protonation and Anion-Binding Effects on Fe/N/C Catalysts for O₂ Reduction in Proton-Exchange-Membrane Fuel Cells. Journal of Physical Chemistry C, 2011, 115, 16087-16097.	3.1	300
56	Iron-based cathode catalyst with enhanced power density in polymer electrolyte membrane fuel cells. Nature Communications, 2011, 2, 416.	12.8	1,262
57	Enhancing the Performance of Non-noble Metal Catalysts for the Reduction of O2 in PEM Fuel Cells: is the Adsorption of Iron the Limiting Factor for Increasing the Site Density of the Catalysts?. ECS Transactions, 2009, 16, 431-441.	0.5	0
58	Electrochemical Evidence of Two Types of Active Sites for Oxygen Reduction in Fe-based Catalysts. ECS Transactions, 2009, 25, 117-128.	0.5	20
59	Cross-Laboratory Experimental Study of Non-Noble-Metal Electrocatalysts for the Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2009, 1, 1623-1639.	8.0	655
60	Metal-Precursor Adsorption Effects on Fe-Based Catalysts for Oxygen Reduction in PEM Fuel Cells. Journal of the Electrochemical Society, 2009, 156, B593.	2.9	11
61	Step-by-Step Synthesis of Non-Noble Metal Electrocatalysts for O2Reduction under Proton Exchange Membrane Fuel Cell Conditions. Journal of Physical Chemistry C, 2007, 111, 19033-19042.	3.1	54