

Maria Victoria Martinez Huerta

List of Publications by Year in descending order

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82
papers

3,663
citations

101543

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138484

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docs citations

82
times ranked

4265
citing authors

#	ARTICLE	IF	CITATIONS
1	The effect of CeO ₂ on the surface and catalytic properties of Pt/CeO ₂ -ZrO ₂ catalysts for methane dry reforming. Applied Catalysis B: Environmental, 2009, 89, 149-159.	20.2	218
2	Study of the surface and redox properties of ceria-zirconia oxides. Applied Catalysis A: General, 2008, 337, 86-96.	4.3	213
3	Oxidative dehydrogenation of ethane to ethylene over alumina-supported vanadium oxide catalysts: Relationship between molecular structures and chemical reactivity. Catalysis Today, 2006, 118, 279-287.	4.4	171
4	Nature of the vanadia-ceria interface in V ₅₊ /CeO ₂ catalysts and its relevance for the solid-state reaction toward CeVO ₄ and catalytic properties. Journal of Catalysis, 2004, 225, 240-248.	6.2	143
5	Dynamic behavior of supported vanadia catalysts in the selective oxidation of ethane. Catalysis Today, 2000, 61, 295-301.	4.4	115
6	Recent progress on bimetallic NiCo and CoFe based electrocatalysts for alkaline oxygen evolution reaction: A review. Journal of Energy Chemistry, 2022, 67, 101-137.	12.9	109
7	Preparation of carbon supported Pt and PtRu nanoparticles from microemulsion. Applied Catalysis A: General, 2005, 285, 24-35.	4.3	103
8	Influence of carbon nanofiber properties as electrocatalyst support on the electrochemical performance for PEM fuel cells. International Journal of Hydrogen Energy, 2010, 35, 9934-9942.	7.1	102
9	Novel Synthesis Method of CO-Tolerant PtRu-MoO ₃ Nanoparticles: Structural Characteristics and Performance for Methanol Electrooxidation. Chemistry of Materials, 2008, 20, 4249-4259.	6.7	99
10	Tailoring and structure of PtRu nanoparticles supported on functionalized carbon for DMFC applications: New evidence of the hydrous ruthenium oxide phase. Applied Catalysis B: Environmental, 2009, 88, 505-514.	20.2	94
11	TiC, TiCN, and TiN Supported Pt Electrocatalysts for CO and Methanol Oxidation in Acidic and Alkaline Media. Journal of Physical Chemistry C, 2013, 117, 20769-20777.	3.1	92
12	Effect of Ni addition over PtRu/C based electrocatalysts for fuel cell applications. Applied Catalysis B: Environmental, 2006, 69, 75-84.	20.2	71
13	Enhanced methanol electrooxidation activity of PtRu nanoparticles supported on H ₂ O ₂ -functionalized carbon black. Carbon, 2005, 43, 3002-3005.	10.3	70
14	Variations in the Extent of Pyrochlore-Type Cation Ordering in Ce ₂ Zr ₂ O ₈ : A Pathway to Low-Temperature Reduction. Chemistry of Materials, 2005, 17, 1157-1166.	6.7	70
15	Methanol electrooxidation on PtRu nanoparticles supported on functionalised carbon black. Catalysis Today, 2006, 116, 422-432.	4.4	68
16	PtRuMo/C catalysts for direct methanol fuel cells: Effect of the pretreatment on the structural characteristics and methanol electrooxidation. International Journal of Hydrogen Energy, 2010, 35, 11478-11488.	7.1	67
17	The fabrication and characterization of Cu-nanoparticle immobilization on a hybrid chitosan derivative-carbon support as a novel electrochemical sensor: application for the sensitive enzymeless oxidation of glucose and reduction of hydrogen peroxide. Journal of Materials Chemistry B, 2014, 2, 706-717.	5.8	66
18	Operando Raman-GC Study on the Structure-Activity Relationships in V ⁵⁺ /CeO ₂ Catalyst for Ethane Oxidative Dehydrogenation: The Formation of CeVO ₄ . Journal of Physical Chemistry C, 2008, 112, 11441-11447.	3.1	65

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19	Elucidating the Methylammonium (MA) Conformation in MAPbBr ₃ Perovskite with Application in Solar Cells. <i>Inorganic Chemistry</i> , 2017, 56, 14214-14219.	4.0	64
20	Functionalization of carbon support and its influence on the electrocatalytic behaviour of Pt/C in H ₂ and CO electrooxidation. <i>Carbon</i> , 2006, 44, 1919-1929.	10.3	59
21	Pt and PtRu electrocatalysts supported on carbon xerogels for direct methanol fuel cells. <i>Journal of Power Sources</i> , 2011, 196, 4226-4235.	7.8	59
22	Changes in Ceria-Supported Vanadium Oxide Catalysts during the Oxidative Dehydrogenation of Ethane and Temperature-Programmed Treatments. <i>Journal of Physical Chemistry C</i> , 2007, 111, 18708-18714.	3.1	55
23	CO tolerant PtRu@MoO _x nanoparticles supported on carbon nanofibers for direct methanol fuel cells. <i>Journal of Power Sources</i> , 2009, 186, 299-304.	7.8	55
24	Esterification of fatty acids by new ionic liquids as acid catalysts. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2014, 45, 431-435.	5.3	53
25	Bifunctional N-doped graphene Ti and Co nanocomposites for the oxygen reduction and evolution reactions. <i>Renewable Energy</i> , 2018, 125, 182-192.	8.9	51
26	Electrocatalysts for low temperature fuel cells. <i>Catalysis Today</i> , 2017, 285, 3-12.	4.4	50
27	Monitoring the states of vanadium oxide during the transformation of TiO ₂ anatase-to-rutile under reactive environments: H ₂ reduction and oxidative dehydrogenation of ethane. <i>Catalysis Communications</i> , 2009, 11, 15-19.	3.3	49
28	Ethanol oxidation on PtRuMo/C catalysts: In situ FTIR spectroscopy and DEMS studies. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 7131-7140.	7.1	49
29	Titanium carbide and carbonitride electrocatalyst supports: modifying Pt@Ti interface properties by electrochemical potential cycling. <i>Journal of Materials Chemistry A</i> , 2014, 2, 18786-18790.	10.3	48
30	Supporting IrO ₂ and IrRuO nanoparticles on TiO ₂ and Nb-doped TiO ₂ nanotubes as electrocatalysts for the oxygen evolution reaction. <i>Journal of Energy Chemistry</i> , 2019, 34, 227-239.	12.9	48
31	Electrocatalytic stability of Ti based-supported Pt ₃ Ir nanoparticles for unitized regenerative fuel cells. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 5477-5484.	7.1	47
32	Promotion of oxygen reduction and water oxidation at Pt-based electrocatalysts by titanium carbonitride. <i>Applied Catalysis B: Environmental</i> , 2016, 183, 53-60.	20.2	43
33	Electrooxidation of CO and methanol on well-characterized carbon supported Pt _x Sn electrodes. Effect of crystal structure. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 7109-7118.	7.1	42
34	Role of surface vanadium oxide coverage support on titania for the simultaneous removal of o-dichlorobenzene and NO _x from waste incinerator flue gas. <i>Catalysis Today</i> , 2015, 254, 2-11.	4.4	39
35	PtSn nanoparticles supported on titanium carbonitride for the ethanol oxidation reaction. <i>Applied Catalysis B: Environmental</i> , 2018, 237, 382-391.	20.2	39
36	Amoxidation of propane over V-Sb and V-Sb-Nb mixed oxides. <i>Applied Catalysis A: General</i> , 2006, 298, 1-7.	4.3	38

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37	Catalyst support effects at the oxygen electrode of unitized regenerative fuel cells. <i>Catalysis Today</i> , 2013, 210, 67-74.	4.4	37
38	Synthesis of biodiesel from <i>Nigella sativa</i> seed oil using surfactant-Bronsted acidic-combined ionic liquid as catalyst. <i>Fuel Processing Technology</i> , 2014, 118, 296-301.	7.2	37
39	Identification and roles of the different active sites in supported vanadia catalysts by in situ techniques. <i>Studies in Surface Science and Catalysis</i> , 2000, 130, 3125-3130.	1.5	35
40	Carbon supported PdM (M = Fe, Co) electrocatalysts for formic acid oxidation. Influence of the Fe and Co precursors. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 1640-1649.	7.1	33
41	Electrochemical stability of carbon nanofibers in proton exchange membrane fuel cells. <i>Electrochimica Acta</i> , 2011, 56, 9370-9377.	5.2	31
42	CoTiO ₃ /NiGO nanocomposites for oxygen evolution and oxygen reduction reactions: Synthesis and electrocatalytic performance. <i>Electrochimica Acta</i> , 2020, 331, 135396.	5.2	30
43	Highly dispersed molybdenum carbide as non-noble electrocatalyst for PEM fuel cells: Performance for CO electrooxidation. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 7881-7888.	7.1	29
44	Sulfoxide-Controlled S _N 2 Displacements between Cyanocuprates and Epoxy Vinyl Sulfoxides ¹ . <i>Journal of Organic Chemistry</i> , 2000, 65, 6462-6473.	3.2	26
45	Structural investigation of Ce ₂ Zr ₂ O ₈ after redox treatments which lead to low temperature reduction. <i>Topics in Catalysis</i> , 2006, 41, 35-42.	2.8	26
46	Identification of Ru phases in PtRu based electrocatalysts and relevance in the methanol electrooxidation reaction. <i>Catalysis Today</i> , 2009, 143, 69-75.	4.4	26
47	Electrooxidation of H ₂ /CO on carbon-supported PtRu-MoO nanoparticles for polymer electrolyte fuel cells. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 14590-14598.	7.1	26
48	The effect of the Mo precursor on the nanostructure and activity of PtRuMo electrocatalysts for proton exchange membrane fuel cells. <i>Catalysis Today</i> , 2010, 158, 12-21.	4.4	25
49	In situ FTIR and Raman study on the distribution and reactivity of surface vanadia species in V ₂ O ₅ /CeO ₂ catalysts. <i>Journal of Molecular Catalysis A</i> , 2015, 408, 75-84.	4.8	25
50	On the Nature of the Unusual Redox Cycle at the Vanadia Ceria Interface. <i>Journal of Physical Chemistry C</i> , 2018, 122, 1197-1205.	3.1	24
51	Crystal structure features of CH ₃ NH ₃ PbI _{3-x} Br _x hybrid perovskites prepared by ball milling: a route to more stable materials. <i>CrystEngComm</i> , 2020, 22, 767-775.	2.6	24
52	Sulfoxide-controlled S _N 2 displacements between cyanocuprates and epoxy vinyl sulfoxides. <i>Tetrahedron Letters</i> , 1996, 37, 8031-8034.	1.4	23
53	Study of the Synthesis Conditions of Carbon Nanocoils for Energetic Applications. <i>Energy & Fuels</i> , 2010, 24, 3361-3365.	5.1	23
54	Electrochemical activation of nanostructured carbon-supported PtRuMo electrocatalyst for methanol oxidation. <i>Electrochimica Acta</i> , 2010, 55, 7634-7642.	5.2	22

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55	Synthesis and characterization of gold nanoparticles supported on thiol functionalized chitosan for solvent-free oxidation of cyclohexene with molecular oxygen. <i>Journal of Molecular Catalysis A</i> , 2013, 379, 340-349.	4.8	22
56	Crystal Growth, Structural Phase Transitions, and Optical Gap Evolution of $\text{CH}_3\text{NH}_3\text{Pb}(\text{Br}_x\text{Cl}_{1-x})_3$ Perovskites. <i>Crystal Growth and Design</i> , 2019, 19, 918-924.	3.0	22
57	Hybrid chitosan derivative-carbon support for oxygen reduction reactions. <i>RSC Advances</i> , 2013, 3, 5378.	3.6	21
58	Synthesis and characterization of Au nanocatalyst on modified bentonite and silica and their applications for solvent free oxidation of cyclohexene with molecular oxygen. <i>Journal of Molecular Catalysis A</i> , 2015, 406, 118-126.	4.8	21
59	The role of Sn, Ru and Ir on the ethanol electrooxidation on Pt _{3M} /TiCN electrocatalysts. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 14519-14528.	7.1	20
60	Nature of Vanadium Sites in V ⁵⁺ -Ti Phosphate Catalysts for the Oxidative Dehydrogenation of Ethane. <i>Journal of Catalysis</i> , 1999, 181, 280-284.	6.2	19
61	Electrodeposition of Cu ₂ ZnSnS ₄ thin films onto TiO ₂ nanorods for photocatalytic application: Effect of deposition time. <i>Inorganic Chemistry Communication</i> , 2020, 122, 108298.	3.9	19
62	Tantalum-based electrocatalysts prepared by a microemulsion method for the oxygen reduction and evolution reactions. <i>Electrochimica Acta</i> , 2019, 317, 261-271.	5.2	18
63	Platinum border atoms as dominant active site during the carbon monoxide electrooxidation reaction. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 19674-19683.	7.1	15
64	Sulfur-Directed Synthesis of Enantiopure Hydroxy 2-Sulfinyl Butadienes. <i>Journal of Organic Chemistry</i> , 2004, 69, 1978-1986.	3.2	14
65	Transformation of CoFe ₂ O ₄ spinel structure into active and robust CoFe alloy/N-doped carbon electrocatalyst for oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2022, 625, 70-82.	9.4	14
66	Carbon nanofiber-supported tantalum oxides as durable catalyst for the oxygen evolution reaction in alkaline media. <i>Renewable Energy</i> , 2021, 178, 307-317.	8.9	13
67	Carbon-Supported PtRuMo Electrocatalysts for Direct Alcohol Fuel Cells. <i>Catalysts</i> , 2013, 3, 811-838.	3.5	12
68	Effect of molybdophosphoric acid in iron and cobalt graphene/chitosan composites for oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 28093-28101.	7.1	12
69	Effect of secondary heteroatom (S, P) in N-doped reduced graphene oxide catalysts to oxygen reduction reaction. <i>Molecular Catalysis</i> , 2021, 502, 111372.	2.0	11
70	Ni-Based Composites from Chitosan Biopolymer a One-Step Synthesis for Oxygen Evolution Reaction. <i>Catalysts</i> , 2019, 9, 471.	3.5	10
71	Optimization of alkaline catalytic inks for three-electrode electrochemical half-cell measurements. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 19656-19663.	7.1	9
72	Oxidation of cyclohexanol to adipic acid with molecular oxygen catalyzed by ZnO nanoparticles immobilized on hydroxyapatite. <i>RSC Advances</i> , 2016, 6, 78487-78495.	3.6	9

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73	Dynamic Disorder Restriction of Methylammonium (MA) Groups in Chloride-Doped MAPbBr ₃ Hybrid Perovskites: A Neutron Powder Diffraction Study. Chemistry - A European Journal, 2019, 25, 4496-4500.	3.3	9
74	The role of cobalt and copper nanoparticles on performance of magnetite-rich waste material in Fenton reaction. International Journal of Environmental Science and Technology, 2019, 16, 373-382.	3.5	9
75	Titanium Dioxide/N-Doped Graphene Composites as Non-Noble Bifunctional Oxygen Electrocatalysts. Industrial & Engineering Chemistry Research, 2021, 60, 18817-18830.	3.7	8
76	Biodiesel Production Using Calcined Waste Filter Press Cake from a Sugar Manufacturing Facility as a Highly Economic Catalyst. JAOCS, Journal of the American Oil Chemists' Society, 2016, 93, 773-779.	1.9	7
77	Effect of phosphomolybdic acid on the catalytic behavior of bifunctional Pt/Cr/nanocrystalline Y zeolite in hydroisomerization of <i>n</i> -octane. Journal of the Chinese Chemical Society, 2020, 67, 267-276.	1.4	5
78	Vanadium oxide loaded tin-titanium phosphates. Solid State Sciences, 2000, 2, 177-185.	0.7	4
79	Titanium carbonitride-graphene composites assembled with organic linkers as electrocatalytic supports for methanol oxidation reaction. Catalysis Today, 2020, 356, 101-109.	4.4	4
80	Non-precious Melamine/Chitosan Composites for the Oxygen Reduction Reaction: Effect of the Transition Metal. Frontiers in Materials, 2020, 7, .	2.4	4
81	Transforming Waste Clamshell into Highly Selective Nanostructured Catalysts for Solvent Free Liquid Phase Oxidation of Benzyl Alcohol. Catalysts, 2022, 12, 155.	3.5	4
82	Palladium nanoparticles supported on silicate-based nanohybrid material: highly active and eco-friendly catalyst for reduction of nitrobenzene at ambient conditions. Inorganic and Nano-Metal Chemistry, 2021, 51, 569-578.	1.6	2