Fernando Dorado FernÃ¡ndez

List of Publications by Year
in descending order

113 papers	3,125 citations	126907 33 h-index	206112 48 g-index
113 all docs	113 docs citations	113 times ranked	2387 citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemical reforming of ethanolâ€“water solutions for pure H2 production in a PEM electrolysis cell. International Journal of Hydrogen Energy, 2012, 37, 9504-9513.	7.1	114
2	From biomass to pure hydrogen: Electrochemical reforming of bio-ethanol in a PEM electrolyser. Applied Catalysis B: Environmental, 2013, 134-135, 302-309.	20.2	93
3	Effect of support nature on the cobalt-catalyzed CO2 hydrogenation. Journal of CO2 Utilization, 2017, 21, 562-571.	6.8	91
4	Characterization of Ni and Pd supported on H-mordenite catalysts: Influence of the metal loading method. Applied Catalysis A: General, 1998, 169, 137-150.	4.3	88
5	Influence of the ion exchanged metal (Cu, Co, Ni and Mn) on the selective catalytic reduction of NOX over mordenite and ZSM-5. Journal of Molecular Catalysis A, 2005, 225, 47-58.	4.8	86
6	Cation exchanged and impregnated Ti-pillared clays for selective catalytic reduction of NOx by propylene. Applied Catalysis B: Environmental, 2003, 43, 43-56.	20.2	85
7	Hydroisomerization of n-butane over Pd/HZSM-5 and Pd/HÎ² with and without binder. Applied Catalysis A: General, 2002, 236, 235-243.	4.3	80
8	Electrochemical promotion of platinum impregnated catalyst for the selective catalytic reduction of NO by propene in presence of oxygen. Applied Catalysis B: Environmental, 2007, 73, 42-50.	20.2	73
9	Hydroisomerization of n-octane over platinum catalysts with or without binder. Applied Catalysis A: General, 2005, 282, 15-24.	4.3	70
10	Effect of the metal loading in the hydroisomerization of n-octane over beta agglomerated zeolite based catalysts. Applied Catalysis A: General, 2005, 294, 215-225.	4.3	70
11	Precursor influence and catalytic behaviour of Ni/CeO2 and Ni/SiC catalysts for the tri-reforming process. Applied Catalysis A: General, 2012, 431-432, 49-56.	4.3	68
12	Influence of Clay Binders on the Performance of Pd/HZSM-5 Catalysts for the Hydroisomerization ofn-Butane. Industrial & Engineering Chemistry Research, 2001, 40, 3428-3434.	3.7	63
13	Influence of the synthesis conditions on the preparation of titanium-pillared clays using hydrolyzed titanium ethoxide as the pillaring agent. Microporous and Mesoporous Materials, 2002, 54, 155-165.	4.4	61
14	Low-temperature propene combustion over Pt/K-Î²Al2O3 electrochemical catalyst: Characterization, catalytic activity measurements, and investigation of the NEMCA effect. Journal of Catalysis, 2007, 251, 474-484.	6.2	59
15	Hydrogenation of CO₂to Methanol at Atmospheric Pressure over Cu/ZnO Catalysts: Influence of the Calcination, Reduction, and Metal Loading. Industrial & Engineering Chemistry Research, 2017, 56, 1979-1987.	3.7	57
16	Influence of the Binder on then-Octane Hydroisomerization over Palladium-Containing Zeolite Catalysts. Industrial & Engineering Chemistry Research, 2004, 43, 8217-8225.	3.7	55
17	Influence of the support on the catalytic behaviour of Ni catalysts for the dry reforming reaction and the tri-reforming process. Journal of Molecular Catalysis A, 2014, 395, 108-116.	4.8	54
18	Optimization of the Pd/Cu ratio in Pd-Cu-Zn/SiC catalysts for the CO 2 hydrogenation to methanol at atmospheric pressure. Journal of CO2 Utilization, 2017, 22, 71-80.	6.8	54

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19	Preparation of Niâ€“Mg/Î²-SiC catalysts for the methane tri-reforming: Effect of the order of metal impregnation. Applied Catalysis B: Environmental, 2015, 164, 316-323.	20.2	50
20	Catalytic and kinetic analysis of the methane tri-reforming over a Niâ€“Mg/Î²-SiC catalyst. International Journal of Hydrogen Energy, 2015, 40, 8677-8687.	7.1	49
21	CO2 Hydrogenation to Methanol at Atmospheric Pressure: Influence of the Preparation Method of Pd/ZnO Catalysts. Catalysis Letters, 2016, 146, 373-382.	2.6	48
22	Kinetic, energetic and exergetic approach to the methane tri-reforming process. International Journal of Hydrogen Energy, 2016, 41, 19339-19348.	7.1	38
23	Carbon Nanofiber-Based Palladium/Zinc Catalysts for the Hydrogenation of Carbon Dioxide to Methanol at Atmospheric Pressure. Industrial & Engineering Chemistry Research, 2016, 55, 3556-3567.	3.7	38
24	Influence of the reaction temperature on the electrochemical promoted catalytic behaviour of platinum impregnated catalysts for the reduction of nitrogen oxides under lean burn conditions. Applied Catalysis A: General, 2007, 321, 86-92.	4.3	36
25	The role of sodium montmorillonite on bounded zeolite-type catalysts. Applied Clay Science, 2000, 16, 273-287.	5.2	35
26	Hydroisomerization of a refinery naphtha stream over platinum zeolite-based catalysts. Chemical Engineering Journal, 2007, 126, 13-21.	12.7	35
27	Development of a new electrochemical catalyst with an electrochemically assisted regeneration ability for H2 production at low temperatures. Journal of Catalysis, 2010, 274, 251-258.	6.2	35
28	Methane tri-reforming over a Ni/Î²-SiC-based catalyst: Optimizing the feedstock composition. International Journal of Hydrogen Energy, 2013, 38, 4524-4532.	7.1	35
29	Ti-pillared clays: synthesis and general characterization. Clays and Clay Minerals, 2006, 54, 737-747.	1.3	34
30	Influence of alkaline and alkaline-earth cocations on the performance of Ni/Î²-SiC catalysts in the methane tri-reforming reaction. Applied Catalysis B: Environmental, 2014, 148-149, 322-329.	20.2	34
31	n-Butane Hydroisomerization over Pt/HZSM-5 Catalysts. Industrial & Engineering Chemistry Research, 1997, 36, 4797-4808.	3.7	33
32	Copper ion-exchanged and impregnated Fe-pillared claysStudy of the influence of the synthesis conditions on the activity for the selective catalytic reduction of NO with C3H6. Applied Catalysis A: General, 2006, 305, 189-196.	4.3	33
33	Effect of the binder content on the catalytic performance of beta-based catalysts. Journal of Molecular Catalysis A, 2007, 273, 109-113.	4.8	33
34	Electrochemical activation of Pt catalyst by potassium for low temperature CO deep oxidation. Catalysis Communications, 2008, 9, 17-20.	3.3	33
35	Over-faradaic hydrogen production in methanol electrolysis cells. Chemical Engineering Journal, 2020, 396, 125217.	12.7	33
36	Kinetics of the hydrogenation of CO 2 to methanol at atmospheric pressure using a Pd-Cu-Zn/SiC catalyst. Fuel Processing Technology, 2018, 173, 173-181.	7.2	32

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37	Hydrogen from electrochemical reforming of ethanol assisted by sulfuric acid addition. Applied Catalysis B: Environmental, 2018, 231, 310-316.	20.2	32
38	Electrochemical reforming of ethanol in a membrane-less reactor configuration. Chemical Engineering Journal, 2020, 379, 122289.	12.7	32
39	Influence of the Si/Al ratio in the hydroisomerization of n-octane over platinum and palladium beta zeolite-based catalysts with or without binder. Applied Catalysis A: General, 2005, 289, 205-213.	4.3	31
40	Complete oxidation of methane on Pd/YSZ and Pd/CeO2/YSZ by electrochemical promotion. Catalysis Today, 2009, 146, 326-329.	4.4	31
41	Hydrogen storage for off-grid power supply based on solar PV and electrochemical reforming of ethanol-water solutions. Renewable Energy, 2020, 147, 639-649.	8.9	31
42	Study by in situ FTIR of the SCR of NO by propene on Cu2+ ion-exchanged Ti-PILC. Journal of Molecular Catalysis A, 2005, 230, 23-28.	4.8	30
43	Hydroisomerization of C6â€“C8 n-alkanes, cyclohexane and benzene over palladium and platinum beta catalysts agglomerated with bentonite. Applied Catalysis A: General, 2006, 314, 248-255.	4.3	30
44	PREPARATION AND CHARACTERIZATION OF Ti-PILLARED CLAYS USING Ti ALKOXIDES. INFLUENCE OF THE SYNTHESIS PARAMETERS. Clays and Clay Minerals, 2003, 51, 41-51.	1.3	27
45	A new improvement of catalysis by solid-state electrochemistry: An electrochemically assisted NOx storage/reduction catalyst. Journal of Catalysis, 2008, 259, 54-65.	6.2	27
46	Influence of the reaction conditions on the electrochemical promotion by potassium for the selective catalytic reduction of N2O by C3H6 on platinum. Applied Catalysis B: Environmental, 2008, 78, 222-231.	20.2	26
47	Influence of the carbon support on the Ptâ€“Sn anodic catalyst for the electrochemical reforming of ethanol. International Journal of Hydrogen Energy, 2019, 44, 10616-10626.	7.1	25
48	Valorization of olive oil industry subproducts: ash and olive pomace fast pyrolysis. Food and Bioproducts Processing, 2021, 125, 37-45.	3.6	25
49	Influence of Cobalt Precursor on Efficient Production of Commercial Fuels over FTS Co/SiC Catalyst. Catalysts, 2016, 6, 98.	3.5	24
50	n-Butane isomerization over H-mordenite: role of the monomolecular mechanism. Applied Catalysis A: General, 2000, 196, 225-231.	4.3	23
51	n-Butane Hydroisomerization over Pd/HZSM-5 Catalysts. 1. Palladium Loaded by Impregnation. Industrial & Engineering Chemistry Research, 1998, 37, 2592-2600.	3.7	22
52	Preferential CO oxidation in hydrogen-rich stream over an electrochemically promoted Pt catalyst. Applied Catalysis B: Environmental, 2010, 94, 281-287.	20.2	22
53	Electrochemical activation of a non noble metal catalyst for the waterâ€“gas shift reaction. Catalysis Communications, 2011, 15, 6-9.	3.3	22
54	Electrochemical promotion for hydrogen production via ethanol steam reforming reaction. Applied Catalysis B: Environmental, 2019, 243, 355-364.	20.2	22

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55	Gasification versus fast pyrolysis bio-oil production: A life cycle assessment. Journal of Cleaner Production, 2022, 336, 130373.	9.3	22
56	Influence of the GDL and assembly mode of a PEM cell on the ethanol revalorization into chemicals. Chemical Engineering Journal, 2020, 402, 125298.	12.7	20
57	Influence of Pt/Ru anodic ratio on the valorization of ethanol by PEM electrocatalytic reforming towards value-added products. Journal of Energy Chemistry, 2021, 56, 264-275.	12.9	20
58	Effect of zeolite pore geometry on isomerization of n-butane. Applied Catalysis A: General, 2000, 190, 233-239.	4.3	19
59	Electrochemical promotion of Pt impregnated catalyst for the treatment of automotive exhaust emissions. Journal of Applied Electrochemistry, 2008, 38, 1151-1157.	2.9	19
60	Electrochemical promotion of methane oxidation on Pd catalyst-electrodes deposited on Y2O3-stabilized-ZrO2. Applied Catalysis B: Environmental, 2012, 128, 48-54.	20.2	19
61	Autothermal reforming and waterâ€“gas shift double bed reactor for H2 production from ethanol. Chemical Engineering and Processing: Process Intensification, 2013, 74, 14-18.	3.6	19
62	Enhanced electropromotion of methane combustion on palladium catalysts deposited on highly porous supports. Applied Catalysis B: Environmental, 2013, 132-133, 80-89.	20.2	19
63	SCR of NO by Propene on Monometallic (Co or Ni) and Bimetallic (Co/Ag or Ni/Ag) Mordenite-Based Catalysts. Industrial & Engineering Chemistry Research, 2005, 44, 8988-8996.	3.7	18
64	Preparation of Cu-ion-exchanged Fe-PILCs for the SCR of NO by propene. Applied Catalysis B: Environmental, 2006, 65, 175-184.	20.2	18
65	Enhancement of Ammonia Synthesis on a Co₃Mo₃N-Ag Electrocatalyst in a K-Î²Al₂O₃ Solid Electrolyte Cell. ACS Sustainable Chemistry and Engineering, 2017, 5, 8844-8851.	6.7	17
66	Boosting hydrogen and chemicals production through ethanol electro-reforming on Pt-transition metal anodes. Journal of Energy Chemistry, 2022, 70, 394-406.	12.9	17
67	Influence of the Operating Parameters on the Selective Catalytic Reduction of NO with Hydrocarbons Using Cu-Ion-Exchanged Titanium-Pillared Interlayer Clays (Ti-PILCs). Industrial & Engineering Chemistry Research, 2005, 44, 2955-2965.	3.7	16
68	Kinetic Model of the n-Octane Hydroisomerization on PtBeta Agglomerated Catalyst:â€‰ Influence of the Reaction Conditions. Industrial & Engineering Chemistry Research, 2006, 45, 978-985.	3.7	16
69	Preparation and characterization of a low particle size Pt/C catalyst electrode for the simultaneous electrochemical promotion of CO and C3H6 oxidation. Applied Catalysis A: General, 2009, 365, 274-280.	4.3	16
70	n-Butane hydroisomerization over Pd/HZSM-5 catalysts. Palladium loaded by ion exchange. Microporous and Mesoporous Materials, 2001, 42, 245-254.	4.4	15
71	Hydroisomerization of a Refinery Naphtha Stream over Agglomerated Pd Zeolites. Industrial & Engineering Chemistry Research, 2005, 44, 9050-9058.	3.7	15
72	An electrochemically assisted NO storage/reduction catalyst operating under fixed lean burn conditions. Catalysis Communications, 2009, 11, 247-251.	3.3	15

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73	Electrochemical promotion of methane oxidation on impregnated and sputtered Pd catalyst-electrodes deposited on YSZ. Applied Catalysis B: Environmental, 2012, 127, 18-27.	20.2	15
74	Pt/Kâ€“Î²Al2O3 solid electrolyte cell as a â€œsmart electrochemical catalystâ€•for the effective removal of NOx under wet reaction conditions. Catalysis Today, 2009, 146, 330-335.	4.4	14
75	Electrochemical Promotion of CH₄ Combustion over a Pd/CeO₂â€“YSZ Catalyst. Fuel Cells, 2011, 11, 131-139.	2.4	14
76	Methane oxidation on Pd/YSZ by electrochemical promotion. Solid State Ionics, 2012, 225, 376-381.	2.7	14
77	Stability Testing of Pt x Sn1Ââˆ'Âx /C Anodic Catalyst for Renewable Hydrogen Production Via Electrochemical Reforming of Ethanol. Electrocatalysis, 2018, 9, 293-301.	3.0	14
78	Hydrocarbon selective catalytic reduction of NO over Cu/Fe-pillared clays: Diffuse reflectance infrared spectroscopy studies. Journal of Molecular Catalysis A, 2010, 332, 45-52.	4.8	13
79	Simultaneous production of H2 and C2 hydrocarbons by gas phase electrocatalysis. Applied Catalysis B: Environmental, 2012, 113-114, 192-200.	20.2	13
80	Simultaneous production of H2 and C2 hydrocarbons by using a novel configuration solid-electrolyteÂ+Âfixed bed reactor. International Journal of Hydrogen Energy, 2013, 38, 3111-3122.	7.1	13
81	Exergetic and Economic Improvement for a Steam Methane-Reforming Industrial Plant: Simulation Tool. Energies, 2020, 13, 3807.	3.1	13
82	Catalytic effect of alkali and alkaline earth metals on fast pyrolysis preâ€treatment of agricultural waste. Biofuels, Bioproducts and Biorefining, 2021, 15, 1473-1484.	3.7	13
83	Electrochemical promotion and characterization of PdZn alloy catalysts with K and Na ionic conductors for pure gaseous CO2 hydrogenation. Journal of CO2 Utilization, 2016, 16, 375-383.	6.8	12
84	Electrochemical promotion of ethanol partial oxidation and reforming reactions for hydrogen production. Renewable Energy, 2022, 183, 515-523.	8.9	12
85	Characterization and Catalytic Properties of Titanium-Pillared Clays Prepared at Laboratory and Pilot Scales:Â A Comparative Study. Industrial & Engineering Chemistry Research, 2003, 42, 2783-2790.	3.7	11
86	Fast pyrolysis of agroindustrial wastes blends: Hydrocarbon production enhancement. Journal of Analytical and Applied Pyrolysis, 2021, 157, 105242.	5.5	11
87	Influence of palladium incorporation technique on n-butane hydroisomerization over HZSM-5/bentonite catalysts. Applied Catalysis A: General, 2004, 274, 79-85.	4.3	10
88	Characterization of Pd catalyst-electrodes deposited on YSZ: Influence of the preparation technique and the presence of a ceria interlayer. Applied Surface Science, 2012, 261, 671-678.	6.1	10
89	Coupling catalysis and gas phase electrocatalysis for the simultaneous production and separation of pure H2 and C2 hydrocarbons from methane and natural gas. Applied Catalysis B: Environmental, 2013, 142-143, 298-306.	20.2	10
90	Fast pyrolysis as an alternative to the valorization of olive mill wastes. Journal of the Science of Food and Agriculture, 2021, 101, 2650-2658.	3.5	10

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91	Towards a new definition of EPOC parameters for anionic electrochemical catalysts: case of propene combustion. Journal of Applied Electrochemistry, 2008, 38, 1083-1088.	2.9	9
92	Optimization of the catalytic support and membrane for the electrochemical reforming of ethanol in alkaline media. Journal of Chemical Technology and Biotechnology, 2019, 94, 3698-3705.	3.2	9
93	Process simulation and economic feasibility assessment of the methanol production via tri-reforming using experimental kinetic equations. International Journal of Hydrogen Energy, 2020, 45, 26623-26636.	7.1	9
94	Use of potassium conductors in the electrochemical promotion of environmental catalysis. Catalysis Today, 2009, 146, 293-298.	4.4	8
95	Additional pathways for the ethanol electro-reforming knowledge: The role of the initial concentration on the product yields. Fuel Processing Technology, 2021, 222, 106954.	7.2	8
96	Synthesis and Characterization of Cuâˆ'TiPILCs for Selective Catalytic Reduction of NO by Propylene in the Presence of Oxygen and H2O:Â Influence of the Calcination Temperature, the Copper Content, and the Cation Promoter (Ce/Ag). Industrial & Engineering Chemistry Research, 2003, 42, 3871-3880.	3.7	7
97	Nano-Scale Au Supported on Carbon Materials for the Low Temperature Water Gas Shift (WGS) Reaction. Catalysts, 2011, 1, 155-174.	3.5	7
98	Experimental data and kinetic modeling of the catalytic and electrochemically promoted CH4 oxidation over Pd catalyst-electrodes. Chemical Engineering Journal, 2013, 225, 315-322.	12.7	7
99	Hydroisomerization of n-butane over hybrid catalysts. Applied Catalysis A: General, 2001, 217, 69-78.	4.3	6
100	Metal loaded Ti-pillared clays for selective catalytic reduction of NO by propylene. Studies in Surface Science and Catalysis, 2002, , 723-730.	1.5	6
101	Enhancing the combustion of natural gas by electrochemical promotion of catalysis. Electrochemistry Communications, 2012, 23, 9-12.	4.7	6
102	Hydroisomerization of n-Butane over Pd/HZSM-5 and Pd/Hmordenite with and without binder. Studies in Surface Science and Catalysis, 2002, 142, 707-714.	1.5	5
103	Nickel supported carbon nanofibers as an active and selective catalyst for the gas-phase hydrogenation of 2-tert-butylphenol. Journal of Colloid and Interface Science, 2012, 380, 173-181.	9.4	5
104	Assembly of a Multiphase Bioreactor for Laboratory Demonstrations: Study of the Oxygen-Transfer Efficiency in Activated Sludge. The Chemical Educator, 2002, 7, 90-95.	0.0	4
105	Enhanced H2 formation by electrochemical promotion in a single chamber steam electrolysis cell. Applied Catalysis B: Environmental, 2011, , .	20.2	4
106	Influence of cocations on the activity of Co-MOR for NO/N2O SCR by propene. Studies in Surface Science and Catalysis, 2002, 142, 731-738.	1.5	3
107	Selective catalytic reduction of NO by propene in the presence of oxygen and water over catalysts prepared by the modified solâ€"gel method. Catalysis Communications, 2007, 8, 736-740.	3.3	3
108	Membrane-Less Ethanol Electrooxidation over Pd-M (M: Sn, Mo and Re) Bimetallic Catalysts. Catalysts, 2021, 11, 541.	3.5	3

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109	Oscillatory behavior of Rh/YSZ under electropromoted conditions. Chemical Physics Letters, 2012, 519-520, 89-92.	2.6	2
110	Silica-Based Catalysts for Fuel Applications. , 2019, , 143-161.		2
111	Taylor-made aerogels through a freeze-drying process: economic assessment. Journal of Sol-Gel Science and Technology, 2019, 89, 436-447.	2.4	2
112	Electrochemical investigation of O2-exposed Pd electrodes supported on YSZ. Journal of Applied Electrochemistry, 2013, 43, 417-424.	2.9	1
113	Preliminary Design of a Self-Sufficient Electrical Storage System Based on Electrolytic Hydrogen for Power Supply in a Residential Application. Applied Sciences (Switzerland), 2021, 11, 9582.	2.5	0