Miguel Angel Gutierrez Ortiz

List of Publications by Year
in descending order

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101 papers	3,080 citations	117625 34 h-index	182427 51 g-index
101 all docs	101 docs citations	101 times ranked	2993 citing authors

#	Article	IF	Citations
1	Activity and product distribution of alumina supported platinum and palladium catalysts in the gas-phase oxidative decomposition of chlorinated hydrocarbons. Applied Catalysis B: Environmental, 1998, 19, 189-197.	20.2	135
2	Nickel aluminate spinel-derived catalysts for the aqueous phase reforming of glycerol: Effect of reduction temperature. Applied Catalysis B: Environmental, 2019, 244, 931-945.	20.2	103
3	Contribution of cerium/zirconium mixed oxides to the activity of a new generation of TWC. Applied Catalysis B: Environmental, 1999, 22, 167-178.	20.2	98
4	Effect of copper loading on copper-ceria catalysts performance in CO selective oxidation for fuel cell applications. International Journal of Hydrogen Energy, 2010, 35, 1232-1244.	7.1	98
5	CuOâ€“CeO2 catalysts synthesized by various methods: Comparative study of redox properties. International Journal of Hydrogen Energy, 2010, 35, 11582-11590.	7.1	98
6	Thermal aging of Pd/Pt/Rh automotive catalysts under a cycled oxidizingâ€“reducing environment. Catalysis Today, 2000, 59, 395-402.	4.4	95
7	Kinetics of the Low-Temperature WGS Reaction over a CuO/ZnO/Al2O3 Catalyst. Industrial & Engineering Chemistry Research, 2005, 44, 41-50.	3.7	90
8	Effect of process variables on Pt/CeO2 catalyst behaviour for the PROX reaction. International Journal of Hydrogen Energy, 2006, 31, 2231-2242.	7.1	87
9	MnOx/Pt/Al2O3 catalysts for CO oxidation in H2-rich streams. Applied Catalysis B: Environmental, 2007, 70, 532-541.	20.2	79
10	Selective CO oxidation in H 2 streams on CuO/Ce x Zr 1â^'x O 2 catalysts: Correlation between activity and low temperature reducibility. International Journal of Hydrogen Energy, 2012, 37, 1993-2006.	7.1	77
11	Cobalt aluminate spinel-derived catalysts for glycerol aqueous phase reforming. Applied Catalysis B: Environmental, 2018, 239, 86-101.	20.2	69
12	Comparative study of CuOâ€“CeO2 catalysts prepared by wet impregnation and depositionâ€“precipitation. International Journal of Hydrogen Energy, 2009, 34, 547-553.	7.1	66
13	Non-isothermal analysis of the kinetics of the combustion of carbonaceous materials. Journal of Thermal Analysis and Calorimetry, 2005, 80, 65-69.	3.6	64
14	Selective CO oxidation over CeXZr1â^'XO2-supported Pt catalysts. Catalysis Today, 2006, 116, 391-399.	4.4	62
15	Catalytic oxidation of aliphatic chlorinated volatile organic compounds over Pt/H-BETA zeolite catalyst under dry and humid conditions. Catalysis Today, 2005, 107-108, 200-207.	4.4	61
16	Influence of water and hydrocarbon processed in feedstream on the three-way behaviour of platinum-alumina catalysts. Applied Catalysis B: Environmental, 1997, 12, 61-79.	20.2	58
17	Impact of induced chlorine-poisoning on the catalytic behaviour of Ce0.5Zr0.5O2 and Ce0.15Zr0.85O2 in the gas-phase oxidation of chlorinated VOCs. Applied Catalysis B: Environmental, 2011, 104, 373-381.	20.2	56
18	Dealuminated Y Zeolites for Destruction of Chlorinated Volatile Organic Compounds. Journal of Catalysis, 2002, 209, 145-150.	6.2	54

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19	Synthesis of cordierite monolithic honeycomb by solid state reaction of precursor oxides. Journal of Materials Science, 1999, 34, 1999-2002.	3.7	52
20	Influence of particle size distribution of precursor oxides on the synthesis of cordierite by solid-state reaction. Powder Technology, 2005, 153, 34-42.	4.2	52
21	Synthesis and characterization of low amount tin-doped ceria (Ce Sn1â^'O2â^') for catalytic CO oxidation. Chemical Engineering Journal, 2014, 244, 372-381.	12.7	49
22	Transition metal promoters in CuO/CeO2 catalysts for CO removal from hydrogen streams. International Journal of Hydrogen Energy, 2012, 37, 7385-7397.	7.1	48
23	Structural characterisation of Ce0.5Zr0.5O2 modified by redox treatments and evaluation for chlorinated VOC oxidation. Applied Catalysis B: Environmental, 2011, 101, 317-325.	20.2	47
24	Oxidative destruction of dichloromethane over protonic zeolites. AICHE Journal, 2003, 49, 496-504.	3.6	46
25	Kinetic considerations of three-way catalysis in automobile exhaust converters. Applied Catalysis B: Environmental, 2001, 32, 243-256.	20.2	45
26	Kinetic analysis of non-catalytic and Mn-catalysed combustion of diesel soot surrogates. Applied Catalysis B: Environmental, 2005, 61, 150-158.	20.2	45
27	Pt/Ce0.68Zr0.32O2Washcoated Monoliths for Automotive Emission Control. Industrial & Engineering Chemistry Research, 2003, 42, 311-317.	3.7	44
28	A kinetic study of the combustion of porous synthetic soot. Chemical Engineering Journal, 2007, 129, 41-49.	12.7	43
29	Gas-phase catalytic combustion of chlorinated VOC binary mixtures. Applied Catalysis B: Environmental, 2003, 45, 13-21.	20.2	41
30	Oxygen-enhanced water gas shift over ceria-supported Auâ€“Cu bimetallic catalysts prepared by wet impregnation and depositionâ€“precipitation. International Journal of Hydrogen Energy, 2012, 37, 7005-7016.	7.1	41
31	CO elimination processes over promoter-free hydroxyapatite supported palladium catalysts. Applied Catalysis B: Environmental, 2017, 201, 189-201.	20.2	40
32	CuO/CeO2 washcoated ceramic monoliths for CO-PROX reaction. Chemical Engineering Journal, 2011, 171, 224-231.	12.7	38
33	CO oxidation on CeXZr1â^'XO2-supported CuO catalysts: Correlation between activity and support composition. Applied Catalysis A: General, 2010, 387, 119-128.	4.3	37
34	Transition metals supported on bone-derived hydroxyapatite as potential catalysts for the Water-Gas Shift reaction. Renewable Energy, 2018, 115, 641-648.	8.9	36
35	Highly stable Pt/CoAl2O4 catalysts in Aqueous-Phase Reforming of glycerol. Catalysis Today, 2021, 367, 278-289.	4.4	36
36	Low-temperature combustion of chlorinated hydrocarbons over CeO2/H-ZSM5 catalysts. Applied Catalysis A: General, 2012, 417-418, 93-101.	4.3	35

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37	Development of an industrial characterisation method for naphtha reforming bimetallic Pt-Sn/Al2O3 catalysts through n-heptane reforming test reactions. Catalysis Today, 2005, 107-108, 685-692.	4.4	33
38	Kinetics of Carbon Monoxide Oxidation over CuO Supported on Nanosized CeO₂. Industrial & Engineering Chemistry Research, 2009, 48, 5633-5641.	3.7	33
39	Effects of redox thermal treatments and feedstream composition on the activity of Ce/Zr mixed oxides for TWC applications. Applied Catalysis B: Environmental, 2000, 25, 19-29.	20.2	32
40	Catalytic combustion of chlorinated ethylenes over H-zeolites. Journal of Chemical Technology and Biotechnology, 2003, 78, 15-22.	3.2	32
41	Steady-state NH 3 -SCR global model and kinetic parameter estimation for NO x removal in diesel engine exhaust aftertreatment with Cu/chabazite. Catalysis Today, 2017, 296, 95-104.	4.4	32
42	Preparation and characterisation of CuO/Al2O3 films deposited onto stainless steel microgrids for CO oxidation. Applied Catalysis B: Environmental, 2014, 160-161, 629-640.	20.2	31
43	Activity and Selectivity of Palladium Catalysts during the Liquid-Phase Hydrogenation of Phenol. Influence of Temperature and Pressure. Industrial & Engineering Chemistry Research, 1995, 34, 1031-1036.	3.7	28
44	Use of test reactions for the characterisation of bimetallic Pt-Sn/Al2O3 catalysts. Applied Catalysis A: General, 2004, 273, 259-268.	4.3	28
45	Effect of calcination temperature on catalytic properties of Au/Fe2O3 catalysts in CO-PROX. International Journal of Hydrogen Energy, 2016, 41, 19546-19555.	7.1	28
46	Selectivity of high surface area Ce0.68Zr0.32O2 for the new generation of TWC under environments with different redox character. Applied Catalysis B: Environmental, 2001, 33, 303-314.	20.2	25
47	FT-IR study of NO X storage mechanism over Pt/BaO/Al2O3 catalysts. Effect of the Ptâ€“BaO interaction. Topics in Catalysis, 2007, 42-43, 37-41.	2.8	25
48	Ceria-supported Auâ€“CuO and Auâ€“Co 3 O 4 catalysts for CO oxidation: An 18 O/ 16 O isotopic exchange study. Applied Catalysis B: Environmental, 2015, 168-169, 87-97.	20.2	25
49	Preparation, activity and durability of promoted platinum catalysts for automotive exhaust control. Applied Catalysis B: Environmental, 1994, 3, 191-204.	20.2	23
50	Role of water and other H-rich additives in the catalytic combustion of 1,2-dichloroethane and trichloroethylene. Chemosphere, 2009, 75, 1356-1362.	8.2	23
51	Effect of Au promoter in CuO/CeO2 catalysts for the oxygen-assisted WGS reaction. Catalysis Today, 2011, 176, 63-71.	4.4	23
52	Thermokinetic modeling of the combustion of carbonaceous particulate matter. Combustion and Flame, 2006, 144, 398-406.	5.2	22
53	High external surface Pt/zeolite catalysts for improving polystyrene hydrocracking. Catalysis Today, 2014, 227, 163-170.	4.4	22
54	Platinum supported on lanthana-modified hydroxyapatite samples for realistic WGS conditions: On the nature of the active species, kinetic aspects and the resistance to shut-down/start-up cycles. Applied Catalysis B: Environmental, 2020, 270, 118851.	20.2	22

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55	Promotion effect of Sn in alumina-supported Pt catalysts for CO-PROX. Catalysis Communications, 2011, 12, 895-900.	3.3	21
56	Catalytic performance of Cu/hydroxyapatite catalysts in CO preferential oxidation in H2-rich stream. International Journal of Hydrogen Energy, 2019, 44, 12649-12660.	7.1	21
57	Oxygen-enhanced WGS over ceria-supported Auâ€“Co 3 O 4 bimetallic catalysts. Chemical Engineering Journal, 2012, 207-208, 49-56.	12.7	20
58	Optimal inlet temperature trajectories for adiabatic packed reactors with catalyst decay. Chemical Engineering Science, 1992, 47, 1495-1501.	3.8	18
59	Influence of Operational Variables on the Catalytic Behavior of Pt/Alumina in the Slurry-Phase Hydrogenation of Phenol. Industrial & Engineering Chemistry Research, 1994, 33, 2571-2577.	3.7	18
60	Catalytic properties of cobalt-promoted Pd/HAP catalyst for CO-cleanup of H2-rich stream. International Journal of Hydrogen Energy, 2018, 43, 16949-16958.	7.1	18
61	Water-gas shift reaction over a novel Cu-ZnO/HAP formulation: Enhanced catalytic performance in mobile fuel cell applications. Applied Catalysis A: General, 2018, 566, 1-14.	4.3	18
62	Reactivation of aged model Pd/Ce0.68Zr0.32O2three-way catalyst by high temperature oxidising treatment. Chemical Communications, 2004, , 196-197.	4.1	17
63	Combustion of chlorinated VOCs using Îº-CeZrO4 catalysts. Catalysis Today, 2011, 176, 470-473.	4.4	16
64	CuO/CexSn1âˆ’xO2 catalysts with low tin content for CO removal from H2-rich streams. International Journal of Hydrogen Energy, 2014, 39, 5213-5224.	7.1	15
65	Improvements in batch distillation startup. Industrial & Engineering Chemistry Research, 1987, 26, 745-750.	3.7	14
66	Exceptional performance of gold supported on fluoridated hydroxyapatite catalysts in CO-cleanup of H2-rich stream: High activity and resistance under PEMFC operation conditions. Applied Catalysis B: Environmental, 2021, 292, 120142.	20.2	13
67	New copper species generated on Cu/Al2O3-based microreactors for COPROX activity enhancement. International Journal of Hydrogen Energy, 2015, 40, 7318-7328.	7.1	11
68	Catalytic Activity Study of Ceriaâˆ’Zirconia Mixed Oxides Submitted to Different Aging Treatments under Simulated Exhaust Gases. Industrial & Engineering Chemistry Research, 2000, 39, 272-276.	3.7	10
69	Effect OF Au in Auâ€“Co3O4/CeO2 catalyst during oxygen-enhanced water gas shift. International Journal of Hydrogen Energy, 2016, 41, 19408-19417.	7.1	10
70	Investigation of the calcination temperature effect on the interaction between Au nanoparticles and the catalytic support Î±-Fe 2 O 3 for the low temperature CO oxidation. Journal of the Taiwan Institute of Chemical Engineers, 2017, 75, 18-28.	5.3	10
71	TWC Behaviour of Platinum Supported on High and Low Surface Area Cerium/Zirconium Mixed Oxides. Topics in Catalysis, 2001, 16/17, 101-106.	2.8	9
72	Optimization by lumped control of reactors with langmuirâ€hinshelwood catalyst deactivation. Canadian Journal of Chemical Engineering, 1985, 63, 314-321.	1.7	8

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73	Pt/ITQ-6 zeolite as a bifunctional catalyst for hydrocracking of waste plastics containing polystyrene. Journal of Material Cycles and Waste Management, 2015, 17, 465-475.	3.0	8
74	Optimal temperature policies by distributed control for reactors with lhhw catalyst deactivation. Canadian Journal of Chemical Engineering, 1987, 65, 36-41.	1.7	7
75	Study of the Pretreatment Chemistry and Thermal Stability of Zirconia Supported Ruâ€“Pt Catalysts. Journal of Catalysis, 1999, 187, 24-29.	6.2	6
76	Biogenic hydroxyapatite as novel catalytic support for Ni and Cu for the waterâ€“gas shift reaction. Journal of Materials Science, 2021, 56, 6745-6763.	3.7	6
77	Viability of Au/La2O3/HAP catalysts for the CO preferential oxidation reaction under reformate gas conditions. Applied Catalysis B: Environmental, 2022, 312, 121384.	20.2	6
78	The control of the temperature and the feed in deactivating isothermal catalyst beds. The Chemical Engineering Journal, 1984, 28, 13-20.	0.3	5
79	Space-time policy in deactivating isothermal catalyst beds. Chemical Engineering Science, 1984, 39, 615-618.	3.8	5
80	Palladium Catalysts for Selective Gas-Phase Hydrogenation of Phenol to Cyclohexanone. Studies in Surface Science and Catalysis, 1987, , 619-629.	1.5	5
81	Analysis of the lumped and distributed optimal temperature trajectories for packed bed reactors with concentration dependent catalyst deactivation. Canadian Journal of Chemical Engineering, 1990, 68, 860-866.	1.7	5
82	Behavior of highly dispersed platinum catalysts in liquid-phase hydrogenations. Industrial & Engineering Chemistry Research, 1993, 32, 1035-1040.	3.7	5
83	Kinetics of weight loss and chain scission in the thermooxidative degradation of poly[1-(trimethylsilyl)-1-propyne] films. Journal of Polymer Science Part A, 1999, 37, 4309-4317.	2.3	5
84	Performance of Cu-ZSM-5 in a Coupled Monolith NSR-SCR System for NOx Removal in Lean-Burn Engine Exhaust. Topics in Catalysis, 2016, 59, 259-267.	2.8	5
85	Bimetallic Pt-Co Catalysts for the Liquid-Phase WGS. Catalysts, 2020, 10, 830.	3.5	5
86	Tuning the cycle length in the NOx storage-reduction process and its contribution to the real-flow scenario. Chemical Engineering Journal, 2009, 150, 447-454.	12.7	4
87	Relation Between the Preparation and the Morphology of Silica-Alumina Gels. Adsorption Science and Technology, 1987, 4, 149-161.	3.2	3
88	Optimization of inlet temperature for deactivating LTWGS reactor performance. AICHE Journal, 2005, 51, 2016-2023.	3.6	3
89	Catalytic performance of chlorinated Ce/Zr mixed oxides for Cl-VOC oxidation. WIT Transactions on Ecology and the Environment, 2008, , .	0.0	3
90	Kinetics of isomerization of maleic acid using ammonium bromide and ammonium peroxydisulfate as catalyst. Industrial & Engineering Chemistry Research, 1991, 30, 2138-2143.	3.7	2

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91	Surface features and catalytic performance of platinum/alumina catalysts in slurry-phase hydrogenation. Industrial & Engineering Chemistry Research, 1993, 32, 2457-2463.	3.7	2
92	Analysis of the Behaviour of Different Mixed Oxides in the Treatment of Cl-VOC Containing Gas Streams. International Journal of Chemical Reactor Engineering, 2008, 6, .	1.1	2
93	Effect of the Incorporation Order of Pt- and Ba-Precursors on the Structure and Catalytic Performance of NSR Catalysts. Topics in Catalysis, 2009, 52, 1808-1812.	2.8	2
94	Durability of Three-Way Platinum and Rhodium Catalysts in Oxidizing, Reducing and Cycled Environments. Journal De Chimie Physique Et De Physico-Chimie Biologique, 1999, 96, 437-442.	0.2	2
95	Aqueous-Phase Glycerol Conversion over Ni-Based Catalysts Synthesized by Nanocasting. Catalysts, 2022, 12, 668.	3.5	2
96	Analysis of combined temperature and space time trajectories to maintain constant the exit conversion of fixed bed reactors with catalyst decay. The Chemical Engineering Journal, 1991, 47, 105-112.	0.3	1
97	Techno-economic optimization of isomerization of maleic acid to fumaric acid using ammonium bromide as a soluble catalyst. Chemical Engineering and Processing: Process Intensification, 1991, 30, 15-21.	3.6	1
98	Pd Supported on Ce/Zr Mixed Oxides in the Reduction of NO with Propylene in Oxidizing Conditions. International Journal of Chemical Reactor Engineering, 2006, 4, .	1.1	1
99	Promoter Effects on Platinum Catalysts for Automotive Exhaust Control. Studies in Surface Science and Catalysis, 1993, 75, 2689-2692.	1.5	0
100	Yield and Purity Comparison of Dimethoate Manufacturing Processes:Â Homogeneous Reaction, Two-Phase Uncatalyzed Reaction, and Phase Transfer Catalysis. Industrial & Engineering Chemistry Research, 1996, 35, 4389-4393.	3.7	0
101	Intercooled Double-Bed Reactor for LTWGS Reaction with Catalyst Poisoning by Chlorine: Inlet Temperatures for the Maximization of the Production. International Journal of Chemical Reactor Engineering, 2006, 4, .	1.1	0