Avelina GarcÃ-a GarcÃ-a

List of Publications by Year
in descending order

67 papers	2,548 citations	218677 26 h-index	197818 49 g-index
67 all docs	67 docs citations	67 times ranked	1990 citing authors

#	Article	IF	Citations
1	Combined removal of diesel soot particulates and NO over CeO2â€“ZrO2 mixed oxides. Journal of Catalysis, 2008, 259, 123-132.	6.2	254
2	Effect of NO adsorption/desorption over ceria-zirconia catalysts on the catalytic combustion of model soot. Applied Catalysis B: Environmental, 2009, 92, 126-137.	20.2	189
3	Catalytic activity for soot combustion of birnessite and cryptomelane. Applied Catalysis B: Environmental, 2010, 93, 267-273.	20.2	134
4	Thermally stable ceriaâ€“zirconia catalysts for soot oxidation by O2. Catalysis Communications, 2008, 9, 250-255.	3.3	112
5	Role of yttrium loading in the physico-chemical properties and soot combustion activity of ceria and ceriaâ€“zirconia catalysts. Journal of Molecular Catalysis A, 2009, 300, 103-110.	4.8	97
6	Catalytic NOx reduction by carbon supporting metals. Applied Catalysis B: Environmental, 1999, 20, 267-275.	20.2	92
7	Active oxygen by Ceâ€“Pr mixed oxide nanoparticles outperform diesel soot combustion Pt catalysts. Applied Catalysis B: Environmental, 2015, 174-175, 60-66.	20.2	85
8	Comparison of the catalytic activity of MO2 (M=Ti, Zr, Ce) for soot oxidation under NOx/O2. Journal of Catalysis, 2007, 250, 75-84.	6.2	83
9	Activity, selectivity and stability of praseodymium-doped CeO2 for chlorinated VOCs catalytic combustion. Applied Catalysis B: Environmental, 2012, 121-122, 162-170.	20.2	82
10	Uncatalysed and catalysed soot combustion under NOx+O2: Real diesel versus model soots. Combustion and Flame, 2010, 157, 2086-2094.	5.2	79
11	Influence of the physico-chemical properties of CeO2â€“ZrO2 mixed oxides on the catalytic oxidation of NO to NO2. Applied Surface Science, 2010, 256, 7706-7712.	6.1	75
12	Preparation, characterisation and testing of CuO/Ce0.8Zr0.2O2 catalysts for NO oxidation to NO2 and mild temperature diesel soot combustion. Applied Catalysis B: Environmental, 2014, 152-153, 99-107.	20.2	75
13	Probing the Surface of Ceriaâˆ’Zirconia Catalysts Using NO_{<i>x</i>} Adsorption/Desorption: A First Step Toward the Investigation of Crystallite Heterogeneity. Journal of Physical Chemistry C, 2010, 114, 13300-13312.	3.1	74
14	New insights into the performance of ceriaâ€“zirconia mixed oxides as soot combustion catalysts. Identification of the role of â€œactive oxygenâ€•production. Catalysis Today, 2011, 176, 404-408.	4.4	65
15	Effects of a Pt/Ce0.68Zr0.32O2 catalyst and NO2 on the kinetics of diesel soot oxidation from thermogravimetric analyses. Fuel Processing Technology, 2011, 92, 363-371.	7.2	53
16	Isotopic study of ceria-catalyzed soot oxidation in the presence of NOx. Journal of Catalysis, 2013, 299, 181-187.	6.2	53
17	Influence of the cerium precursor on the physico-chemical features and NO to NO2 oxidation activity of ceria and ceriaâ€“zirconia catalysts. Journal of Molecular Catalysis A, 2010, 323, 52-58.	4.8	52
18	Potassium-containing briquetted coal for the reduction of NO. Fuel, 1997, 76, 499-505.	6.4	50

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19	Catalytic performances of ceria and ceria-zirconia materials for the combustion of diesel soot under NOx/O2 and O2. Importance of the cerium precursor salt. Applied Catalysis A: General, 2012, 437-438, 166-172.	4.3	46
20	Lattice oxygen activity in ceria-praseodymia mixed oxides for soot oxidation in catalysed Gasoline Particle Filters. Applied Catalysis B: Environmental, 2019, 245, 706-720.	20.2	43
21	Contributions of surface and bulk heterogeneities to the NO oxidation activities of ceriaâ€“zirconia catalysts with composition Ce0.76Zr0.24O2 prepared by different methods. Physical Chemistry Chemical Physics, 2010, 12, 13770.	2.8	39
22	Surface and structural characterisation of coprecipitated Ce x Zr1âˆ’x O2 (0Ââ‰ÂxÂâ‰Â1) mixed oxides. Journal of Materials Science, 2012, 47, 3204-3213.	3.7	36
23	Influence of peroxometallic intermediaries present on polyoxometalates nanoparticles surface on the adipic acid synthesis. Journal of Molecular Catalysis A, 2014, 394, 211-216.	4.8	31
24	Further Insights into the Key Features of Ceriaâ€“Zirconia Mixed Oxides Governing the Catalysed Soot Combustion Under NO x /O2. Topics in Catalysis, 2009, 52, 2088-2091.	2.8	30
25	Unconverted chars obtained during biomass gasification on a pilot-scale gasifier as a source of activated carbon production. Bioresource Technology, 2003, 88, 27-32.	9.6	29
26	SO2 retention at low temperatures by Ca(OH)2-derived CaO: a model for CaO regeneration. Fuel, 2002, 81, 305-313.	6.4	28
27	Catalytic activity of La-modified TiO2 for soot oxidation by O2. Catalysis Communications, 2007, 8, 478-482.	3.3	28
28	NO Reduction by Potassium-Containing Coal Briquettes. Effect of Mineral Matter Content and Coal Rank. Energy & Fuels, 1997, 11, 292-298.	5.1	27
29	NOxReduction by Potassium-Containing Coal Briquettes. Effect of NO2Concentration. Energy & Fuels, 1999, 13, 499-505.	5.1	26
30	Study of Ce/Pr ratio in ceria-praseodymia catalysts for soot combustion under different atmospheres. Applied Catalysis A: General, 2020, 590, 117339.	4.3	26
31	NOx Reduction by Potassium-Containing Coal Briquettes. Effect of Preparation Procedure and Potassium Content. Energy & Fuels, 2002, 16, 569-574.	5.1	25
32	Identifying the nature of the copper entities over ceria-based supports to promote diesel soot combustion: Synergistic effects. Applied Catalysis A: General, 2017, 542, 226-239.	4.3	25
33	Catalyzed Particulate Filter Regeneration by Platinum Versus Noble Metal-Free Catalysts: From Principles to Real Application. Topics in Catalysis, 2017, 60, 2-12.	2.8	25
34	Opportunities for ceria-based mixed oxides versus commercial platinum-based catalysts in the soot combustion reaction. Mechanistic implications. Fuel Processing Technology, 2015, 129, 227-235.	7.2	23
35	Catalytic performance of CuO/Ce_{0.8}Zr_{0.2}O₂ loaded onto SiC-DPF in NO_x-assisted combustion of diesel soot. RSC Advances, 2015, 5, 17018-17029.	3.6	22
36	Combined SO2 and NOx removal at moderate temperature by a dual bed of potassium-containing coal-pellets and calcium-containing pellets. Fuel Processing Technology, 2005, 86, 1745-1759.	7.2	20

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37	Study of the temperature window for the selective reduction of NO in O2-rich gas mixtures by metal-loaded carbon. Catalysis Communications, 2006, 7, 678-684.	3.3	19
38	Attempts at an in situ Raman study of ceria/zirconia catalysts in PM combustion. Applied Catalysis B: Environmental, 2011, 108-109, 134-139.	20.2	19
39	Catalytic activity of Cu and Co supported on ceria-yttria-zirconia oxides for the diesel soot combustion reaction in the presence of NOx. Chemical Engineering Journal, 2020, 380, 122370.	12.7	19
40	Ceria-Praseodymia Mixed Oxides: Relationships Between Redox Properties and Catalytic Activities Towards NO Oxidation to NO2 and CO-PROX Reactions. Topics in Catalysis, 2016, 59, 1065-1070.	2.8	18
41	Advances in Potassium Catalyzed NOxReduction by Carbon Materials:Â An Overview. Industrial & Engineering Chemistry Research, 2007, 46, 3891-3903.	3.7	17
42	NOx Adsorption/Desorption Processes Over Ce0.76Zr0.24O2 and Their Influence on DeSoot Activity: Effect of the Catalyst Calcination Temperature. Topics in Catalysis, 2009, 52, 2092-2096.	2.8	17
43	Potassium-containing coal-pellets for NO reduction under gas mixtures of different composition. Carbon, 2004, 42, 1565-1574.	10.3	15
44	Evidences of the Cerium Oxide-Catalysed DPF Regeneration in a Real Diesel Engine Exhaust. Topics in Catalysis, 2013, 56, 452-456.	2.8	14
45	Behavior of different soot combustion catalysts under NOx/O2. Importance of the catalystâ€“soot contact. Reaction Kinetics, Mechanisms and Catalysis, 2014, 111, 167-182.	1.7	14
46	NOx reduction by potassium-containing coal pellets. Discussing lifetime test profiles. Fuel Processing Technology, 2002, 77-78, 301-307.	7.2	13
47	Influence of potassium loading at different reaction temperatures on the NOx reduction process by potassium-containing coal pelletsâ˜†. Fuel, 2003, 82, 267-274.	6.4	12
48	Potential of Cuâ€“saponite catalysts for soot combustion. Catalysis Science and Technology, 2016, 6, 507-514.	4.1	12
49	Development of a Kinetic Model for the NOxReduction Process by Potassium-Containing Coal Pellets. Environmental Science & Technology, 2002, 36, 5447-5454.	10.0	11
50	Regenerable CaO sorbents for SO2 retention: carbonaceous versus inorganic dispersants. Fuel, 2002, 81, 2435-2438.	6.4	11
51	Low-Cost Potassium-Containing Char Briquettes for NOx Reduction. Energy & Fuels, 2002, 16, 997-1003.	5.1	10
52	Influence of SO2in the Reduction of NOxby Potassium-Containing Coal Pellets. Energy & Fuels, 2005, 19, 94-100.	5.1	10
53	Evaluation of hectorites, synthesized in different conditions, as soot combustion catalysts after impregnation with copper. Applied Clay Science, 2013, 77-78, 40-45.	5.2	10
54	Ceria-based catalysts for NOx removal in NSR processes: A fundamental study of the catalyst modifications explored by in situ techniques. Applied Surface Science, 2020, 529, 147019.	6.1	10

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55	Analysis of the Reaction Conditions in the NOxReduction Process by Carbon with a View to Achieve High NOxConversions. Residence Time Considerations. Energy & Fuels, 2002, 16, 1425-1428.	5.1	8
56	Kinetic model for the NOx reduction process by potassium containing coal char pellets at moderate temperature (350â€“450 Â°C) in the presence of O2 and H2O. Fuel Processing Technology, 2006, 87, 429-436.	7.2	7
57	NOx Adsorption Over Ce/Zr-Based Catalysts Doped with Cu and Ba. Topics in Catalysis, 2019, 62, 140-149.	2.8	7
58	Isotopic study of the influence of oxygen interaction and surface species over different catalysts on the soot removal mechanism. Catalysis Today, 2022, 384-386, 33-44.	4.4	7
59	The Emissions of VOCs during Co-Combustion of Coal with Different Waste Materials in a Fluidized Bed. Energy & Fuels, 2004, 18, 605-610.	5.1	6
60	Insights into the relationship between the catalytic oxidation performances of Ce-Pr mixed oxides and their semiconductive and redox properties. Applied Catalysis A: General, 2019, 578, 30-39.	4.3	5
61	Unraveling the nature of active sites onto copper/ceria-zirconia catalysts for low temperature CO oxidation. Catalysis Today, 2022, 384-386, 246-256.	4.4	5
62	NOx removal by low-cost char pellets: Factors influencing the activity and selectivity towards NOx reduction. Fuel, 2007, 86, 949-956.	6.4	4
63	INTERACTION OF NITROGEN OXIDES WITH CERIA-BASED MATERIALS. Catalytic Science Series, 2013, , 223-246.	0.0	4
64	Improved NOx Storage/Release Properties of Ceria-Based Lean NOx Trap Compositions with MnOx Modification. Materials, 2019, 12, 2127.	2.9	4
65	Activated Carbons Prepared from Pine Wastes for the Uptake of Organic Compounds from Aqueous Solution. Adsorption Science and Technology, 2002, 20, 1051-1063.	3.2	3
66	NOX reduction by coal briquets.. Coal Science and Technology, 1995, , 1787-1790.	0.0	2
67	NOx Reduction Pathways during LNT Operation over Ceria Containing Catalysts: Effect of Copper Presence and Barium Content. Applied Sciences (Switzerland), 2021, 11, 5700.	2.5	2