Ana Iglesias-Juez

List of Publications by Year
in descending order

62 papers	3,340 citations	136950 32 h-index	144013 57 g-index
63 all docs	63 docs citations	63 times ranked	3649 citing authors

#	Article	IF	Citations
1	A combined in situ time-resolved UVâ€“Vis, Raman and high-energy resolution X-ray absorption spectroscopy study on the deactivation behavior of Pt and PtSn propane dehydrogenation catalysts under industrial reaction conditions. Journal of Catalysis, 2010, 276, 268-279.	6.2	256
2	Structural Characteristics and Redox Behavior of CeO2â€“ZrO2/Al2O3 Supports. Journal of Catalysis, 2000, 194, 385-392.	6.2	202
3	Properties of CeO2and Ce1-xZrxO2Nanoparticles:Â X-ray Absorption Near-Edge Spectroscopy, Density Functional, and Time-Resolved X-ray Diffraction Studies. Journal of Physical Chemistry B, 2003, 107, 3535-3543.	2.6	199
4	Nature of the vanadia?ceria interface in V5+/CeO2 catalysts and its relevance for the solid-state reaction toward CeVO4 and catalytic properties. Journal of Catalysis, 2004, 225, 240-248.	6.2	143
5	High-Performance Photocatalytic Hydrogen Production and Degradation of Levofloxacin by Wide Spectrum-Responsive Ag/Fe₃O₄ Bridged SrTiO₃/g-C₃N₄ Plasmonic Nanojunctions: Joint Effect of Ag and Fe₃O₄. ACS Applied Materials & Interfaces, 2018, 10, 40474-40490.	8.0	140
6	New Pd/CexZr1â^'xO2/Al2O3 three-way catalysts prepared by microemulsion. Applied Catalysis B: Environmental, 2001, 31, 39-50.	20.2	131
7	Study of the lean NOx reduction with C3H6 in the presence of water over silver/alumina catalysts prepared from inverse microemulsions. Applied Catalysis B: Environmental, 2000, 28, 29-41.	20.2	119
8	Metalâ€“promoter interface in Pd/(Ce,Zr)Ox/Al2O3 catalysts: effect of thermal aging. Journal of Catalysis, 2004, 221, 148-161.	6.2	116
9	The behavior of mixed-metal oxides: Physical and chemical properties of bulk Ce1â^'xTbxO2 and nanoparticles of Ce1â^'xTbxOy. Journal of Chemical Physics, 2004, 121, 5434-5444.	3.0	113
10	New Pd/CexZr1â^'xO2/Al2O3 three-way catalysts prepared by microemulsion. Applied Catalysis B: Environmental, 2001, 31, 51-60.	20.2	112
11	The behavior of mixed-metal oxides: Structural and electronic properties of Ce1â^'xCaxO2 and Ce1â^'xCaxO2â^'x. Journal of Chemical Physics, 2003, 119, 5659-5669.	3.0	112
12	Effect of Thermal Sintering on Light-Off Performance of Pd/(Ce,Zr)Ox/Al2O3 Three-Way Catalysts: Model Gas and Engine Tests. Journal of Catalysis, 2001, 204, 238-248.	6.2	90
13	Nature and catalytic role of active silver species in the lean NOx reduction with C3H6 in the presence of water. Journal of Catalysis, 2003, 217, 310-323.	6.2	85
14	Redox interplay at copper oxide-(Ce,Zr)Ox interfaces: influence of the presence of NO on the catalytic activity for CO oxidation over CuO/CeZrO4. Journal of Catalysis, 2003, 214, 261-272.	6.2	83
15	Structural, Morphological, and Oxygen Handling Properties of Nanosized Ceriumâ^'Terbium Mixed Oxides Prepared by Microemulsion. Chemistry of Materials, 2003, 15, 4309-4316.	6.7	81
16	Ceriumâ€“terbium mixed oxides as potential materials for anodes in solid oxide fuel cells. Journal of Power Sources, 2005, 151, 43-51.	7.8	64
17	Role of the state of the metal component on the light-off performance ofÂPd-based three-way catalysts. Journal of Catalysis, 2004, 221, 594-600.	6.2	62
18	Light-off behaviour of PdO/Î³-Al2O3 catalysts for stoichiometric COâ€“O2 and COâ€“O2â€“NO reactions: a combined catalytic activityâ€“in situ DRIFTSÂstudy. Journal of Catalysis, 2004, 221, 85-92.	6.2	60

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19	Effects of Copper on the Catalytic Properties of Bimetallic Pdâ€“Cu/(Ce,Zr)Ox/Al2O3 and Pdâ€“Cu/(Ce,Zr)Ox Catalysts for CO and NO Elimination. Journal of Catalysis, 2002, 206, 281-294.	6.2	59
20	Antimicrobial surfaces with self-cleaning properties functionalized by photocatalytic ZnO electrosprayed coatings. Journal of Hazardous Materials, 2019, 369, 665-673.	12.4	54
21	Ca Doping of Nanosize Ceâˆ'Zr and Ceâˆ'Tb Solid Solutions:Â Structural and Electronic Effects. Chemistry of Materials, 2005, 17, 4181-4193.	6.7	49
22	Physical and chemical properties of Ce1âˆ'xZrxO2 nanoparticles and Ce1âˆ'xZrxO2(111) surfaces: synchrotron-based studies. Journal of Molecular Catalysis A, 2005, 228, 11-19.	4.8	47
23	Behavior of bimetallic Pd?Cr/Al2O3 and Pd?Cr/(Ce,Zr)Ox/Al2O3 catalysts for CO and NO elimination. Journal of Catalysis, 2003, 214, 220-233.	6.2	45
24	Synergy of Contact between ZnO Surface Planes and PdZn Nanostructures: Morphology and Chemical Property Effects in the Intermetallic Sites for Selective 1,3-Butadiene Hydrogenation. ACS Catalysis, 2017, 7, 796-811.	11.2	45
25	Thermal behavior of (Ce,Zr)Ox/Al2O3 complex oxides prepared by a microemulsion method. Physical Chemistry Chemical Physics, 2002, 4, 2473-2481.	2.8	43
26	Experimental methods in chemical engineering:<scp>X</scp>â€ray absorption spectroscopyâ€"<scp>XAS</scp>,<scp>XANES</scp>,<scp>EXAFS</scp>. Canadian Journal of Chemical Engineering, 2022, 100, 3-22.	1.7	41
27	Nanoparticulate Pd Supported Catalysts: Size-Dependent Formation of Pd(I)/Pd(0) and Their Role in CO Elimination. Journal of the American Chemical Society, 2011, 133, 4484-4489.	13.7	40
28	Hydroxyl Identification on ZnO by Infrared Spectroscopies: Theory and Experiments. Journal of Physical Chemistry C, 2014, 118, 1492-1505.	3.1	40
29	Morphology effects in photoactive ZnO nanostructures: photooxidative activity of polar surfaces. Journal of Materials Chemistry A, 2015, 3, 8782-8792.	10.3	39
30	Detecting the Genesis of a High-Performance Carbon-Supported Pd Sulfide Nanophase and Its Evolution in the Hydrogenation of Butadiene. ACS Catalysis, 2015, 5, 5235-5241.	11.2	38
31	Structure and activity of iron-doped TiO₂-anatase nanomaterials for gas-phase toluene photo-oxidation. Catalysis Science and Technology, 2013, 3, 626-634.	4.1	35
32	Influence of thermal sintering on the activity for COâ€“O2 and COâ€“O2â€“NO stoichiometric reactions over Pd/(Ce, Zr)Ox/Al2O3 catalysts. Applied Catalysis B: Environmental, 2002, 38, 151-158.	20.2	34
33	Redox and catalytic properties of CuO/CeO2 under CO+O2+NO: Promoting effect of NO on CO oxidation. Catalysis Today, 2012, 180, 81-87.	4.4	32
34	Observing Oxygen Storage and Release at Work during Cycling Redox Conditions: Synergies between Noble Metal and Oxide Promoter. Angewandte Chemie - International Edition, 2012, 51, 2363-2367.	13.8	31
35	Silverâ€“Gold Bimetal-Loaded TiO₂ Photocatalysts for CO₂ Reduction. Industrial & Engineering Chemistry Research, 2020, 59, 9440-9450.	3.7	30
36	Operando DRIFTS study of the redox and catalytic properties of CuO/Ce_{1âˆ'x}Tb_xO_{2âˆ'Î´}(x = 0â€“0.5) catalysts: evidence of an induction step during CO oxidation. Physical Chemistry Chemical Physics, 2012, 14, 2144-2151.	2.8	28

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37	Recent progress in the use of in situ X-ray methods for the study of heterogeneous catalysts in packed-bed capillary reactors. Catalysis Today, 2009, 145, 204-212.	4.4	27
38	Illuminating the nature and behavior of the active center: the key for photocatalytic H₂production in Co@NH₂-MIL-125(Ti). Journal of Materials Chemistry A, 2018, 6, 17318-17322.	10.3	27
39	Pd-based (Ce,Zr)O -supported catalysts: Promoting effect of base metals (Cr, Cu, Ni) in CO and NO elimination. Catalysis Today, 2009, 143, 195-202.	4.4	26
40	Biocide mechanism of highly efficient and stable antimicrobial surfaces based on zinc oxideâ€“reduced graphene oxide photocatalytic coatings. Journal of Materials Chemistry B, 2020, 8, 8294-8304.	5.8	25
41	On the Nature of the Unusual Redox Cycle at the Vanadia Ceria Interface. Journal of Physical Chemistry C, 2018, 122, 1197-1205.	3.1	24
42	Redox behaviour of Pd-based TWCs under dynamic conditions: analysis using dispersive XAS and mass spectrometry. Chemical Communications, 2005, , 4092.	4.1	23
43	Promotion Effects in the Oxidation of CO over Zeolite-Supported Rh Nanoparticles. Journal of Physical Chemistry C, 2008, 112, 9394-9404.	3.1	23
44	Time-Resolved XAS Investigation of the Local Environment and Evolution of Oxidation States of a Fischerâ€“Tropsch Ruâ€“Cs/C Catalyst. ACS Catalysis, 2016, 6, 1437-1445.	11.2	23
45	XAS/DRIFTS/MS spectroscopy for time-resolved <i>operando</i> investigations at high temperature. Journal of Synchrotron Radiation, 2018, 25, 1745-1752.	2.4	22
46	Influence of the nature of the Ce-promoter on the behavior of Pd and Pdâ€“Cr TWC systems. Applied Catalysis A: General, 2004, 259, 207-220.	4.3	21
47	Light and Heat Joining Forces: Methanol from Photothermal CO2 Hydrogenation. CheM, 2018, 4, 1490-1491.	11.7	20
48	Pdâ€“Au bimetallic catalysts supported on ZnO for selective 1,3-butadiene hydrogenation. Catalysis Science and Technology, 2020, 10, 2503-2512.	4.1	20
49	Promotion Effects in the Reduction of NO by CO over Zeolite-Supported Rh Catalysts. Journal of Physical Chemistry C, 2010, 114, 2282-2292.	3.1	19
50	Role of Exposed Surfaces on Zinc Oxide Nanostructures in the Catalytic Ethanol Transformation. ChemSusChem, 2015, 8, 2223-2230.	6.8	17
51	DRIFTSâ€“XANES study of Pd-Ni/(Ce,Zr)Ox/Al2O3 model automotive catalysts. Catalysis Today, 2007, 126, 90-95.	4.4	15
52	Influence of the Ceâ€“Zr promoter on Pd behaviour under dynamic CO/NO cycling conditions: a structural and chemical approach. Physical Chemistry Chemical Physics, 2013, 15, 8640.	2.8	15
53	Innovative insights in a plug flow microreactor for<i>operando</i>X-ray studies. Journal of Applied Crystallography, 2013, 46, 1523-1527.	4.5	15
54	A structural and surface approach to size and shape control of sulfur-modified undoped and Fe-doped TiO2 anatase nano-materials. Physical Chemistry Chemical Physics, 2012, 14, 5628.	2.8	14

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55	Surface and Bulk Approach to Timeâ€resolved Characterization of Heterogeneous Catalysts. ChemCatChem, 2012, 4, 725-737.	3.7	14
56	Influence of preparation method on surface and bulk properties of sunlight-active Tiâ€“W mixed oxide photocatalysts. Physical Chemistry Chemical Physics, 2003, 5, 2913-2921.	2.8	12
57	Morphological and structural behavior of TiO₂ nanoparticles in the presence of WO₃: crystallization of the oxide composite system. Physical Chemistry Chemical Physics, 2014, 16, 19540-19549.	2.8	10
58	New Strategies for the Improvement of Automobile Catalysts. International Journal of Molecular Sciences, 2001, 2, 251-262.	4.1	9
59	Effect of different promoter precursors in a model Ru-Cs/graphite system on the catalytic selectivity for Fischer-Tropsch reaction. Applied Surface Science, 2018, 447, 307-314.	6.1	8
60	Understanding W Doping in Wurtzite ZnO. Journal of Physical Chemistry C, 2018, 122, 19082-19089.	3.1	4
61	Photocatalytic Nanooxides: The Case of TiO2 and ZnO. , 2013, , 245-266.		2
62	Approaching photocatalysts characterization under real conditions: In situ and operando studies. , 2021, , 139-156.		2