BelÃ©n Bachiller-Baeza

List of Publications by Year
in descending order

77 papers	2,519 citations	172457 29 h-index	206112 48 g-index
78 all docs	78 docs citations	78 times ranked	3473 citing authors

#	Article	IF	Citations
1	Interaction of Carbon Dioxide with the Surface of Zirconia Polymorphs. Langmuir, 1998, 14, 3556-3564.	3.5	286
2	Transient studies of low-temperature dry reforming of methane over Ni-CaO/ZrO2-La2O3. Applied Catalysis B: Environmental, 2013, 129, 450-459.	20.2	120
3	Surface chemical modifications induced on high surface area graphite and carbon nanofibers using different oxidation and functionalization treatments. Journal of Colloid and Interface Science, 2011, 355, 179-189.	9.4	110
4	Catalytic wet air oxidation of phenol and acrylic acid over Ru/C and Ruâ€“CeO2/C catalysts. Applied Catalysis B: Environmental, 2000, 25, 267-275.	20.2	101
5	Novel electrochemical sensor based on N-doped carbon nanotubes and Fe3O4 nanoparticles: Simultaneous voltammetric determination of ascorbic acid, dopamine and uric acid. Journal of Colloid and Interface Science, 2014, 432, 207-213.	9.4	99
6	Hydrogenation of Citral on Activated Carbon and High-Surface-Area Graphite-Supported Ruthenium Catalysts Modified with Iron. Journal of Catalysis, 2001, 204, 450-459.	6.2	83
7	MnFe2O4@CNT-N as novel electrochemical nanosensor for determination of caffeine, acetaminophen and ascorbic acid. Sensors and Actuators B: Chemical, 2015, 218, 128-136.	7.8	83
8	Doping level effect on sunlight-driven W,N-co-doped TiO2-anatase photo-catalysts for aromatic hydrocarbon partial oxidation. Applied Catalysis B: Environmental, 2010, 93, 274-281.	20.2	80
9	Influence of Mg and Ce addition to ruthenium based catalysts used in the selective hydrogenation of Î±,Î²-unsaturated aldehydes. Applied Catalysis A: General, 2001, 205, 227-237.	4.3	75
10	FTIR and reaction studies of the acylation of anisole with acetic anhydride over supported HPA catalysts. Journal of Catalysis, 2004, 228, 225-233.	6.2	64
11	Influence of Structural and Surface Characteristics of Ti1-xZrxO2 Nanoparticles on the Photocatalytic Degradation of Methylcyclohexane in the Gas Phase. Chemistry of Materials, 2007, 19, 4283-4291.	6.7	61
12	Role of the residual chlorides in platinum and ruthenium catalysts for the hydrogenation of Î±,Î²-unsaturated aldehydes. Applied Catalysis A: General, 2000, 192, 289-297.	4.3	58
13	Modification of catalytic properties over carbon supported Ruâ€“Cu and Niâ€“Cu bimetallics. Applied Catalysis A: General, 2006, 300, 120-129.	4.3	51
14	The effect of Cu loading on Ni/carbon nanotubes catalysts for hydrodeoxygenation of guaiacol. RSC Advances, 2016, 6, 26658-26667.	3.6	50
15	FTIR and Reaction Studies of Styrene and Toluene over Silicaâ€“Zirconia-Supported Heteropoly Acid Catalysts. Journal of Catalysis, 2002, 212, 231-239.	6.2	48
16	W,N-Codoped TiO₂-Anatase: A Sunlight-Operated Catalyst for Efficient and Selective Aromatic Hydrocarbons Photo-Oxidation. Journal of Physical Chemistry C, 2009, 113, 8553-8555.	3.1	47
17	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
18	Isotopic tracing experiments in syngas production from methane on Ru/Al2O3 and Ru/SiO2. Catalysis Today, 1998, 46, 99-105.	4.4	43

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19	Role of Pt in Pt/Ba/Al2O3NOxstorage and reduction traps. Physical Chemistry Chemical Physics, 2003, 5, 4418-4427.	2.8	43
20	Chemoselective hydrogenation of cinnamaldehyde: A comparison of the immobilization of Ruâ€“phosphine complex on graphite oxide and on graphitic surfaces. Journal of Catalysis, 2011, 282, 299-309.	6.2	43
21	Polyoxotungstate@Carbon Nanocomposites As Oxygen Reduction Reaction (ORR) Electrocatalysts. Langmuir, 2018, 34, 6376-6387.	3.5	41
22	Bioethanol dehydrogenation over copper supported on functionalized graphene materials and a high surface area graphite. Carbon, 2016, 102, 426-436.	10.3	40
23	Design of surface sites for the selective hydrogenation of 1,3-butadiene on Pd nanoparticles: Cu bimetallic formation and sulfur poisoning. Catalysis Science and Technology, 2014, 4, 1446-1455.	4.1	39
24	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
25	Nature of Surface Sulfate Species and the Generation of Active Sites on Silicaâ^'Zirconia Mixed-Oxide Catalysts. Journal of Physical Chemistry B, 2003, 107, 6526-6534.	2.6	37
26	Ruthenium-supported catalysts for the stereoselective hydrogenation of paracetamol to 4--acetamidocyclohexanol: effect of support, metal precursor, and solvent. Journal of Catalysis, 2005, 229, 439-445.	6.2	37
27	The promoter effect of potassium in CuO/CeO₂ systems supported on carbon nanotubes and graphene for the CO-PROX reaction. Catalysis Science and Technology, 2016, 6, 6118-6127.	4.1	34
28	Title is missing!. Topics in Catalysis, 2002, 19, 303-311.	2.8	32
29	Green photo-oxidation of styrene over Wâ€“Ti composite catalysts. Journal of Catalysis, 2014, 309, 428-438.	6.2	32
30	Effect of the carbon support nano-structures on the performance of Ru catalysts in the hydrogenation of paracetamol. Carbon, 2008, 46, 1046-1052.	10.3	29
31	High nitrogen doped graphenes and their applicability as basic catalysts. Diamond and Related Materials, 2014, 44, 26-32.	3.9	27
32	Preparation, Characterization, and Activity forn-Hexane Reactions of Alumina-Supported Rhodiumâ€“Copper Catalysts. Journal of Catalysis, 1997, 171, 374-382.	6.2	26
33	Improved performance of carbon nanofiber-supported palladium particles in the selective 1,3-butadiene hydrogenation: Influence of carbon nanostructure, support functionalization treatment and metal precursor. Catalysis Today, 2015, 249, 63-71.	4.4	26
34	Multifunctional mixed valence N-doped CNT@MFe₂O₄ hybrid nanomaterials: from engineered one-pot coprecipitation to application in energy storage paper supercapacitors. Nanoscale, 2018, 10, 12820-12840.	5.6	26
35	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
36	Catalytic properties of carbon-supported ruthenium catalysts for n-hexane conversion. Applied Catalysis A: General, 1998, 173, 231-238.	4.3	24

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37	Deposition of gold nanoparticles on ZnO and their catalytic activity for hydrogenation applications. Catalysis Communications, 2012, 22, 79-82.	3.3	22
38	Structural and surface modifications of carbon nanotubes when submitted to high temperature annealing treatments. Journal of Alloys and Compounds, 2012, 536, S460-S463.	5.5	21
39	When the nature of surface functionalities on modified carbon dominates the dispersion of palladium hydrogenation catalysts. Catalysis Today, 2018, 301, 248-257.	4.4	20
40	Pdâ€“Au bimetallic catalysts supported on ZnO for selective 1,3-butadiene hydrogenation. Catalysis Science and Technology, 2020, 10, 2503-2512.	4.1	20
41	An immersion calorimetry study of the interaction of organic compounds with carbon nanotube surfaces. Carbon, 2012, 50, 2731-2740.	10.3	19
42	Sn modification of TiO2 anatase and rutile type phases: 2-Propanol photo-oxidation under UV and visible light. Applied Catalysis B: Environmental, 2018, 228, 130-141.	20.2	19
43	Title is missing!. Catalysis Letters, 1997, 49, 163-167.	2.6	18
44	Selective 1,3-butadiene hydrogenation by gold nanoparticles on novel nano-carbon materials. Catalysis Today, 2015, 249, 117-126.	4.4	17
45	Promoter effect of alkalis on CuO/CeO 2 /carbon nanotubes systems for the PROx reaction. Catalysis Today, 2018, 301, 141-146.	4.4	17
46	Graphite oxide as support for the immobilization of Ru-BINAP: Application in the enantioselective hydrogenation of methylacetoacetate. Catalysis Communications, 2012, 26, 149-154.	3.3	16
47	PMo11V@N-CNT electrochemical properties and its application as electrochemical sensor for determination of acetaminophen. Journal of Solid State Electrochemistry, 2017, 21, 1059-1068.	2.5	16
48	Infrared study of competitive crotonaldehyde and CO adsorption on Cu/TiO2. Physical Chemistry Chemical Physics, 2001, 3, 4817-4825.	2.8	15
49	Microwave-assisted silylation of graphite oxide and iron(III) porphyrin intercalation. Polyhedron, 2014, 81, 475-484.	2.2	15
50	Effect of the reductionâ€“preparation method on the surface states and catalytic properties of supported-nickel particles. Journal of Molecular Catalysis A, 2006, 258, 221-230.	4.8	14
51	Support effects on Ruâ€“HPA bifunctional catalysts: Surface characterization and catalytic performance. Applied Catalysis A: General, 2007, 333, 281-289.	4.3	14
52	Selective 1,3-butadiene hydrogenation by gold nanoparticles deposited & precipitated onto nano-carbon materials. RSC Advances, 2015, 5, 81583-81598.	3.6	13
53	Structural properties of alumina- and silica-supported Iridium catalysts and their behavior in the enantioselective hydrogenation of ethyl pyruvate. Applied Catalysis A: General, 2013, 451, 14-20.	4.3	12
54	Hydrogenation of crotonaldehyde over carbonâ€supported molybdenum nitrides. Catalysis Letters, 1998, 55, 165-168.	2.6	11

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55	Reductive degradation of 2,4-dichlorophenoxyacetic acid using Pd/carbon with bifunctional mechanism. Catalysis Today, 2020, 357, 361-367.	4.4	11
56	(NH4)4[NiMo6O24H6].5H2O / g-C3N4 materials for selective photo-oxidation of C O and C C bonds. Applied Catalysis B: Environmental, 2020, 278, 119299.	20.2	11
57	Diastereoselective hydrogenation of o-toluic acid coupled with (S)-proline and (S)-pyroglutamic acid methyl esters on ruthenium catalysts. Journal of Molecular Catalysis A, 2000, 164, 147-155.	4.8	10
58	Fructose Transformations in Ethanol using Carbon Supported Polyoxometalate Acidic Solids for 5â€Ethoxymethylfurfural Production. ChemCatChem, 2018, 10, 3746-3753.	3.7	10
59	Catalytic Activity and Characterization of Oxygen Mobility on Pt/Ce0.75Zr0.25O2 Catalyst by Isotopic Exchange with 18O. Chinese Journal of Catalysis, 2006, 27, 109-114.	14.0	8
60	Difference in the deactivation of Au catalysts during ethanol transformation when supported on ZnO and on TiO₂. RSC Advances, 2018, 8, 7473-7485.	3.6	8
61	Bioethanol Transformations Over Active Surface Sites Generated on Carbon Nanotubes or Carbon Nanofibers Materials. Open Catalysis Journal, 2014, 7, 1-7.	0.9	8
62	Inclusion of Ti and Zr species on clay surfaces and their effect on the interaction with organic molecules. Applied Surface Science, 2018, 445, 229-241.	6.1	7
63	Modification of catalytic properties over carbon supported Ruâ€“Cu and Niâ€“Cu bimetallics. Applied Catalysis A: General, 2006, 303, 88-95.	4.3	6
64	Influence of modifiers on the performance of Ru-supported catalysts on the stereoselective hydrogenation of 4-acetamidophenol. Applied Surface Science, 2007, 253, 4805-4813.	6.1	6
65	Utilization of CO2 in the reforming of natural gas on carbon supported ruthenium catalysts. Influence of MgO addition. Studies in Surface Science and Catalysis, 1998, 114, 399-402.	1.5	4
66	Interactions between toluene and aniline and graphite surfaces. Carbon, 2006, 44, 3130-3133.	10.3	4
67	Structural changes on RuCu/KL bimetallic catalysts as evidenced by n-hexane reforming. Catalysis Today, 2008, 133-135, 793-799.	4.4	4
68	Oxygen exchange between C18O2 and basic metal oxides (CaO, MgO, ZrO2 ZnO). Studies in Surface Science and Catalysis, 1997, 112, 277-284.	1.5	3
69	An immersion calorimetric study of the interactions between some organic molecules and functionalized carbon nanotube surfaces. Thermochimica Acta, 2013, 567, 107-111.	2.7	3
70	New Insights in the Development of Carbon Supported Ruthenium Catalysts for Hydrogenation of Levulinic Acid. Current Catalysis, 2018, 7, 129-137.	0.5	3
71	Exploring the insertion of ethylenediamine and bis(3-aminopropyl)amine into graphite oxide. Nanoscience Methods, 2014, 3, 28-39.	1.0	2
72	Efficient sorption performance of carbon-diatomaceous silica compounds towards phenol. Surfaces and Interfaces, 2021, 24, 101101.	3.0	2

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73	Comparative determination of surface and lattice oxygen mobility on vanadium phosphorus oxides by isotopic exchange with C18O2. Studies in Surface Science and Catalysis, 2001, , 379-386.	1.5	1
74	Detection of specific electronic interactions at the interface aromatic hydrocarbon-graphite by immersion calorimetry. Studies in Surface Science and Catalysis, 2007, 160, 689-696.	1.5	1
75	Preparation of gold catalysts supported on SiO2-TiO2 for the CO PROX reaction. Studies in Surface Science and Catalysis, 2010, , 719-722.	1.5	1
76	Use of IR and XANES spectroscopies to study NOx storage and reduction catalysts under reaction conditions. Special Publication - Royal Society of Chemistry, 2007, , 296-301.	0.0	1
77	Comparison of the acid properties on sulphated and phosphated silica-zirconia mixed oxide catalysts. Special Publication - Royal Society of Chemistry, 2007, , 197-204.	0.0	0