Giuseppe Bonura

List of Publications by Year
in descending order

85 papers	5,468 citations	81900 39 h-index	79698 73 g-index
86 all docs	86 docs citations	86 times ranked	4844 citing authors

#	Article	IF	Citations
1	Synthesis, characterization and activity pattern of Cuâ€“ZnO/ZrO2 catalysts in the hydrogenation of carbon dioxide to methanol. Journal of Catalysis, 2007, 249, 185-194.	6.2	468
2	Solid-state interactions, adsorption sites and functionality of Cu-ZnO/ZrO2 catalysts in the CO2 hydrogenation to CH3OH. Applied Catalysis A: General, 2008, 350, 16-23.	4.3	367
3	H2 production for MC fuel cell by steam reforming of ethanol over MgO supported Pd, Rh, Ni and Co catalysts. Catalysis Communications, 2004, 5, 611-615.	3.3	284
4	The changing nature of the active site of Cu-Zn-Zr catalysts for the CO2 hydrogenation reaction to methanol. Applied Catalysis B: Environmental, 2014, 152-153, 152-161.	20.2	227
5	Steam reforming of bio-ethanol on alkali-doped Ni/MgO catalysts: hydrogen production for MC fuel cell. Applied Catalysis A: General, 2004, 270, 1-7.	4.3	214
6	Catalytic etherification of glycerol by tert-butyl alcohol to produce oxygenated additives for diesel fuel. Applied Catalysis A: General, 2009, 367, 77-83.	4.3	181
7	Steam and auto-thermal reforming of bio-ethanol over MgO and CeO2CeO2 Ni supported catalysts. International Journal of Hydrogen Energy, 2006, 31, 2193-2199.	7.1	168
8	Solvent free depolymerization of Kraft lignin to alkyl-phenolics using supported NiMo and CoMo catalysts. Green Chemistry, 2015, 17, 4921-4930.	9.0	134
9	Multifunctionality of Cuâ€“ZnOâ€“ZrO 2 /H-ZSM5 catalysts for the one-step CO 2 -to-DME hydrogenation reaction. Applied Catalysis B: Environmental, 2015, 162, 57-65.	20.2	133
10	CO2 Recycling to Dimethyl Ether: State-of-the-Art and Perspectives. Molecules, 2018, 23, 31.	3.8	133
11	Hybrid Cuâ€“ZnOâ€“ZrO2/H-ZSM5 system for the direct synthesis of DME by CO2 hydrogenation. Applied Catalysis B: Environmental, 2013, 140-141, 16-24.	20.2	132
12	Basic evidences for methanol-synthesis catalyst design. Catalysis Today, 2009, 143, 80-85.	4.4	119
13	Stepwise tuning of metal-oxide and acid sites of CuZnZr-MFI hybrid catalysts for the direct DME synthesis by CO2 hydrogenation. Applied Catalysis B: Environmental, 2015, 176-177, 522-531.	20.2	119
14	Structureâ€“activity relationships of Fe-Co/K-Al2O3 catalysts calcined at different temperatures for CO2 hydrogenation to light olefins. Applied Catalysis A: General, 2017, 547, 219-229.	4.3	119
15	Catalytic behaviour of a bifunctional system for the one step synthesis of DME by CO2 hydrogenation. Catalysis Today, 2014, 228, 51-57.	4.4	110
16	Surface-dependent oxidation of H 2 on CeO 2 surfaces. Journal of Catalysis, 2013, 297, 193-201.	6.2	109
17	Efficient catalytic hydrotreatment of Kraft lignin to alkylphenolics using supported NiW and NiMo catalysts in supercritical methanol. Green Chemistry, 2015, 17, 5046-5057.	9.0	106
18	Direct CO 2 -to-DME hydrogenation reaction: New evidences of a superior behaviour of FER-based hybrid systems to obtain high DME yield. Journal of CO2 Utilization, 2017, 18, 353-361.	6.8	101

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19	Role of the ceria promoter and carrier on the functionality of Cu-based catalysts in the CO2-to-methanol hydrogenation reaction. Catalysis Today, 2011, 171, 251-256.	4.4	98
20	Probing the factors affecting structure and activity of the Au/CeO2 system in total and preferential oxidation of CO. Applied Catalysis B: Environmental, 2006, 66, 81-91.	20.2	96
21	Efficient Catalytic Conversion of Ethanol to 1-Butanol via the Guerbet Reaction over Copper- and Nickel-Doped Porous. ACS Sustainable Chemistry and Engineering, 2017, 5, 1738-1746.	6.7	90
22	Hydrogen production by glycerol steam reforming: How Mg doping affects the catalytic behaviour of Ni/Al2O3 catalysts. International Journal of Hydrogen Energy, 2016, 41, 157-166.	7.1	81
23	DME production by CO2 hydrogenation: Key factors affecting the behaviour of CuZnZr/ferrierite catalysts. Catalysis Today, 2017, 281, 337-344.	4.4	75
24	Potassium improved stability of Ni/MgO in the steam reforming of ethanol for the production of hydrogen for MCFC. Journal of Power Sources, 2004, 132, 139-144.	7.8	72
25	Technologies for energetic exploitation of biodiesel chain derived glycerol: Oxy-fuels production by catalytic conversion. Applied Energy, 2013, 102, 63-71.	10.1	72
26	Acidity control of zeolite functionality on activity and stability of hybrid catalysts during DME production via CO2 hydrogenation. Journal of CO2 Utilization, 2018, 24, 398-406.	6.8	71
27	Biobased chemicals from the catalytic depolymerization of Kraft lignin using supported noble metal-based catalysts. Fuel Processing Technology, 2018, 179, 143-153.	7.2	69
28	Catalytic features of CuZnZrâ€“zeolite hybrid systems for the direct CO2-to-DME hydrogenation reaction. Catalysis Today, 2016, 277, 48-54.	4.4	68
29	Dimethyl ether as circular hydrogen carrier: Catalytic aspects of hydrogenation/dehydrogenation steps. Journal of Energy Chemistry, 2021, 58, 55-77.	12.9	67
30	Catalytic etherification of glycerol to produce biofuels over novel spherical silica supported HyflonÂ® catalysts. Bioresource Technology, 2012, 118, 350-358.	9.6	63
31	Ceriaâ€“gadolinia supported NiCu catalyst: A suitable system for dry reforming of biogas to feed a solid oxide fuel cell (SOFC). Applied Catalysis B: Environmental, 2012, 121-122, 135-147.	20.2	60
32	Highly effective MnCeOx catalysts for biodiesel production by transesterification of vegetable oils with methanol. Applied Catalysis A: General, 2010, 382, 158-166.	4.3	57
33	Mixture of glycerol ethers as diesel bio-derivable oxy-fuel: Impact on combustion and emissions of an automotive engine combustion system. Applied Energy, 2014, 132, 236-247.	10.1	52
34	Efficient nickel-catalysed<i>N</i>-alkylation of amines with alcohols. Catalysis Science and Technology, 2018, 8, 5498-5505.	4.1	49
35	Interaction effects between CuO-ZnO-ZrO2 methanol phase and zeolite surface affecting stability of hybrid systems during one-step CO2 hydrogenation to DME. Catalysis Today, 2020, 345, 175-182.	4.4	47
36	A basic assessment of the reactivity of Ni catalysts in the decomposition of methane for the production of â€œCOx-freeâ€•hydrogen for fuel cells application. Catalysis Today, 2006, 116, 298-303.	4.4	43

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37	H2 production by methane decomposition: Catalytic and technological aspects. International Journal of Hydrogen Energy, 2012, 37, 16367-16374.	7.1	41
38	New insights about coke deposition in methanol-to-DME reaction over MOR-, MFI- and FER-type zeolites. Journal of Industrial and Engineering Chemistry, 2018, 68, 196-208.	5.8	41
39	Potential of Pervaporation and Vapor Separation with Water Selective Membranes for an Optimized Production of Biofuelsâ€"A Review. Catalysts, 2017, 7, 187.	3.5	40
40	The influence of different promoter oxides on the functionality of hybrid CuZn-ferrierite systems for the production of DME from CO 2 -H 2 mixtures. Applied Catalysis A: General, 2017, 544, 21-29.	4.3	39
41	Desilicated ZSM-5 zeolite: Catalytic performances assessment in methanol to DME dehydration. Microporous and Mesoporous Materials, 2020, 302, 110198.	4.4	37
42	Physico-chemical properties and reactivity of Au/CeO2 catalysts in total and selective oxidation of CO. Catalysis Today, 2006, 116, 384-390.	4.4	36
43	Methane decomposition over Co thin layer supported catalysts to produce hydrogen for fuel cell. International Journal of Hydrogen Energy, 2010, 35, 11568-11575.	7.1	36
44	Glycerol Etherification with TBA: High Yield to Poly-Ethers Using a Membrane Assisted Batch Reactor. Environmental Science & Technology, 2014, 48, 6019-6026.	10.0	36
45	Glycerol Ethers Production and Engine Performance with Diesel/Ethers Blend. Topics in Catalysis, 2013, 56, 378-383.	2.8	35
46	Development of an ammonia sensor based on silver nanoparticles in a poly-methacrylic acid matrix. Journal of Materials Chemistry C, 2014, 2, 5778.	5.5	35
47	A One-Step Synthesis of C6 Sugar Alcohols from Levoglucosan and Disaccharides Using a Ru/CMK-3 Catalyst. ACS Catalysis, 2016, 6, 4411-4422.	11.2	35
48	The role of Gadolinia Doped Ceria support on the promotion of CO2 methanation over Ni and Ni Fe catalysts. International Journal of Hydrogen Energy, 2017, 42, 26828-26842.	7.1	35
49	Inside the reaction mechanism of direct CO2 conversion to DME over zeolite-based hybrid catalysts. Applied Catalysis B: Environmental, 2021, 294, 120255.	20.2	34
50	Integrated synthesis of dimethylether via CO2 hydrogenation. Studies in Surface Science and Catalysis, 2004, 147, 385-390.	1.5	32
51	Enhanced coke suppression by using phosphate-zirconia supported nickel catalysts under dry methane reforming conditions. International Journal of Hydrogen Energy, 2019, 44, 27784-27794.	7.1	32
52	Hydrodeoxygenation of raw bio-oil towards platform chemicals over FeMoP/zeolite catalysts. Journal of Industrial and Engineering Chemistry, 2019, 80, 392-400.	5.8	30
53	Flammability reduction in a pressurised water electrolyser based on a thin polymer electrolyte membrane through a Pt-alloy catalytic approach. Applied Catalysis B: Environmental, 2019, 246, 254-265.	20.2	30
54	Batch reactor coupled with water permselective membrane: Study of glycerol etherification reaction with butanol. Chemical Engineering Journal, 2015, 282, 187-193.	12.7	29

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55	Experimental Characterization of Diesel Combustion Using Glycerol Derived Ethers Mixtures. SAE International Journal of Fuels and Lubricants, 0, 6, 940-950.	0.2	28
56	In Situ FT-IR Characterization of CuZnZr/Ferrierite Hybrid Catalysts for One-Pot CO2-to-DME Conversion. Materials, 2018, 11, 2275.	2.9	28
57	Zeolite-assisted etherification of glycerol with butanol for biodiesel oxygenated additives production. Journal of Energy Chemistry, 2020, 48, 136-144.	12.9	28
58	Carbon microspheres preparation, graphitization and surface functionalization for glycerol etherification. Catalysis Today, 2016, 277, 68-77.	4.4	27
59	Catalytic Behaviour of Ce-Doped Ni Systems Supported on Stabilized Zirconia under Dry Reforming Conditions. Catalysts, 2019, 9, 473.	3.5	24
60	How surface and textural properties affect the behaviour of Mn-based catalysts during transesterification reaction to produce biodiesel. Catalysis Today, 2012, 195, 32-43.	4.4	22
61	Hydrogen production by reforming of bio-alcohols. , 2015, , 109-136.		21
62	Biofuels production by esterification of oleic acid with ethanol using a membrane assisted reactor in vapour permeation configuration. Applied Catalysis A: General, 2018, 566, 121-129.	4.3	21
63	Hydrotreatment of the carbohydrate-rich fraction of pyrolysis liquids using bimetallic Ni based catalyst: Catalyst activity and product property relations. Fuel Processing Technology, 2018, 169, 258-268.	7.2	18
64	Study of PtOx/TiO2 Photocatalysts in the Photocatalytic Reforming of Glycerol: The Role of Co-Catalyst Formation. Materials, 2018, 11, 1927.	2.9	18
65	Tailoring of Hydrotalcite-Derived Cu-Based Catalysts for CO2 Hydrogenation to Methanol. Catalysts, 2019, 9, 1058.	3.5	18
66	Methane production by sequential supercritical gasification of aqueous organic compounds and selective CO 2 methanation. Applied Catalysis A: General, 2017, 545, 24-32.	4.3	14
67	DFT and kinetic evidences of the preferential CO oxidation pattern of manganese dioxide catalysts in hydrogen stream (PROX). Applied Catalysis B: Environmental, 2022, 300, 120715.	20.2	14
68	Structure control on kinetics of copper reduction in Zrâ€“containing mixed oxides during catalytic hydrogenation of carbon oxides to methanol. Catalysis Today, 2020, 342, 39-45.	4.4	13
69	Catalytic features of Ni/Baâ€“Ce0.9â€“Y0.1 catalyst to produce hydrogen for PCFCs by methane reforming. International Journal of Hydrogen Energy, 2010, 35, 11661-11668.	7.1	11
70	Techno-economic feasibility of industrial production of biofuels by glycerol etherification reaction with isobutene or tert-butyl alcohol assisted by vapor-permeation membrane. Journal of Industrial and Engineering Chemistry, 2021, 98, 413-424.	5.8	11
71	Stability of Metallic Ruthenium in Ruâ€“Co Supported Silica Catalysts. Catalysis Letters, 2012, 142, 1452-1460.	2.6	10
72	Catalytic production of oxygenated additives by glycerol etherification. Open Chemistry, 2014, 12, 1248-1254.	1.9	10

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73	Factors affecting the efficiency of Nafion-based catalytic membranes in the selective oxidation of light paraffins mediated by the Fenton system. Catalysis Today, 2004, 91-92, 215-218.	4.4	9
74	Promoting Direct CO2 Conversion to DME over Zeolite-based Hybrid Catalysts. Petroleum Chemistry, 2020, 60, 508-515.	1.4	8
75	Dynamics of carbon formation during the catalytic hydrodeoxygenation of raw bio-oil. Sustainable Energy and Fuels, 2020, 4, 5503-5512.	4.9	8
76	Synthesis and physical-chemical characterization of nanocrystalline Ta modified TiO 2 as potential support of electrocatalysts for fuel cells and electrolyzers. International Journal of Hydrogen Energy, 2017, 42, 28011-28021.	7.1	5
77	Activity and stability of iron based catalysts in advanced fischer-tropsch technology via co2-rich syngas conversion. Studies in Surface Science and Catalysis, 2007, 167, 49-54.	1.5	3
78	Direct CO2-to-dimethyl Ether Hydrogenation over CuZnZr/zeolite Hybrid Catalyst: New Evidences on the Interaction Between Acid and Metal Sites. Annales De Chimie: Science Des Materiaux, 2019, 43, 141-149.	0.4	3
79	Diesel-fuel improver production via novel heterogenized solid-acid catalysts. Chemical Engineering Journal, 2010, 161, 409-415.	12.7	2
80	Effect of the Microstructure of the Semiconductor Support on the Photocatalytic Performance of the Pt-PtOx/TiO2 Catalyst System. Materials, 2021, 14, 943.	2.9	2
81	Copper and Iron Cooperation on Micro-Spherical Silica during Methanol Synthesis via CO2 Hydrogenation. Catalysts, 2022, 12, 603.	3.5	2
82	The Effect of Zeolite Features on Catalytic Performances of Cuznzr/Zeolite Hybrid Catalysts in One-pot CO2-to-DME Hydrogenation. Tecnica Italiana, 2019, 63, 257-262.	0.2	1
83	Analysis of citrus peels-based polygeneration plant for hydrogen, heat, power and DME production: energy and exergy analysis. E3S Web of Conferences, 2020, 197, 09001.	0.5	0
84	Supercritical water gasification of biomass to produce hydrogen. , 2017, , 147-183.		0
85	Catalysts for Biofuels Production. RSC Green Chemistry, 2018, , 144-180.	0.1	0