Felipa Bautista

List of Publications by Year
in descending order

114 papers	2,322 citations	201674 27 h-index	289244 40 g-index
122 all docs	122 docs citations	122 times ranked	2101 citing authors

#	Article	IF	Citations
1	An overview on glycerol-free processes for the production of renewable liquid biofuels, applicable in diesel engines. Renewable and Sustainable Energy Reviews, 2015, 42, 1437-1452.	16.4	96
2	Sustainable preparation of a novel glycerol-free biofuel by using pig pancreatic lipase: Partial 1,3-regiospecific alcoholysis of sunflower oil. Process Biochemistry, 2009, 44, 334-342.	3.7	78
3	Development of a new biodiesel that integrates glycerol, by using CaO as heterogeneous catalyst, in the partial methanolysis of sunflower oil. Fuel, 2014, 122, 94-102.	6.4	73
4	Influence of acidâ€“base properties of catalysts in the gas-phase dehydrationâ€“dehydrogenation of cyclohexanol on amorphous AlPO4 and several inorganic solids. Applied Catalysis A: General, 2003, 243, 93-107.	4.3	71
5	Screening of amorphous metalâ€“phosphate catalysts for the oxidative dehydrogenation of ethylbenzene to styrene. Applied Catalysis B: Environmental, 2007, 70, 611-620.	20.2	69
6	Biodiesel at the Crossroads: A Critical Review. Catalysts, 2019, 9, 1033.	3.5	57
7	Production of a new second generation biodiesel with a low cost lipase derived from Thermomyces lanuginosus: Optimization by response surface methodology. Catalysis Today, 2011, 167, 107-112.	4.4	56
8	Selective ethanolysis of sunflower oil with Lipozyme RM IM, an immobilized Rhizomucor miehei lipase, to obtain a biodiesel-like biofuel, which avoids glycerol production through the monoglyceride formation. New Biotechnology, 2014, 31, 596-601.	4.4	53
9	Fluoride and Sulfate Treatment of AlPO4-Al2O3 Catalysts .I. Structure, Texture, Surface Acidity and Catalytic Performance in Cyclohexene Conversion and Cumene Cracking. Journal of Catalysis, 1994, 145, 107-125.	6.2	51
10	Structural and Textural Characterization of AlPO4â€“B2O3and Al2O3â€“B2O3(5â€“30 wt% B2O3) Systems Obtained by Boric Acid Impregnation. Journal of Catalysis, 1998, 173, 333-344.	6.2	50
11	1-Butanol dehydration on AlPO4 and modified AlPO4: catalytic behaviour and deactivation. Applied Catalysis A: General, 1995, 130, 47-65.	4.3	48
12	Vanadium oxides supported on TiO2-Sepiolite and Sepiolite: Preparation, structural and acid characterization and catalytic behaviour in selective oxidation of toluene. Applied Catalysis A: General, 2007, 325, 336-344.	4.3	48
13	Study on dry-media microwave azalactone synthesis on different supported KF catalysts: influence of textural and acidâ€“base properties of supports. Perkin Transactions II RSC, 2002, , 227-234.	1.1	42
14	Acidity and catalytic activity of AlPO4â€“B2O3 and Al2O3â€“B2O3 (5â€“30wt% B2O3) systems prepared by impregnation. Applied Catalysis A: General, 1998, 170, 159-168.	4.3	40
15	Structure, Texture, Surface Acidity, and Catalytic Activity of AlPO4â€“ZrO2(5â€“50 wt% ZrO2) Catalysts Prepared by a Solâ€“Gel Procedure. Journal of Catalysis, 1998, 179, 483-494.	6.2	38
16	Etherification of glycerol with tert-butyl alcohol over sulfonated hybrid silicas. Applied Catalysis A: General, 2016, 526, 155-163.	4.3	37
17	N-Alkylation of Aniline with Methanol over CrPO4and CrPO4â€“AlPO4(5â€“50 wt% AlPO4) Catalysts. Journal of Catalysis, 1997, 172, 103-109.	6.2	36
18	Properties of a glucose oxidase covalently immobilized on amorphous AlPO4 support. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 567-577.	1.8	36

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19	Covalent immobilization of porcine pancreatic lipase on amorphous AlPO4 and other inorganic supports. Journal of Chemical Technology and Biotechnology, 1998, 72, 249-254.	3.2	35
20	Production of acrolein from glycerol in liquid phase on heterogeneous catalysts. Chemical Engineering Journal, 2015, 282, 179-186.	12.7	35
21	Covalent immobilization of acid phosphatase on amorphous AlPO4 support. Journal of Molecular Catalysis B: Enzymatic, 1999, 6, 473-481.	1.8	34
22	A comprehensive study of reaction parameters in the enzymatic production of novel biofuels integrating glycerol into their composition. Bioresource Technology, 2010, 101, 6657-6662.	9.6	34
23	N-Alkylation of aniline with methanol over AlPO4Al2O3 catalysts. Applied Catalysis A: General, 1998, 166, 39-45.	4.3	33
24	New Biofuel Integrating Glycerol into Its Composition Through the Use of Covalent Immobilized Pig Pancreatic Lipase. International Journal of Molecular Sciences, 2012, 13, 10091-10112.	4.1	30
25	Technological challenges for the production of biodiesel in arid lands. Journal of Arid Environments, 2014, 102, 127-138.	2.4	29
26	AlP04-Al203 catalysts with low-alumina content. Applied Catalysis A: General, 1993, 104, 109-135.	4.3	28
27	Influence of Niî—¸Cu alloying on Sepiolite-supported nickel catalysts in the liquid-phase selective hydrogenation of fatty acid ethyl esters. Journal of Molecular Catalysis A, 1996, 104, 229-235.	4.8	28
28	Biofuel that Keeps Glycerol as Monoglyceride by 1,3-Selective Ethanolysis with Pig Pancreatic Lipase Covalently Immobilized on AlPO4 Support. Energies, 2013, 6, 3879-3900.	3.1	27
29	Synthesis, Performance and Emission Quality Assessment of Ecodiesel from Castor Oil in Diesel/Biofuel/Alcohol Triple Blends in a Diesel Engine. Catalysts, 2019, 9, 40.	3.5	27
30	Production of a biodiesel-like biofuel without glycerol generation, by using Novozym 435, an immobilized Candida antarctica lipase. Bioresources and Bioprocessing, 2014, 1, .	4.2	26
31	Direct hydroxylation of benzene to phenol by nitrous oxide on amorphous aluminium-iron binary phosphates. Applied Catalysis A: General, 2014, 474, 272-279.	4.3	26
32	Biocatalytic Behaviour of Immobilized Rhizopus oryzae Lipase in the 1,3-Selective Ethanolysis of Sunflower Oil to Obtain a Biofuel Similar to Biodiesel. Molecules, 2014, 19, 11419-11439.	3.8	26
33	Vanadylâ€"aluminum binary phosphate: Al/V ratio influence on their structure and catalytic behavior in the 2-propanol conversion. Catalysis Today, 2003, 78, 269-280.	4.4	25
34	Diethyl Ether as an Oxygenated Additive for Fossil Diesel/Vegetable Oil Blends: Evaluation of Performance and Emission Quality of Triple Blends on a Diesel Engine. Energies, 2020, 13, 1542.	3.1	25
35	AlPO4-supported nickel catalysts VIII. Support effects on the gas-phase dehydrogenation of alkylbenzenes. Journal of Catalysis, 1987, 107, 181-194.	6.2	24
36	Microwave-assisted etherification of glycerol with tert-butyl alcohol over amorphous organosilica-aluminum phosphates. Applied Catalysis B: Environmental, 2017, 213, 42-52.	20.2	24

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37	Sulfonic Acid Functionalization of Different Zeolites and Their Use as Catalysts in the Microwave-Assisted Etherification of Glycerol with tert-Butyl Alcohol. Molecules, 2017, 22, 2206.	3.8	24
38	Biodiesel Is Dead: Long Life to Advanced Biofuelsâ€"A Comprehensive Critical Review. Energies, 2022, 15, 3173.	3.1	24
39	Efficient hydrogenation of alkenes using a highly active and reusable immobilised Ru complex on AlPO4. Journal of Molecular Catalysis A, 2009, 308, 41-45.	4.8	23
40	Anion treatment (Fâ˜ or SO42â˜) of AlPO4-Al2O3 (25 wt.-% Al2O3) catalysts. Applied Catalysis A: General, 1993, 99, 161-173.	4.3	22
41	Title is missing!. Catalysis Letters, 1998, 52, 205-213.	2.6	22
42	Heterogeneization of a new Ru(II) homogeneous asymmetric hydrogenation catalyst containing BINAP and the N-tridentate bpea ligand, through covalent attachment on amorphous AlPO4 support. Topics in Catalysis, 2006, 40, 193-205.	2.8	20
43	Gas-phase selective oxidation of chloro- and methoxy-substituted toluenes on TiO2â€"Sepiolite supported vanadium oxides. Applied Catalysis A: General, 2009, 352, 251-258.	4.3	19
44	Study of the gas-phase glycerol oxidehydration on systems based on transition metals (Co, Fe, V) and aluminium phosphate. Molecular Catalysis, 2018, 455, 68-77.	2.0	19
45	Sulfonated carbons from olive stones as catalysts in the microwave-assisted etherification of glycerol with tert-butyl alcohol. Molecular Catalysis, 2020, 488, 110921.	2.0	19
46	Chromiumâ€"aluminium orthophosphates. Part 1.â€"Structure, texture, surface acidity and catalytic activity in cyclohexene skeletal isomerization and cumene conversion of CrPO4â€"AlPO4catalysts. Journal of Materials Chemistry, 1994, 4, 311-317.	6.7	18
47	Vanadium oxides supported on amorphous aluminum phosphate: Structural and chemical characterization and catalytic performance in the 2-propanol reaction. Journal of Molecular Catalysis A, 2016, 416, 105-116.	4.8	18
48	An Overview of the Production of Oxygenated Fuel Additives by Glycerol Etherification, Either with Isobutene or tert-Butyl Alcohol, over Heterogeneous Catalysts. Energies, 2019, 12, 2364.	3.1	18
49	Microwave-Assisted Glycerol Etherification Over Sulfonic Acid Catalysts. Materials, 2020, 13, 1584.	2.9	18
50	Kinetics and mechanism of catalytic oxydehydrogenation of alkylbenzenes. Journal of Catalysis, 1989, 116, 338-349.	6.2	17
51	AlPO4-supported nickel catalysts IX. Liquid-phase selective hydrogenation of propargyl alcohols. Journal of Catalysis, 1990, 125, 171-186.	6.2	17
52	Outlook for Direct Use of Sunflower and Castor Oils as Biofuels in Compression Ignition Diesel Engines, Being Part of Diesel/Ethyl Acetate/Straight Vegetable Oil Triple Blends. Energies, 2020, 13, 4836.	3.1	17
53	Influence of the acidâ€"base/redox properties of TiOx-sepiolite supported vanadium oxide catalysts in the gas-phase selective oxidation of toluene. Catalysis Today, 2006, 112, 28-32.	4.4	16
54	Gas-phase selective oxidation of toluene on TiO2â€"sepiolite supported vanadium oxidesInfluence of vanadium loading on conversion and product selectivities. Catalysis Today, 2007, 128, 183-190.	4.4	16

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55	Acetone Prospect as an Additive to Allow the Use of Castor and Sunflower Oils as Drop-In Biofuels in Diesel/Acetone/Vegetable Oil Triple Blends for Application in Diesel Engines. Molecules, 2020, 25, 2935.	3.8	16
56	The mechanism of liquid-phase catalytic hydrogenation of the olefinic double bond on supported nickel catalysts. Journal of the Chemical Society Perkin Transactions II, 1989, , 493-498.	0.9	15
57	Catalytic behaviour of mesoporous metal phosphates in the gas-phase glycerol transformation. Journal of Molecular Catalysis A, 2016, 421, 92-101.	4.8	15
58	Effect of precipitation medium on surface acidity and catalytic performance of chromium orthophosphates in cyclohexene skeletal isomerization and cumene conversion. Journal of Materials Chemistry, 1993, 3, 975.	6.7	14
59	Chromium-aluminium orthophosphates, III. Acidity and catalytic performance in cyclohexene and cumene conversions on CrPO4â^'AlPO4 (20â€"50 wt.% AlPO4) catalysts obtained in aqueous ammonia. Reaction Kinetics and Catalysis Letters, 1994, 53, 55-63.	0.6	14
60	Structure, texture, acidity and catalytic performance of AlPO4-caesium oxide catalysts in 2-methyl-3-butyn-2-ol conversion. Journal of Materials Chemistry, 1999, 9, 827-835.	6.7	14
61	A Biofuel Similar to Biodiesel Obtained by Using a Lipase from Rhizopus oryzae, Optimized by Response Surface Methodology. Energies, 2014, 7, 3383-3399.	3.1	14
62	Application of Enzymatic Extracts from a CALB Standard Strain as Biocatalyst within the Context of Conventional Biodiesel Production Optimization. Molecules, 2017, 22, 2025.	3.8	14
63	Porcine pancreatic lipase-catalized enantioselective hydrolysis of N-protected amino acid methyl-esters. Amino Acids, 1992, 2, 87-95.	2.7	13
64	A1PO4-TiO2 catalysts. V. Vapor-phase Beckmann rearrangement of cyclohexanone oxime. Studies in Surface Science and Catalysis, 1993, 78, 615-622.	1.5	13
65	Performance and Emission Quality Assessment in a Diesel Engine of Straight Castor and Sunflower Vegetable Oils, in Diesel/Gasoline/Oil Triple Blends. Energies, 2019, 12, 2181.	3.1	13
66	AlPO4catalyzed Diels-Alder reaction of cyclopentadiene with (-)-menthyl acrylate. Influence of catalyst surface properties. Catalysis Letters, 1996, 36, 215-221.	2.6	12
67	Production of a Biofuel that Keeps the Glycerol as a Monoglyceride by Using Supported KF as Heterogeneous Catalyst. Energies, 2014, 7, 3764-3780.	3.1	12
68	Influence of surface support properties on the liquid-phase hydrogenation of propargyl alcohols on AlPO4-supported nickel catalysts. Journal of Molecular Catalysis, 1991, 67, 91-104.	1.2	11
69	Liquid-Phase Selective Hydrogenation of 1, 4â€"Butynediol on Supported Ni and Ni-Cu Catalysts.. Studies in Surface Science and Catalysis, 1991, 59, 269-276.	1.5	11
70	Title is missing!. Catalysis Letters, 1999, 60, 229-235.	2.6	11
71	Continuous flow toluene methylation over AlPO4 and AlPO4-Al2O3 catalysts. Catalysis Letters, 1994, 26, 159-167.	2.6	10
72	Synthesis of 1,3-dioxolanes catalysed by AlPO4and AlPO4â€"Al2O3: kinetic and mechanistic studies. Journal of the Chemical Society Perkin Transactions II, 1995, , 815-822.	0.9	10

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73	Study of catalytic behaviour and deactivation of vanadyl-aluminum binary phosphates in selective oxidation of o-xylene. Chemical Engineering Journal, 2006, 120, 3-9.	12.7	10
74	Rhizomucor miehei Lipase Supported on Inorganic Solids, as Biocatalyst for the Synthesis of Biofuels: Improving the Experimental Conditions by Response Surface Methodology. Energies, 2019, 12, 831.	3.1	10
75	Biofuels from Diethyl Carbonate and Vegetable Oils for Use in Triple Blends with Diesel Fuel: Effect on Performance and Smoke Emissions of a Diesel Engine. Energies, 2020, 13, 6584.	3.1	10
76	Fourth generation synthesis of solketal by glycerol acetalization with acetone: A solar-light photocatalytic approach. Journal of the Taiwan Institute of Chemical Engineers, 2021, 125, 297-303.	5.3	10
77	Toluene methylation on AlPO4-Al2O3 catalysts (5â€"15 wt.% Al2O3). Reaction Kinetics and Catalysis Letters, 1996, 57, 61-70.	0.6	9
78	N-methylation of aniline over AlPO4 and AlPO4-metal oxide catalysts. Studies in Surface Science and Catalysis, 1997, , 123-130.	1.5	9
79	Phenol methylation over CrPO4 and CrPO4â˜'AlPO4 catalysts. Reaction Kinetics and Catalysis Letters, 1997, 62, 47-54.	0.6	9
80	Acetonylacetone conversion on AlPO4â€"cesium oxide (5â€"30 wt%) catalysts. Catalysis Letters, 1999, 60, 145-149.	2.6	9
81	Vanadyl-aluminum binary phosphate: Effect of thermal treatment over its structure and catalytic properties in selective oxidation of aromatic hydrocarbons. Studies in Surface Science and Catalysis, 2000, , 803-808.	1.5	9
82	Biochemical catalytic production of biodiesel. , 2016, , 165-199.		9
83	Insight into the gasâ€phase glycerol dehydration on transition metal modified aluminium phosphates and zeolites. Journal of Chemical Technology and Biotechnology, 2017, 92, 2661-2672.	3.2	9
84	Effect of precipitation medium and thermal treatment on structure and textural properties of chromium orthophosphates. Reaction Kinetics and Catalysis Letters, 1993, 49, 173-181.	0.6	8
85	Gas-phase catalytic oxydehydrogenation of ethylbenzene on A1PO4 catalysts. Studies in Surface Science and Catalysis, 1994, 82, 759-768.	1.5	8
86	Conversion of 2-propanol over chromium orthophosphates. Reaction Kinetics and Catalysis Letters, 1995, 55, 133-141.	0.6	8
87	Conversion of 2-propanol over chromium aluminum orthophosphates. Catalysis Letters, 1995, 35, 143-154.	2.6	8
88	Alkylation of phenol with dimethyl carbonate over AlPO4, Al2O3 and AlPO4-Al2O3 catalysts. Reaction Kinetics and Catalysis Letters, 1998, 63, 261-269.	0.6	8
89	Optimization by response surface methodology of the reaction conditions in 1,3-selective transesterification of sunflower oil, by using CaO as heterogeneous catalyst. Molecular Catalysis, 2020, 484, 110804.	2.0	8
90	Fluoride treatment of AlPO4-Al2O3 catalysts. II. Poisoning experiments by bases for cyclohexene conversion and cumene cracking. Catalysis Letters, 1994, 24, 293-301.	2.6	7

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91	Chromium-aluminium orthophosphates, II. Effect of AlPO4 loading on structure and texture of		

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109	Anion treatment (Fâˆ' or SO 4 2âˆ') of AlPO4âˆ'Al2O3 (25 wt.% Al2O3) catalysts. III. Anion effect on surface basic properties. Reaction Kinetics and Catalysis Letters, 1993, 49, 183-188.	0.6	1
110	Covalent immobilization of glucose oxidase on AlPO4 as inorganic support. Progress in Biotechnology, 1998, , 505-512.	0.2	1
111	Hydrogenation of Î±,Î²-Unsaturated Carbonyl Compounds over Covalently Heterogenized Ru(II) Diphosphine Complexes on AlPO4-Sepiolite Supports. Catalysts, 2021, 11, 289.	3.5	1
112	AlPO4-supported rhodium catalysts. VIII. Gas-phase adsorption of arenes by gas-chromatography. Reaction Kinetics and Catalysis Letters, 1986, 31, 327-332.	0.6	0
113	Production of glycerol-free and alternative biodiesels. , 2011, , 160-176.		0
114	Covalent immobilization of porcine pancreatic lipase on amorphous AlPO4 and other inorganic supports. Journal of Chemical Technology and Biotechnology, 1998, 72, 249-254.	3.2	0