Diego Luna

List of Publications by Year
in descending order

79 papers	3,270 citations	270111 25 h-index	169272 56 g-index
81 all docs	81 docs citations	81 times ranked	4896 citing authors

#	Article	IF	Citations
1	Biodiesel Is Dead: Long Life to Advanced Biofuelsâ€"A Comprehensive Critical Review. Energies, 2022, 15, 3173.	1.6	24
2	Hydrogenation of Î±,Î²-Unsaturated Carbonyl Compounds over Covalently Heterogenized Ru(II) Diphosphine Complexes on AlPO4-Sepiolite Supports. Catalysts, 2021, 11, 289.	1.6	1
3	Evaluation of Dimethyl Carbonate as Alternative Biofuel. Performance and Smoke Emissions of a Diesel Engine Fueled with Diesel/Dimethyl Carbonate/Straight Vegetable Oil Triple Blends. Sustainability, 2021, 13, 1749.	1.6	7
4	Enzymatic Production of Ecodiesel by Using a Commercial Lipase CALB, Immobilized by Physical Adsorption on Mesoporous Organosilica Materials. Catalysts, 2021, 11, 1350.	1.6	5
5	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.	1.6	17
6	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.	1.7	16
7	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.	1.6	10
8	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.	1.6	25
9	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.	1.0	8
10	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.	1.6	18
11	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.	1.6	13
12	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.	1.6	10
13	Biodiesel at the Crossroads: A Critical Review. Catalysts, 2019, 9, 1033.	1.6	57
14	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.	1.6	27
15	Evaluation of Lipases from Wild Microbial Strains as Biocatalysts in Biodiesel Production. Separations, 2018, 5, 53.	1.1	5
16	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.	1.6	9
17	Application of Enzymatic Extracts from a CALB Standard Strain as Biocatalyst within the Context of Conventional Biodiesel Production Optimization. Molecules, 2017, 22, 2025.	1.7	14
18	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.	1.7	24

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19	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.	8.2	96
20	Selection and Characterization of Biofuel-Producing Environmental Bacteria Isolated from Vegetable Oil-Rich Wastes. PLoS ONE, 2014, 9, e104063.	1.1	22
21	Production of a Biofuel that Keeps the Glycerol as a Monoglyceride by Using Supported KF as Heterogeneous Catalyst. Energies, 2014, 7, 3764-3780.	1.6	12
22	A Biofuel Similar to Biodiesel Obtained by Using a Lipase from Rhizopus oryzae, Optimized by Response Surface Methodology. Energies, 2014, 7, 3383-3399.	1.6	14
23	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.	2.4	53
24	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.	3.4	73
25	Enzymatic production of biodiesel that avoids glycerol as byproduct, by using immobilized Rhizopus Oryzae lipase. New Biotechnology, 2014, 31, S94.	2.4	2
26	Production of a biodiesel-like biofuel without glycerol generation, by using Novozym 435, an immobilized Candida antarctica lipase. Bioresources and Bioprocessing, 2014, 1, .	2.0	26
27	Technological challenges for the production of biodiesel in arid lands. Journal of Arid Environments, 2014, 102, 127-138.	1.2	29
28	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.	1.7	26
29	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.	1.6	27
30	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.	1.8	30
31	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.	2.2	56
32	Chapter 4. Secondary Processing of Plant Oils. RSC Green Chemistry, 2011, , 166-202.	0.0	1
33	A comprehensive study of reaction parameters in the enzymatic production of novel biofuels integrating glycerol into their composition. Bioresource Technology, 2010, 101, 6657-6662.	4.8	34
34	Biofuels for Transport: Prospects and Challenges. , 2010, , 171-210.		4
35	Tunable shapes in supported metal nanoparticles: From nanoflowers to nanocubes. Materials Chemistry and Physics, 2009, 117, 408-413.	2.0	13
36	Sustainable Preparation of Supported Metal Nanoparticles and Their Applications in Catalysis. ChemSusChem, 2009, 2, 18-45.	3.6	702

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37	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.	1.8	78
38	Gas-phase Beckmann rearrangement of cyclododecanone oxime on Al,B-MCM-41 mesoporous materials. Journal of Materials Science, 2009, 44, 6741-6746.	1.7	3
39	Modified SBA-1 materials for the Knoevenagel condensation under microwave irradiation. Microporous and Mesoporous Materials, 2009, 118, 87-92.	2.2	24
40	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
41	Preparation of Highly Active and Dispersed Platinum Nanoparticles on Mesoporous Alâ€MCMâ€48 and Their Activity in the Hydroisomerisation of <i>nâ€</i>Octane. Chemistry - A European Journal, 2008, 14, 5988-5995.	1.7	30
42	Microwave oxidation of alkenes and alcohols using highly active and stable mesoporous organotitanium silicates. Journal of Molecular Catalysis A, 2008, 293, 17-24.	4.8	23
43	Activity of Gallium and Aluminum SBA-15 materials in the Friedelâ€“Crafts alkylation of toluene with benzyl chloride and benzyl alcohol. Applied Catalysis A: General, 2008, 349, 148-155.	2.2	71
44	Biofuels: a technological perspective. Energy and Environmental Science, 2008, 1, 542.	15.6	521
45	Al-, Ga- and AlGa-materials as catalysts for the N-methylation of aniline. Studies in Surface Science and Catalysis, 2008, 174, 1331-1334.	1.5	2
46	Study of lipase immobilization on zeolitic support and transesterification reaction in a solvent free-system. Biocatalysis and Biotransformation, 2007, 25, 328-335.	1.1	51
47	Catalytic performance of Al-MCM-41 materials in the N-alkylation of aniline. Journal of Molecular Catalysis A, 2007, 269, 190-196.	4.8	45
48	Ga-MCM-41 synthesis and catalytic activity in the liquid-phase isomerisation of Î±-pinene. Microporous and Mesoporous Materials, 2007, 103, 333-340.	2.2	23
49	Screening of amorphous metalâ€“phosphate catalysts for the oxidative dehydrogenation of ethylbenzene to styrene. Applied Catalysis B: Environmental, 2007, 70, 611-620.	10.8	69
50	Catechol O-methylation with dimethyl carbonate over different acidâ€“base catalysts. New Journal of Chemistry, 2006, 30, 1228-1234.	1.4	26
51	Catalytic Ability of a Cationic Ru(II) Monochloro Complex for the Asymmetric Hydrogenation of Dimethyl Itaconate and Enamides. Inorganic Chemistry, 2006, 45, 2644-2651.	1.9	23
52	Structural and Catalytic Properties of Amorphous Mesoporous AlPO4 Materials Prepared in the Presence of 2,4-Pentanedione and 2,5-Hexanedione as Aluminium Chelating Agents. Studies in Surface Science and Catalysis, 2006, 162, 315-322.	1.5	1
53	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.	1.3	20
54	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

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55	Properties of a glucose oxidase covalently immobilized on amorphous AlPO4 support. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 567-577.	1.8	36
56	Title is missing!. Catalysis Letters, 1999, 60, 229-235.	1.4	11
57	Acetonylacetone conversion on AlPO4â€“cesium oxide (5â€“30 wt%) catalysts. Catalysis Letters, 1999, 60, 145-149.	1.4	9
58	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
59	Title is missing!. Catalysis Letters, 1998, 52, 205-213.	1.4	22
60	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.	3.1	38
61	Covalent immobilization of porcine pancreatic lipase on amorphous AlPO4 and other inorganic supports. Journal of Chemical Technology and Biotechnology, 1998, 72, 249-254.	1.6	35
62	2-Methyl-3-butyn-2-ol conversion on AlPO4-cesium oxide (20 wt.%) catalysts obtained by impregnation with cesium chloride. Reaction Kinetics and Catalysis Letters, 1998, 65, 239-244.	0.6	2
63	Structure and texture of AlPO4-cesium oxide (20 wt.%) catalysts obtained by impregnation with cesium chloride. Reaction Kinetics and Catalysis Letters, 1998, 65, 245-251.	0.6	2
64	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.	3.1	50
65	AlPO4catalyzed Diels-Alder reaction of cyclopentadiene with (-)-menthyl acrylate. Influence of catalyst surface properties. Catalysis Letters, 1996, 36, 215-221.	1.4	12
66	Conversion of 2-propanol over chromium aluminum orthophosphates. Catalysis Letters, 1995, 35, 143-154.	1.4	8
67	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
68	Spanish Sepiolite Clay as a New Heterogeneous Catalyst for the Tetrahydropyranylation of Alcohols and Phenols. Synthetic Communications, 1994, 24, 1345-1350.	1.1	35
69	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
70	Metalâ€”support interaction effects in the liquid-phase selective hydrogenation of 1,4-butynediol with nickel catalysts supported on AlPO4 and on other conventional non-reducible compounds. Journal of Molecular Catalysis, 1993, 85, 305-325.	1.2	18
71	AlPO4-Catalysed asymmetric Diels-Alder reactions of cyclopentadiene with chiral acrylates. Tetrahedron: Asymmetry, 1993, 4, 2507-2512.	1.8	25
72	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

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73	Alpo₄and Alpo₄-Al₂O₃as New Heterogeneous Catalysts for the Solvent-Free Tetrahydropyranylation of Alcohols and Phenols. Synthetic Communications, 1992, 22, 2335-2342.	1.1	28
74	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
75	AlPO4/TiO2 catalysts. Part 2.â€”Structure, texture and catalytic activity of systems precipitated with ammonia or ethene oxide. Journal of the Chemical Society Faraday Transactions I, 1989, 85, 2535.	1.0	13
76	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
77	Gas-Phase Dehydrogenation of Alkylbenzenes on Rh/AlPO4Catalysts. Bulletin of the Chemical Society of Japan, 1989, 62, 3670-3674.	2.0	6
78	Knoevenagel condensation in the heterogeneous phase using aluminum phosphate-aluminum oxide as a new catalyst. Journal of Organic Chemistry, 1984, 49, 5195-5197.	1.7	233
79	Application of a poisoning titration method for measuring support effects in new AlPO4-supported nickel catalysts. Journal of the Chemical Society Faraday Transactions I, 1984, 80, 659.	1.0	16