David Martin Alonso

List of Publications by Year
in descending order

58 papers	13,340 citations	50170 46 h-index	118652 62 g-index
65 all docs	65 docs citations	65 times ranked	10128 citing authors

#	Article	IF	Citations
1	Advances in catalytic routes for the production of carboxylic acids from biomass: a step forward for sustainable polymers. Chemical Society Reviews, 2020, 49, 5704-5771.	18.7	134
2	Catalytic transfer hydrogenation of maleic acid with stoichiometric amounts of formic acid in aqueous phase: paving the way for more sustainable succinic acid production. Green Chemistry, 2020, 22, 1859-1872.	4.6	32
3	GVL pulping facilitates nanocellulose production from woody biomass. Green Chemistry, 2019, 21, 5316-5325.	4.6	33
4	Toward biomass-derived renewable plastics: Production of 2,5-furandicarboxylic acid from fructose. Science Advances, 2018, 4, eaap9722.	4.7	276
5	Improving economics of lignocellulosic biofuels: An integrated strategy for coproducing 1,5-pentanediol and ethanol. Applied Energy, 2018, 213, 585-594.	5.1	60
6	Enhanced Furfural Yields from Xylose Dehydration in the Î³â€Valerolactone/Water Solvent System at Elevated Temperatures. ChemSusChem, 2018, 11, 2321-2331.	3.6	69
7	A Solventâ€Free Synthesis of Ligninâ€Derived Renewable Carbon with Tunable Porosity for Supercapacitor Electrodes. ChemSusChem, 2018, 11, 2953-2959.	3.6	32
8	Enhanced Furfural Yields from Xylose Dehydration in the Î³-Valerolactone/Water Solvent System at Elevated Temperatures. ChemSusChem, 2018, 11, 2266-2266.	3.6	4
9	Improving the production of maleic acid from biomass: TS-1 catalysed aqueous phase oxidation of furfural in the presence of Î³-valerolactone. Green Chemistry, 2018, 20, 2845-2856.	4.6	58
10	Past, Current Situation and Future Technologies of Furfural Production. Sustainable Chemistry Series, 2018, , 31-52.	0.1	3
11	Levulinic Acid and <i>Î³</i>-Valerolactone. Sustainable Chemistry Series, 2018, , 169-190.	0.1	0
12	Increasing the revenue from lignocellulosic biomass: Maximizing feedstock utilization. Science Advances, 2017, 3, e1603301.	4.7	352
13	New catalytic strategies for Î±,Ï‰-diols production from lignocellulosic biomass. Faraday Discussions, 2017, 202, 247-267.	1.6	61
14	Effects of Water on the Copperâ€Catalyzed Conversion of Hydroxymethylfurfural in Tetrahydrofuran. ChemSusChem, 2015, 8, 3983-3986.	3.6	47
15	Solventâ€Enabled Nonenyzmatic Sugar Production from Biomass for Chemical and Biological Upgrading. ChemSusChem, 2015, 8, 1317-1322.	3.6	30
16	A lignocellulosic ethanol strategy via nonenzymatic sugar production: Process synthesis and analysis. Bioresource Technology, 2015, 182, 258-266.	4.8	91
17	Selective Production of Levulinic Acid from Furfuryl Alcohol in THF Solvent Systems over H-ZSM-5. ACS Catalysis, 2015, 5, 3354-3359.	5.5	116
18	Process systems engineering studies for the synthesis of catalytic biomass-to-fuels strategies. Computers and Chemical Engineering, 2015, 81, 57-69.	2.0	45

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19	Synthesis of catalytic biomass-to-fuels strategies. Computer Aided Chemical Engineering, 2014, 34, 615-620.	0.3	1
20	A strategy for the simultaneous catalytic conversion of hemicellulose and cellulose from lignocellulosic biomass to liquid transportation fuels. Green Chemistry, 2014, 16, 653-661.	4.6	124
21	Nonenzymatic Sugar Production from Biomass Using Biomass-Derived Î³-Valerolactone. Science, 2014, 343, 277-280.	6.0	607
22	Solvent Effects in Acidâ€Catalyzed Biomass Conversion Reactions. Angewandte Chemie - International Edition, 2014, 53, 11872-11875.	7.2	371
23	Targeted chemical upgrading of lignocellulosic biomass to platform molecules. Green Chemistry, 2014, 16, 4816-4838.	4.6	399
24	Effects of Î³-valerolactone in hydrolysis of lignocellulosic biomass to monosaccharides. Green Chemistry, 2014, 16, 4659-4662.	4.6	149
25	Production of renewable jet fuel range alkanes and commodity chemicals from integrated catalytic processing of biomass. Energy and Environmental Science, 2014, 7, 1500-1523.	15.6	342
26	Selective Conversion of Cellulose to Hydroxymethylfurfural in Polar Aprotic Solvents. ChemCatChem, 2014, 6, 2229-2234.	1.8	110
27	Production of Furfural from Lignocellulosic Biomass Using Beta Zeolite and Biomass-Derived Solvent. Topics in Catalysis, 2013, 56, 1775-1781.	1.3	111
28	A highly selective route to linear alpha olefins from biomass-derived lactones and unsaturated acids. Chemical Communications, 2013, 49, 7040.	2.2	69
29	Gamma-valerolactone, a sustainable platform molecule derived from lignocellulosic biomass. Green Chemistry, 2013, 15, 584.	4.6	868
30	Production and upgrading of 5-hydroxymethylfurfural using heterogeneous catalysts and biomass-derived solvents. Green Chemistry, 2013, 15, 85-90.	4.6	310
31	Conversion of Hemicellulose into Furfural Using Solid Acid Catalysts in Î³â€Valerolactone. Angewandte Chemie - International Edition, 2013, 52, 1270-1274.	7.2	397
32	Direct conversion of cellulose to levulinic acid and gamma-valerolactone using solid acid catalysts. Catalysis Science and Technology, 2013, 3, 927-931.	2.1	213
33	Integrated conversion of hemicellulose and cellulose from lignocellulosic biomass. Energy and Environmental Science, 2013, 6, 76-80.	15.6	332
34	A roadmap for conversion of lignocellulosic biomass to chemicals and fuels. Current Opinion in Chemical Engineering, 2012, 1, 218-224.	3.8	273
35	Production of butene oligomers as transportation fuels using butene for esterification of levulinic acid from lignocellulosic biomass: process synthesis and technoeconomic evaluation. Green Chemistry, 2012, 14, 3289.	4.6	59
36	A sulfuric acid management strategy for the production of liquid hydrocarbon fuels via catalytic conversion of biomass-derived levulinic acid. Energy and Environmental Science, 2012, 5, 9690.	15.6	72

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37	Production of levulinic acid and gamma-valerolactone (GVL) from cellulose using GVL as a solvent in biphasic systems. Energy and Environmental Science, 2012, 5, 8199.	15.6	316
38	Bimetallic catalysts for upgrading of biomass to fuels and chemicals. Chemical Society Reviews, 2012, 41, 8075.	18.7	1,167
39	RuSn bimetallic catalysts for selective hydrogenation of levulinic acid to Î³-valerolactone. Applied Catalysis B: Environmental, 2012, 117-118, 321-329.	10.8	196
40	Interconversion between Î³-valerolactone and pentenoic acid combined with decarboxylation to form butene over silica/alumina. Journal of Catalysis, 2011, 281, 290-299.	3.1	102
41	Activation of Amberlyst-70 for Alkene Oligomerization in Hydrophobic Media. Topics in Catalysis, 2011, 54, 447-457.	1.3	15
42	Reactive Extraction of Levulinate Esters and Conversion to Î³â€Valerolactone for Production of Liquid Fuels. ChemSusChem, 2011, 4, 357-361.	3.6	161
43	Production of Biofuels from Cellulose and Corn Stover Using Alkylphenol Solvents. ChemSusChem, 2011, 4, 1078-1081.	3.6	130
44	Surface chemical promotion of Ca oxide catalysts in biodiesel production reaction by the addition of monoglycerides, diglycerides and glycerol. Journal of Catalysis, 2010, 276, 229-236.	3.1	79
45	Deactivation of organosulfonic acid functionalized silica catalysts during biodiesel synthesis. Applied Catalysis B: Environmental, 2010, 95, 279-287.	10.8	66
46	Heterogeneous transesterification processes by using CaO supported on zinc oxide as basic catalysts. Catalysis Today, 2010, 149, 281-287.	2.2	140
47	Relevance of the physicochemical properties of CaO catalysts for the methanolysis of triglycerides to obtain biodiesel. Catalysis Today, 2010, 158, 114-120.	2.2	47
48	Î³-Valerolactone Ring-Opening and Decarboxylation over SiO₂/Al₂O₃ in the Presence of Water. Langmuir, 2010, 26, 16291-16298.	1.6	169
49	Catalytic conversion of biomass to biofuels. Green Chemistry, 2010, 12, 1493.	4.6	2,017
50	Integrated Catalytic Conversion of Î³-Valerolactone to Liquid Alkenes for Transportation Fuels. Science, 2010, 327, 1110-1114.	6.0	988
51	Production of liquid hydrocarbon transportation fuels by oligomerization of biomass-derived C9 alkenes. Green Chemistry, 2010, 12, 992.	4.6	150
52	Polarity of the acid chain of esters and transesterification activity of acid catalysts. Journal of Catalysis, 2009, 262, 18-26.	3.1	55
53	Biodiesel preparation using Li/CaO catalysts: Activation process and homogeneous contribution. Catalysis Today, 2009, 143, 167-171.	2.2	91
54	Leaching and homogeneous contribution in liquid phase reaction catalysed by solids: The case of triglycerides methanolysis using CaO. Applied Catalysis B: Environmental, 2009, 89, 265-272.	10.8	199

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55	Transesterification of Triglycerides by CaO: Increase of the Reaction Rate by Biodiesel Addition. Energy & Fuels, 2009, 23, 2259-2263.	2.5	71
56	Loss of NO storage capacity of Ptâ€“Ba/Al2O3 catalysts due to incorporation of phosphorous. Catalysis Communications, 2008, 9, 327-332.	1.6	3
57	Potassium leaching during triglyceride transesterification using K/Î³-Al2O3 catalysts. Catalysis Communications, 2007, 8, 2074-2080.	1.6	149
58	Biodiesel from sunflower oil by using activated calcium oxide. Applied Catalysis B: Environmental, 2007, 73, 317-326.	10.8	677