

David Martin Alonso

List of Publications by Year in descending order

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58
papers

13,340
citations

50276

46
h-index

118850

62
g-index

65
all docs

65
docs citations

65
times ranked

10128
citing authors

#	ARTICLE	IF	CITATIONS
1	Catalytic conversion of biomass to biofuels. <i>Green Chemistry</i> , 2010, 12, 1493.	9.0	2,017
2	Bimetallic catalysts for upgrading of biomass to fuels and chemicals. <i>Chemical Society Reviews</i> , 2012, 41, 8075.	38.1	1,167
3	Integrated Catalytic Conversion of γ -Valerolactone to Liquid Alkenes for Transportation Fuels. <i>Science</i> , 2010, 327, 1110-1114.	12.6	988
4	Gamma-valerolactone, a sustainable platform molecule derived from lignocellulosic biomass. <i>Green Chemistry</i> , 2013, 15, 584.	9.0	868
5	Biodiesel from sunflower oil by using activated calcium oxide. <i>Applied Catalysis B: Environmental</i> , 2007, 73, 317-326.	20.2	677
6	Nonenzymatic Sugar Production from Biomass Using Biomass-Derived γ -Valerolactone. <i>Science</i> , 2014, 343, 277-280.	12.6	607
7	Targeted chemical upgrading of lignocellulosic biomass to platform molecules. <i>Green Chemistry</i> , 2014, 16, 4816-4838.	9.0	399
8	Conversion of Hemicellulose into Furfural Using Solid Acid Catalysts in γ -Valerolactone. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 1270-1274.	13.8	397
9	Solvent Effects in Acid-Catalyzed Biomass Conversion Reactions. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 11872-11875.	13.8	371
10	Increasing the revenue from lignocellulosic biomass: Maximizing feedstock utilization. <i>Science Advances</i> , 2017, 3, e1603301.	10.3	352
11	Production of renewable jet fuel range alkanes and commodity chemicals from integrated catalytic processing of biomass. <i>Energy and Environmental Science</i> , 2014, 7, 1500-1523.	30.8	342
12	Integrated conversion of hemicellulose and cellulose from lignocellulosic biomass. <i>Energy and Environmental Science</i> , 2013, 6, 76-80.	30.8	332
13	Production of levulinic acid and gamma-valerolactone (GVL) from cellulose using GVL as a solvent in biphasic systems. <i>Energy and Environmental Science</i> , 2012, 5, 8199.	30.8	316
14	Production and upgrading of 5-hydroxymethylfurfural using heterogeneous catalysts and biomass-derived solvents. <i>Green Chemistry</i> , 2013, 15, 85-90.	9.0	310
15	Toward biomass-derived renewable plastics: Production of 2,5-furandicarboxylic acid from fructose. <i>Science Advances</i> , 2018, 4, eaap9722.	10.3	276
16	A roadmap for conversion of lignocellulosic biomass to chemicals and fuels. <i>Current Opinion in Chemical Engineering</i> , 2012, 1, 218-224.	7.8	273
17	Direct conversion of cellulose to levulinic acid and gamma-valerolactone using solid acid catalysts. <i>Catalysis Science and Technology</i> , 2013, 3, 927-931.	4.1	213
18	Leaching and homogeneous contribution in liquid phase reaction catalysed by solids: The case of triglycerides methanolysis using CaO. <i>Applied Catalysis B: Environmental</i> , 2009, 89, 265-272.	20.2	199

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19	RuSn bimetallic catalysts for selective hydrogenation of levulinic acid to $\hat{\gamma}$ -valerolactone. <i>Applied Catalysis B: Environmental</i> , 2012, 117-118, 321-329.	20.2	196
20	$\hat{\gamma}$ -Valerolactone Ring-Opening and Decarboxylation over $\text{SiO}_2/\text{Al}_2\text{O}_3$ in the Presence of Water. <i>Langmuir</i> , 2010, 26, 16291-16298.	3.5	169
21	Reactive Extraction of Levulinate Esters and Conversion to $\hat{\gamma}$ -Valerolactone for Production of Liquid Fuels. <i>ChemSusChem</i> , 2011, 4, 357-361.	6.8	161
22	Production of liquid hydrocarbon transportation fuels by oligomerization of biomass-derived C9 alkenes. <i>Green Chemistry</i> , 2010, 12, 992.	9.0	150
23	Potassium leaching during triglyceride transesterification using $\text{K}/\text{Al}_2\text{O}_3$ catalysts. <i>Catalysis Communications</i> , 2007, 8, 2074-2080.	3.3	149
24	Effects of $\hat{\gamma}$ -valerolactone in hydrolysis of lignocellulosic biomass to monosaccharides. <i>Green Chemistry</i> , 2014, 16, 4659-4662.	9.0	149
25	Heterogeneous transesterification processes by using CaO supported on zinc oxide as basic catalysts. <i>Catalysis Today</i> , 2010, 149, 281-287.	4.4	140
26	Advances in catalytic routes for the production of carboxylic acids from biomass: a step forward for sustainable polymers. <i>Chemical Society Reviews</i> , 2020, 49, 5704-5771.	38.1	134
27	Production of Biofuels from Cellulose and Corn Stover Using Alkylphenol Solvents. <i>ChemSusChem</i> , 2011, 4, 1078-1081.	6.8	130
28	A strategy for the simultaneous catalytic conversion of hemicellulose and cellulose from lignocellulosic biomass to liquid transportation fuels. <i>Green Chemistry</i> , 2014, 16, 653-661.	9.0	124
29	Selective Production of Levulinic Acid from Furfuryl Alcohol in THF Solvent Systems over H-ZSM-5. <i>ACS Catalysis</i> , 2015, 5, 3354-3359.	11.2	116
30	Production of Furfural from Lignocellulosic Biomass Using Beta Zeolite and Biomass-Derived Solvent. <i>Topics in Catalysis</i> , 2013, 56, 1775-1781.	2.8	111
31	Selective Conversion of Cellulose to Hydroxymethylfurfural in Polar Aprotic Solvents. <i>ChemCatChem</i> , 2014, 6, 2229-2234.	3.7	110
32	Interconversion between $\hat{\gamma}$ -valerolactone and pentenoic acid combined with decarboxylation to form butene over silica/alumina. <i>Journal of Catalysis</i> , 2011, 281, 290-299.	6.2	102
33	Biodiesel preparation using Li/CaO catalysts: Activation process and homogeneous contribution. <i>Catalysis Today</i> , 2009, 143, 167-171.	4.4	91
34	A lignocellulosic ethanol strategy via nonenzymatic sugar production: Process synthesis and analysis. <i>Bioresource Technology</i> , 2015, 182, 258-266.	9.6	91
35	Surface chemical promotion of Ca oxide catalysts in biodiesel production reaction by the addition of monoglycerides, diglycerides and glycerol. <i>Journal of Catalysis</i> , 2010, 276, 229-236.	6.2	79
36	A sulfuric acid management strategy for the production of liquid hydrocarbon fuels via catalytic conversion of biomass-derived levulinic acid. <i>Energy and Environmental Science</i> , 2012, 5, 9690.	30.8	72

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37	Transesterification of Triglycerides by CaO: Increase of the Reaction Rate by Biodiesel Addition. <i>Energy & Fuels</i> , 2009, 23, 2259-2263.	5.1	71
38	A highly selective route to linear alpha olefins from biomass-derived lactones and unsaturated acids. <i>Chemical Communications</i> , 2013, 49, 7040.	4.1	69
39	Enhanced Furfural Yields from Xylose Dehydration in the β -Valerolactone/Water Solvent System at Elevated Temperatures. <i>ChemSusChem</i> , 2018, 11, 2321-2331.	6.8	69
40	Deactivation of organosulfonic acid functionalized silica catalysts during biodiesel synthesis. <i>Applied Catalysis B: Environmental</i> , 2010, 95, 279-287.	20.2	66
41	New catalytic strategies for γ -diols production from lignocellulosic biomass. <i>Faraday Discussions</i> , 2017, 202, 247-267.	3.2	61
42	Improving economics of lignocellulosic biofuels: An integrated strategy for coproducing 1,5-pentanediol and ethanol. <i>Applied Energy</i> , 2018, 213, 585-594.	10.1	60
43	Production of butene oligomers as transportation fuels using butene for esterification of levulinic acid from lignocellulosic biomass: process synthesis and techno-economic evaluation. <i>Green Chemistry</i> , 2012, 14, 3289.	9.0	59
44	Improving the production of maleic acid from biomass: TS-1 catalysed aqueous phase oxidation of furfural in the presence of β -valerolactone. <i>Green Chemistry</i> , 2018, 20, 2845-2856.	9.0	58
45	Polarity of the acid chain of esters and transesterification activity of acid catalysts. <i>Journal of Catalysis</i> , 2009, 262, 18-26.	6.2	55
46	Relevance of the physicochemical properties of CaO catalysts for the methanolysis of triglycerides to obtain biodiesel. <i>Catalysis Today</i> , 2010, 158, 114-120.	4.4	47
47	Effects of Water on the Copper-Catalyzed Conversion of Hydroxymethylfurfural in Tetrahydrofuran. <i>ChemSusChem</i> , 2015, 8, 3983-3986.	6.8	47
48	Process systems engineering studies for the synthesis of catalytic biomass-to-fuels strategies. <i>Computers and Chemical Engineering</i> , 2015, 81, 57-69.	3.8	45
49	GVL pulping facilitates nanocellulose production from woody biomass. <i>Green Chemistry</i> , 2019, 21, 5316-5325.	9.0	33
50	A Solvent-Free Synthesis of Lignin-Derived Renewable Carbon with Tunable Porosity for Supercapacitor Electrodes. <i>ChemSusChem</i> , 2018, 11, 2953-2959.	6.8	32
51	Catalytic transfer hydrogenation of maleic acid with stoichiometric amounts of formic acid in aqueous phase: paving the way for more sustainable succinic acid production. <i>Green Chemistry</i> , 2020, 22, 1859-1872.	9.0	32
52	Solvent-Enabled Nonenzymatic Sugar Production from Biomass for Chemical and Biological Upgrading. <i>ChemSusChem</i> , 2015, 8, 1317-1322.	6.8	30
53	Activation of Amberlyst-70 for Alkene Oligomerization in Hydrophobic Media. <i>Topics in Catalysis</i> , 2011, 54, 447-457.	2.8	15
54	Enhanced Furfural Yields from Xylose Dehydration in the β -Valerolactone/Water Solvent System at Elevated Temperatures. <i>ChemSusChem</i> , 2018, 11, 2266-2266.	6.8	4

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55	Loss of NO storage capacity of Pt-Ba/Al ₂ O ₃ catalysts due to incorporation of phosphorous. Catalysis Communications, 2008, 9, 327-332.	3.3	3
56	Past, Current Situation and Future Technologies of Furfural Production. Sustainable Chemistry Series, 2018, , 31-52.	0.1	3
57	Synthesis of catalytic biomass-to-fuels strategies. Computer Aided Chemical Engineering, 2014, 34, 615-620.	0.5	1
58	Levulinic Acid and γ -Valerolactone. Sustainable Chemistry Series, 2018, , 169-190.	0.1	0