Elmar Villota

List of Publications by Year
in descending order

21 papers	1,003 citations	516710 16 h-index	794594 19 g-index
21 all docs	21 docs citations	21 times ranked	942 citing authors

#	Article	IF	Citations
1	Jet fuel production from waste plastics via catalytic pyrolysis with activated carbons. Applied Energy, 2019, 251, 113337.	10.1	191
2	Production of renewable alkyl-phenols from catalytic pyrolysis of Douglas fir sawdust over biomass-derived activated carbons. Applied Energy, 2018, 220, 426-436.	10.1	104
3	Renewable High-Purity Mono-Phenol Production from Catalytic Microwave-Induced Pyrolysis of Cellulose over Biomass-Derived Activated Carbon Catalyst. ACS Sustainable Chemistry and Engineering, 2018, 6, 5349-5357.	6.7	91
4	From glucose-based carbohydrates to phenol-rich bio-oils integrated with syngas production <i>via</i> catalytic pyrolysis over an activated carbon catalyst. Green Chemistry, 2018, 20, 3346-3358.	9.0	87
5	Synthesis and characterization of sulfonated activated carbon as a catalyst for bio-jet fuel production from biomass and waste plastics. Bioresource Technology, 2020, 297, 122411.	9.6	75
6	New Insight into the Mechanism of the Hydrogen Evolution Reaction on MoP(001) from First Principles. ACS Applied Materials & Interfaces, 2018, 10, 20429-20439.	8.0	67
7	Optimizing Microwave-Assisted Pyrolysis of Phosphoric Acid-Activated Biomass: Impact of Concentration on Heating Rate and Carbonization Time. ACS Sustainable Chemistry and Engineering, 2018, 6, 1318-1326.	6.7	59
8	Renewable jet-fuel range hydrocarbons production from co-pyrolysis of lignin and soapstock with the activated carbon catalyst. Waste Management, 2019, 88, 1-9.	7.4	49
9	Enhancing jet fuel range hydrocarbons production from catalytic co-pyrolysis of Douglas fir and low-density polyethylene over bifunctional activated carbon catalysts. Energy Conversion and Management, 2020, 211, 112757.	9.2	47
10	Enhanced production of renewable aromatic hydrocarbons for jet-fuel from softwood biomass and plastic waste using hierarchical ZSM-5 modified with lignin-assisted re-assembly. Energy Conversion and Management, 2021, 236, 114020.	9.2	42
11	Process design and economics for the conversion of lignocellulosic biomass into jet fuel range cycloalkanes. Energy, 2018, 154, 289-297.	8.8	38
12	Microwave-Assisted Activation of Waste Cocoa Pod Husk by H₃PO₄ and KOHâ€"Comparative Insight into Textural Properties and Pore Development. ACS Omega, 2019, 4, 7088-7095.	3.5	36
13	One-step synthesis of biomass-based sulfonated carbon catalyst by direct carbonization-sulfonation for organosolv delignification. Bioresource Technology, 2021, 319, 124194.	9.6	27
14	Renewable bio-phenols from<i>in situ</i>and<i>ex situ</i>catalytic pyrolysis of<i>Douglas fir</i>pellet over biobased activated carbons. Sustainable Energy and Fuels, 2018, 2, 894-904.	4.9	23
15	A novel production of phase-divided jet-fuel-range hydrocarbons and phenol-enriched chemicals from catalytic co-pyrolysis of lignocellulosic biomass with low-density polyethylene over carbon catalysts. Sustainable Energy and Fuels, 2020, 4, 3687-3700.	4.9	20
16	Lignin-Mediated Preparation of Hierarchical ZSM-5 Catalysts and Their Effects in the Catalytic Co-pyrolysis of Softwood Biomass and Low-Density Polyethylene Mixtures. ACS Sustainable Chemistry and Engineering, 2021, 9, 12602-12613.	6.7	18
17	High yield production of nanocrystalline cellulose by microwave-assisted dilute-acid pretreatment combined with enzymatic hydrolysis. Chemical Engineering and Processing: Process Intensification, 2021, 160, 108292.	3.6	14
18	Optimization of delignification from Douglas fir sawdust by alkaline pretreatment with sodium hydroxide and its effect on structural and chemical properties of lignin and pyrolysis products. Bioresource Technology Reports, 2019, 8, 100339.	2.7	11

#	Article	IF	Citations
19	From Douglas fir to renewable H₂-enriched syngas <i>via ex situ</i> catalytic pyrolysis over metal nanoparticlesâ€“nanocellulose derived carbon catalysts. Sustainable Energy and Fuels, 2020, 4, 1084-1087.	4.9	4
20	The effect of canola protein extraction conditions on the kinetic parameters of a two-site extraction model. , 2017, , .		0
21	<i>Development of meso-microstructure in MFI zeolites via nanocrystalline cellulose templating for conversion of lignocellulosic biomass to aromatic hydrocarbons</i>. , 2020, , .		0