Capucine Dupont

List of Publications by Year
in descending order

49 papers	2,162 citations	218677 26 h-index	223800 46 g-index
50 all docs	50 docs citations	50 times ranked	2269 citing authors

#	Article	IF	Citations
1	Kinetic modelling of steam gasification of various woody biomass chars: Influence of inorganic elements. Bioresource Technology, 2011, 102, 9743-9748.	9.6	162
2	Heat capacity measurements of various biomass types and pyrolysis residues. Fuel, 2014, 115, 644-651.	6.4	151
3	Study about the kinetic processes of biomass steam gasification. Fuel, 2007, 86, 32-40.	6.4	139
4	Utilization of Torrefied Coffee Grounds as Reinforcing Agent To Produce High-Quality Biodegradable PBAT Composites for Food Packaging Applications. ACS Sustainable Chemistry and Engineering, 2017, 5, 1906-1916.	6.7	132
5	Thermogravimetric study on the influence of structural, textural and chemical properties of biomass chars on CO2 gasification reactivity. Energy, 2015, 88, 703-710.	8.8	119
6	Effect of particle size and temperature on woody biomass fast pyrolysis at high temperature (1000â€"1400Â°C). Fuel, 2012, 97, 202-210.	6.4	110
7	How inorganic elements of biomass influence char steam gasification kinetics. Energy, 2016, 109, 430-435.	8.8	103
8	Biomass pyrolysis experiments in an analytical entrained flow reactor between 1073K and 1273K. Fuel, 2008, 87, 1155-1164.	6.4	91
9	Biomass pyrolysis: Kinetic modelling and experimental validation under high temperature and flash heating rate conditions. Journal of Analytical and Applied Pyrolysis, 2009, 85, 260-267.	5.5	90
10	Comparison of steam gasification reactivity of algal and lignocellulosic biomass: Influence of inorganic elements. Bioresource Technology, 2014, 164, 347-353.	9.6	85
11	CO2 gasification of woody biomass chars: The influence of KÂand Si on char reactivity. Comptes Rendus Chimie, 2016, 19, 457-465.	0.5	81
12	Volatile species release during torrefaction of wood and its macromolecular constituents: Part 1 â€" Experimental study. Energy, 2014, 72, 180-187.	8.8	70
13	Biochars from various biomass types as precursors for hard carbon anodes in sodium-ion batteries. Biomass and Bioenergy, 2018, 117, 32-37.	5.7	64
14	Torrefaction modelling for lignocellulosic biomass conversion processes. Energy, 2014, 70, 58-67.	8.8	60
15	Possibilities to improve soil aggregate stability using biochars derived from various biomasses through slow pyrolysis, hydrothermal carbonization, or torrefaction. Geoderma, 2019, 344, 40-49.	5.1	57
16	Performance of a compost and biochar packed biofilter for gas-phase hydrogen sulfide removal. Bioresource Technology, 2019, 273, 581-591.	9.6	52
17	Beneficial role of biochar addition on the anaerobic digestion of food waste: A systematic and critical review of the operational parameters and mechanisms. Journal of Environmental Management, 2021, 290, 112537.	7.8	47
18	Study of solid chemical evolution in torrefaction of different biomasses through solid-state 13C cross-polarization/magic angle spinning NMR (nuclear magnetic resonance) and TGA (thermogravimetric analysis). Energy, 2016, 97, 381-390.	8.8	44

#	Article	IF	Citations
19	Volatile species release during torrefaction of biomass and its macromolecular constituents: Part 2 â€" Modeling study. Energy, 2014, 72, 188-194.	8.8	43
20	Characterization of char and soot from millimetric wood particles pyrolysis in a drop tube reactor between 800Â°C and 1400Â°C. Fuel, 2014, 121, 216-224.	6.4	36
21	Impact of biomass diversity on torrefaction: Study of solid conversion and volatile species formation through an innovative TGA-GC/MS apparatus. Biomass and Bioenergy, 2018, 119, 43-53.	5.7	36
22	Towards understanding the role of K during biomass steam gasification. Fuel, 2020, 282, 118806.	6.4	32
23	Experimental study on fast pyrolysis of free-falling millimetric biomass particles between 800 Â°C and 1000 Â°C. Fuel, 2013, 106, 61-66.	6.4	30
24	Short rotation forestry feedstock: Influence of particle size segregation on biomass properties. Fuel, 2013, 111, 820-828.	6.4	30
25	Characterisation of the Most Representative Agricultural and Forestry Biomasses in France for Gasification. Waste and Biomass Valorization, 2015, 6, 515-526.	3.4	30
26	Unraveling the Properties of Biomass-Derived Hard Carbons upon Thermal Treatment for a Practical Application in Na-Ion Batteries. Energies, 2020, 13, 3513.	3.1	30
27	An extensive characterization of various treated waste wood for assessment of suitability with combustion process. Fuel, 2017, 202, 118-128.	6.4	29
28	Torrefaction of cellulose, hemicelluloses and lignin extracted from woody and agricultural biomass in TGA-GC/MS: Linking production profiles of volatile species to biomass type and macromolecular composition. Industrial Crops and Products, 2022, 176, 114350.	5.2	26
29	River driftwood pretreated via hydrothermal carbonization as a sustainable source of hard carbon for Na-ion battery anodes. Journal of Environmental Chemical Engineering, 2021, 9, 106604.	6.7	15
30	Assessing the impact of woody and agricultural biomass variability on its behaviour in torrefaction through Principal Component Analysis. Biomass and Bioenergy, 2020, 134, 105474.	5.7	14
31	Thermodynamic Study of the Alkali Release Behavior during Steam Gasification of Several Biomasses. Energy & Fuels, 2015, 29, 7242-7253.	5.1	13
32	Effect of process parameters and biomass composition on flat-die pellet production from underexploited forest and agricultural biomass. Fuel, 2021, 302, 121076.	6.4	13
33	Impact of the biomass precursor composition in the hard carbon properties and performance for application in a Na-ion battery. Fuel Processing Technology, 2022, 231, 107223.	7.2	13
34	Physicochemical Approach To Blend Biomass. Energy & Fuels, 2019, 33, 5820-5828.	5.1	11
35	The Influence of Char Preparation and Biomass Type on Char Steam Gasification Kinetics. Energies, 2018, 11, 2126.	3.1	10
36	Assessing the suitability of recovering shrub biowaste involved in wildland fires in the South of Europe through torrefaction mobile units. Journal of Environmental Management, 2019, 236, 551-560.	7.8	10

#	Article	IF	Citations
37	Understanding the torrefaction of woody and agricultural biomasses through their extracted macromolecular components. Part 1: Experimental thermogravimetric solid mass loss. Energy, 2020, 205, 118067.	8.8	10
38	Pelleting torrefied biomass at pilot-scale â€“ Quality and implications for co-firing. Renewable Energy, 2021, 178, 766-774.	8.9	10
39	Fluorination/Torrefaction Combination to Further Improve the Hydrophobicity of Wood. Macromolecular Chemistry and Physics, 2019, 220, 1900041.	2.2	9
40	Bioenergy II: Suitability of Wood Chips and Various Biomass Types for Use in Plant of BtL Production by Gasification. International Journal of Chemical Reactor Engineering, 2010, 8, .	1.1	8
41	Wide-angle X-ray scattering combined with pair distribution function analysis of pyrolyzed wood. Journal of Applied Crystallography, 2019, 52, 60-71.	4.5	8
42	Influence of Particle Size, Reactor Temperature and Gas Phase Reactions on Fast Pyrolysis of Beech Wood. International Journal of Chemical Reactor Engineering, 2010, 8, .	1.1	7
43	Thermodynamic equilibrium approach to predict the inorganic interactions of ash from biomass and their mixtures: A critical assessment. Fuel Processing Technology, 2022, 235, 107369.	7.2	7
44	Biomass steam gasification kinetics: relative impact of char physical properties vs. inorganic composition. Biomass Conversion and Biorefinery, 2022, 12, 3475-3490.	4.6	6
45	Impact of cellulose properties on its behavior in torrefaction: commercial microcrystalline cellulose versus cotton linters and celluloses extracted from woody and agricultural biomass. Cellulose, 2021, 28, 4761-4779.	4.9	6
46	Understanding the torrefaction of woody and agricultural biomasses through their extracted macromolecular components. Part 2: Torrefaction model. Energy, 2020, 210, 118451.	8.8	5
47	Evaluating river driftwood as a feedstock for biochar production. Waste Management, 2021, 134, 197-205.	7.4	4
48	Will mixing rule or chemical reactions dominate the ash behavior of biomass mixtures in combustion processes on laboratory and pilot scales?. Fuel, 2022, 308, 122050.	6.4	4
49	Condensable and Liquid Compounds from Biomass and Waste Thermal Degradation. , 2020, , 1173-1210.		0