Beatriz Fidalgo

List of Publications by Citations

47 papers	2,507 citations	26 h-index	47 g-index
47 ext. papers	2,795 ext. citations	7.5 avg, IF	5.04 L-index

#	Paper	IF	Citations
47	Microwave heating processes involving carbon materials. *Fuel Processing Technology*, **2010**, 91, 1-8	7.2	685
46	Microwave-assisted dry reforming of methane. *International Journal of Hydrogen Energy*, **2008**, 33, 4337-4344	4.7	176
45	Bio-syngas production with low concentrations of CO2 and CH4 from microwave-induced pyrolysis of wet and dried sewage sludge. *Chemosphere*, **2008**, 70, 397-403	8.4	134
44	Microwave-assisted catalytic decomposition of methane over activated carbon for CO2-free hydrogen production. *International Journal of Hydrogen Energy*, **2007**, 32, 4792-4799	6.7	99
43	Pyrolysis of fast-growing aquatic biomass -Lemna minor (duckweed): Characterization of pyrolysis products. *Bioresource Technology*, **2010**, 101, 8424-8	11	98
42	Production and characterization of Lemna minor bio-char and its catalytic application for biogas reforming. *Biomass and Bioenergy*, **2012**, 42, 123-131	5.3	87
41	Biogas to Syngas by Microwave-Assisted Dry Reforming in the Presence of Char. *Energy & Fuels* , **2007**, 21, 2066-2071	4.1	87
40	Dry reforming of coke oven gases over activated carbon to produce syngas for methanol synthesis. *Fuel*, **2010**, 89, 2897-2902	7.1	85
39	CO2 reforming of coke oven gas over a Ni/Al2O3 catalyst to produce syngas for methanol synthesis. *Fuel*, **2012**, 94, 197-203	7.1	78
38	Carbon Materials as Catalysts for Decomposition and CO2 Reforming of Methane: A Review. *Chinese Journal of Catalysis*, **2011**, 32, 207-216	11.3	71
37	Influence of temperature and particle size on structural characteristics of chars from Beechwood pyrolysis. *Journal of Analytical and Applied Pyrolysis*, **2018**, 130, 127-134	6	50
36	Physico-chemical properties of excavated plastic from landfill mining and current recycling routes. *Waste Management*, **2018**, 76, 55-67	8.6	49
35	Mixtures of carbon and Ni/Al2O3 as catalysts for the microwave-assisted CO2 reforming of CH4. *Fuel Processing Technology*, **2011**, 92, 1531-1536	7.2	49
34	Synthesis of carbon-supported nickel catalysts for the dry reforming of CH4. *Fuel Processing Technology*, **2010**, 91, 765-769	7.2	48
33	Synergetic effect of a mixture of activated carbon+Ni/Al2O3 used as catalysts for the CO2 reforming of CH4. *Applied Catalysis A: General*, **2010**, 390, 78-83	5.1	43
32	Techno-economic analysis of biofuel production via bio-oil zeolite upgrading: An evaluation of two catalyst regeneration systems. *Biomass and Bioenergy*, **2017**, 98, 182-193	5.3	41
31	Energy recovery from human faeces via gasification: A thermodynamic equilibrium modelling approach. *Energy Conversion and Management*, **2016**, 118, 364-376	10.6	39

30	An experimental investigation of the combustion performance of human faeces. *Fuel*, **2016**, 184, 780-791	7.1	39
29	Study of energy consumption in a laboratory pilot plant for the microwave-assisted CO2 reforming of CH4. *Fuel Processing Technology*, **2012**, 95, 55-61	7.2	37
28	Microwave-assisted pyrolysis of CH4/N2 mixtures over activated carbon. *Journal of Analytical and Applied Pyrolysis*, **2008**, 82, 158-162	6	36
27	Kinetic analysis of vacuum residue hydrocracking in early reaction stages. *Fuel*, **2014**, 117, 408-414	7.1	35
26	Influence of porosity and surface groups on the catalytic activity of carbon materials for the microwave-assisted CO2 reforming of CH4. *Fuel*, **2010**, 89, 4002-4007	7.1	35
25	Effect of H2S on carbon-catalyzed methane decomposition and CO2 reforming reactions. *International Journal of Hydrogen Energy*, **2012**, 37, 14187-14194	6.7	29
24	Thermodynamic analysis of a gamma type Stirling engine in an energy recovery system. *Energy Conversion and Management*, **2018**, 165, 528-540	10.6	28
23	Growth of nanofilaments on carbon-based materials from microwave-assisted decomposition of CH4. *Applied Surface Science*, **2008**, 254, 3553-3557	6.7	28
22	CFD modelling of particle shrinkage in a fluidized bed for biomass fast pyrolysis with quadrature method of moment. *Fuel Processing Technology*, **2017**, 164, 51-68	7.2	26
21	Conceptual energy and water recovery system for self-sustained nano membrane toilet. *Energy Conversion and Management*, **2016**, 126, 352-361	10.6	26
20	Numerical investigation of microwave-assisted pyrolysis of lignin. *Fuel Processing Technology*, **2017**, 156, 473-484	7.2	22
19	The effect of syngas on tar quality and quantity in pyrolysis of a typical South African inertinite-rich coal. *Fuel*, **2014**, 134, 90-96	7.1	22
18	Mechanism of deoxygenation in anisole decomposition over single-metal loaded HZSM-5: Experimental study. *Chemical Engineering Journal*, **2018**, 336, 211-222	14.7	22
17	Comparative evaluation of GHG emissions from the use of Miscanthus for bio-hydrocarbon production via fast pyrolysis and bio-oil upgrading. *Applied Energy*, **2016**, 176, 22-33	10.7	21
16	Chars from agricultural wastes as greener fuels for electric arc furnaces. *Journal of Analytical and Applied Pyrolysis*, **2015**, 113, 274-280	6	19
15	Mechanism of hydrodeoxygenation (HDO) in anisole decomposition over metal loaded Brønsted acid sites: Density Functional Theory (DFT) study. *Molecular Catalysis*, **2018**, 454, 30-37	3.3	19
14	Deoxygenation in anisole decomposition over bimetallic catalysts supported on HZSM-5. *Fuel*, **2019**, 238, 257-266	7.1	18
13	Heat integration for bio-oil hydroprocessing coupled with aqueous phase steam reforming. *Chemical Engineering Research and Design*, **2016**, 107, 73-80	5.5	14

12	Carbon nanofilament synthesis by the decomposition of CH4/CO2 under microwave heating. *Carbon*, **2007**, 45, 1706-1709	10.4	14
11	Non-isothermal thermogravimetric kinetic analysis of the thermochemical conversion of human faeces. *Renewable Energy*, **2019**, 132, 1177-1184	8.1	14
10	Conceptual environmental impact assessment of a novel self-sustained sanitation system incorporating a quantitative microbial risk assessment approach. *Science of the Total Environment*, **2018**, 639, 657-672	10.2	13
9	Probabilistic performance assessment of complex energy process systems - The case of a self-sustained sanitation system. *Energy Conversion and Management*, **2018**, 163, 74-85	10.6	12
8	Production of bio-syngas and bio-hydrogen via gasification **2016**, 431-494		12
7	Design and commissioning of a multi-mode prototype for thermochemical conversion of human faeces. *Energy Conversion and Management*, **2018**, 163, 507-524	10.6	11
6	Mixtures of Steel-Making Slag and Carbons as Catalyst for Microwave-Assisted Dry Reforming of CH4. *Chinese Journal of Catalysis*, **2012**, 33, 1115-1118	11.3	11
5	Mechanism of transmethylation in anisole decomposition over HZSM-5: Experimental study. *Journal of Analytical and Applied Pyrolysis*, **2016**, 122, 323-331	6	7
4	Numerical analysis of microwave assisted thermocatalytic decomposition of methane. *International Journal of Hydrogen Energy*, **2017**, 42, 4061-4068	6.7	6
3	The mechanism of transmethylation in anisole decomposition over Brønsted acid sites: density functional theory (DFT) study. *Sustainable Energy and Fuels*, **2017**, 1, 1788-1794	5.8	6
2	Conventional and microwave-heated oxygen pulsing techniques on metal-doped activated carbons. *Journal of Porous Materials*, **2014**, 21, 81-89	2.4	5
1	Non-isothermal drying kinetics of human feces. *Drying Technology*, **2020**, 38, 1819-1827	2.6	1