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List of Publications by Year
in descending order

78 papers	7,919 citations	36203 51 h-index	71532 76 g-index
78 all docs	78 docs citations	78 times ranked	4964 citing authors

#	Article	IF	Citations
1	Thermochemical routes for the valorization of waste polyolefinic plastics to produce fuels and chemicals. A review. Renewable and Sustainable Energy Reviews, 2017, 73, 346-368.	8.2	557
2	Recent advances in the gasification of waste plastics. A critical overview. Renewable and Sustainable Energy Reviews, 2018, 82, 576-596.	8.2	506
3	Evaluation of thermochemical routes for hydrogen production from biomass: A review. Energy Conversion and Management, 2018, 165, 696-719.	4.4	341
4	Influence of temperature on biomass pyrolysis in a conical spouted bed reactor. Resources, Conservation and Recycling, 2012, 59, 23-31.	5.3	281
5	Bio-oil production from rice husk fast pyrolysis in a conical spouted bed reactor. Fuel, 2014, 128, 162-169.	3.4	263
6	Kinetic study of lignocellulosic biomass oxidative pyrolysis. Fuel, 2012, 95, 305-311.	3.4	207
7	Catalytic pyrolysis of HDPE in continuous mode over zeolite catalysts in a conical spouted bed reactor. Journal of Analytical and Applied Pyrolysis, 2009, 85, 345-351.	2.6	189
8	Fast co-pyrolysis of sewage sludge and lignocellulosic biomass in a conical spouted bed reactor. Fuel, 2015, 159, 810-818.	3.4	188
9	Fast characterization of biomass fuels by thermogravimetric analysis (TGA). Fuel, 2015, 140, 744-751.	3.4	173
10	Sewage sludge valorization by flash pyrolysis in a conical spouted bed reactor. Chemical Engineering Journal, 2015, 273, 173-183.	6.6	161
11	Cracking of High Density Polyethylene Pyrolysis Waxes on HZSM-5 Catalysts of Different Acidity. Industrial & Engineering Chemistry Research, 2013, 52, 10637-10645.	1.8	157
12	Design and operation of a conical spouted bed reactor pilot plant (25kg/h) for biomass fast pyrolysis. Fuel Processing Technology, 2013, 112, 48-56.	3.7	148
13	Styrene recovery from polystyrene by flash pyrolysis in a conical spouted bed reactor. Waste Management, 2015, 45, 126-133.	3.7	147
14	Syngas from steam gasification of polyethylene in a conical spouted bed reactor. Fuel, 2013, 109, 461-469.	3.4	146
15	Influence of operating conditions on the steam gasification of biomass in a conical spouted bed reactor. Chemical Engineering Journal, 2014, 237, 259-267.	6.6	143
16	Waste truck-tyre processing by flash pyrolysis in a conical spouted bed reactor. Energy Conversion and Management, 2017, 142, 523-532.	4.4	141
17	Upgrading the rice husk char obtained by flash pyrolysis for the production of amorphous silica and high quality activated carbon. Bioresource Technology, 2014, 170, 132-137.	4.8	134
18	Coking and sintering progress of a Ni supported catalyst in the steam reforming of biomass pyrolysis volatiles. Applied Catalysis B: Environmental, 2018, 233, 289-300.	10.8	134

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19	Light olefins from HDPE cracking in a two-step thermal and catalytic process. Chemical Engineering Journal, 2012, 207-208, 27-34.	6.6	128
20	Biomass Oxidative Flash Pyrolysis: Autothermal Operation, Yields and Product Properties. Energy & Fuels, 2012, 26, 1353-1362.	2.5	125
21	Operating Conditions for the Pyrolysis of Poly-(ethylene terephthalate) in a Conical Spouted-Bed Reactor. Industrial & Engineering Chemistry Research, 2010, 49, 2064-2069.	1.8	121
22	Influence of Tire Formulation on the Products of Continuous Pyrolysis in a Conical Spouted Bed Reactor. Energy & Fuels, 2009, 23, 5423-5431.	2.5	114
23	Production of Light Olefins from Polyethylene in a Two-Step Process: Pyrolysis in a Conical Spouted Bed and Downstream High-Temperature Thermal Cracking. Industrial & Engineering Chemistry Research, 2012, 51, 13915-13923.	1.8	114
24	Hydrogen production from biomass by continuous fast pyrolysis and in-line steam reforming. RSC Advances, 2016, 6, 25975-25985.	1.7	114
25	Effect of polyethylene co-feeding in the steam gasification of biomass in a conical spouted bed reactor. Fuel, 2015, 153, 393-401.	3.4	112
26	Hydrogen-rich gas production by continuous pyrolysis and in-line catalytic reforming of pine wood waste and HDPE mixtures. Energy Conversion and Management, 2017, 136, 192-201.	4.4	109
27	Influence of FCC catalyst steaming on HDPE pyrolysis product distribution. Journal of Analytical and Applied Pyrolysis, 2009, 85, 359-365.	2.6	105
28	Valorization of citrus wastes by fast pyrolysis in a conical spouted bed reactor. Fuel, 2018, 224, 111-120.	3.4	103
29	Vacuum Pyrolysis of Waste Tires by Continuously Feeding into a Conical Spouted Bed Reactor. Industrial & Engineering Chemistry Research, 2010, 49, 8990-8997.	1.8	102
30	Characterization of the bio-oil obtained by fast pyrolysis of sewage sludge in a conical spouted bed reactor. Fuel Processing Technology, 2016, 149, 169-175.	3.7	101
31	Steam gasification of biomass in a conical spouted bed reactor with olivine and Î³-alumina as primary catalysts. Fuel Processing Technology, 2013, 116, 292-299.	3.7	100
32	Improving bio-oil properties through the fast co-pyrolysis of lignocellulosic biomass and waste tyres. Waste Management, 2019, 85, 385-395.	3.7	99
33	Physical Activation of Rice Husk Pyrolysis Char for the Production of High Surface Area Activated Carbons. Industrial & Engineering Chemistry Research, 2015, 54, 7241-7250.	1.8	96
34	Stability of different Ni supported catalysts in the in-line steam reforming of biomass fast pyrolysis volatiles. Applied Catalysis B: Environmental, 2019, 242, 109-120.	10.8	95
35	Evaluation of the properties of tyre pyrolysis oils obtained in a conical spouted bed reactor. Energy, 2017, 128, 463-474.	4.5	94
36	Influence of the support on Ni catalysts performance in the in-line steam reforming of biomass fast pyrolysis derived volatiles. Applied Catalysis B: Environmental, 2018, 229, 105-113.	10.8	88

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37	HDPE pyrolysis-steam reforming in a tandem spouted bed-fixed bed reactor for H2 production. Journal of Analytical and Applied Pyrolysis, 2015, 116, 34-41.	2.6	83
38	Steam activation of pyrolytic tyre char at different temperatures. Journal of Analytical and Applied Pyrolysis, 2009, 85, 539-543.	2.6	80
39	Performance of a conical spouted bed pilot plant for bio-oil production by poplar flash pyrolysis. Fuel Processing Technology, 2015, 137, 283-289.	3.7	80
40	Effect of Vacuum on Lignocellulosic Biomass Flash Pyrolysis in a Conical Spouted Bed Reactor. Energy & Fuels, 2011, 25, 3950-3960.	2.5	79
41	Recycling poly-(methyl methacrylate) by pyrolysis in a conical spouted bed reactor. Chemical Engineering and Processing: Process Intensification, 2010, 49, 1089-1094.	1.8	77
42	Role of temperature on gasification performance and tar composition in a fountain enhanced conical spouted bed reactor. Energy Conversion and Management, 2018, 171, 1589-1597.	4.4	75
43	Role of operating conditions in the catalyst deactivation in the in-line steam reforming of volatiles from biomass fast pyrolysis. Fuel, 2018, 216, 233-244.	3.4	73
44	Behaviour of primary catalysts in the biomass steam gasification in a fountain confined spouted bed. Fuel, 2019, 253, 1446-1456.	3.4	73
45	Fast pyrolysis of eucalyptus waste in a conical spouted bed reactor. Bioresource Technology, 2015, 194, 225-232.	4.8	69
46	Effect of CeO2 and MgO promoters on the performance of a Ni/Al2O3 catalyst in the steam reforming of biomass pyrolysis volatiles. Fuel Processing Technology, 2020, 198, 106223.	3.7	68
47	Hydrogen Production by High Density Polyethylene Steam Gasification and In-Line Volatile Reforming. Industrial & Engineering Chemistry Research, 2015, 54, 9536-9544.	1.8	64
48	Flash pyrolysis of forestry residues from the Portuguese Central Inland Region within the framework of the BioREFINA-Ter project. Bioresource Technology, 2013, 129, 512-518.	4.8	62
49	Catalytic steam reforming of biomass fast pyrolysis volatiles over Niâ€"Co bimetallic catalysts. Journal of Industrial and Engineering Chemistry, 2020, 91, 167-181.	2.9	62
50	Assessment of steam gasification kinetics of the char from lignocellulosic biomass in a conical spouted bed reactor. Energy, 2016, 107, 493-501.	4.5	60
51	Assessment of a conical spouted with an enhanced fountain bed for biomass gasification. Fuel, 2017, 203, 825-831.	3.4	59
52	On the pyrolysis of different microalgae species in a conical spouted bed reactor: Bio-fuel yields and characterization. Bioresource Technology, 2020, 311, 123561.	4.8	52
53	Preparation of adsorbents from sewage sludge pyrolytic char by carbon dioxide activation. Chemical Engineering Research and Design, 2016, 103, 76-86.	2.7	51
54	Advantages of confining the fountain in a conical spouted bed reactor for biomass steam gasification. Energy, 2018, 153, 455-463.	4.5	51

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55	Evolution of biomass char features and their role in the reactivity during steam gasification in a conical spouted bed reactor. Energy Conversion and Management, 2019, 181, 214-222.	4.4	51
56	Effect of La2O3 promotion on a Ni/Al2O3 catalyst for H2 production in the in-line biomass pyrolysis-reforming. Fuel, 2020, 262, 116593.	3.4	51
57	Analysis of hydrogen production potential from waste plastics by pyrolysis and in line oxidative steam reforming. Fuel Processing Technology, 2022, 225, 107044.	3.7	50
58	Regenerability of a Ni catalyst in the catalytic steam reforming of biomass pyrolysis volatiles. Journal of Industrial and Engineering Chemistry, 2018, 68, 69-78.	2.9	43
59	Drying of Biomass in a Conical Spouted Bed with Different Types of Internal Devices. Drying Technology, 2012, 30, 207-216.	1.7	42
60	Steam reforming of plastic pyrolysis model hydrocarbons and catalyst deactivation. Applied Catalysis A: General, 2016, 527, 152-160.	2.2	42
61	Kinetic modeling and experimental validation of biomass fast pyrolysis in a conical spouted bed reactor. Chemical Engineering Journal, 2019, 373, 677-686.	6.6	42
62	Kinetic Study of Carbon Dioxide Gasification of Rice Husk Fast Pyrolysis Char. Energy & Fuels, 2015, 29, 3198-3207.	2.5	40
63	Fe/olivine as primary catalyst in the biomass steam gasification in a fountain confined spouted bed reactor. Journal of Industrial and Engineering Chemistry, 2021, 99, 364-379.	2.9	39
64	Performance of a Ni/ZrO2 catalyst in the steam reforming of the volatiles derived from biomass pyrolysis. Journal of Analytical and Applied Pyrolysis, 2018, 136, 222-231.	2.6	35
65	Pyrolysis kinetics of forestry residues from the Portuguese Central Inland Region. Chemical Engineering Research and Design, 2013, 91, 2682-2690.	2.7	34
66	Role of temperature in the biomass steam pyrolysis in a conical spouted bed reactor. Energy, 2022, 238, 122053.	4.5	33
67	Effect of calcination conditions on the performance of Ni/MgOâ€“Al₂O₃ catalysts in the steam reforming of biomass fast pyrolysis volatiles. Catalysis Science and Technology, 2019, 9, 3947-3963.	2.1	32
68	Assessment of product yields and catalyst deactivation in fixed and fluidized bed reactors in the steam reforming of biomass pyrolysis volatiles. Chemical Engineering Research and Design, 2021, 145, 52-62.	2.7	32
69	Experimental study and modeling of biomass char gasification kinetics in a novel thermogravimetric flow reactor. Chemical Engineering Journal, 2020, 396, 125200.	6.6	31
70	Influence of reactor and condensation system design on tyre pyrolysis products yields. Journal of Analytical and Applied Pyrolysis, 2019, 143, 104683.	2.6	27
71	Thermodynamic assessment of the oxidative steam reforming of biomass fast pyrolysis volatiles. Energy Conversion and Management, 2020, 214, 112889.	4.4	27
72	Kinetic modelling of the cracking of HDPE pyrolysis volatiles on a HZSM-5 zeolite based catalyst. Chemical Engineering Science, 2014, 116, 635-644.	1.9	26

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73	In line upgrading of biomass fast pyrolysis products using low-cost catalysts. Fuel, 2021, 296, 120682.	3.4	26
74	Kinetic study of the catalytic reforming of biomass pyrolysis volatiles over a commercial Ni/Al2O3 catalyst. International Journal of Hydrogen Energy, 2018, 43, 12023-12033.	3.8	24
75	Conditioning the volatile stream from biomass fast pyrolysis for the attenuation of steam reforming catalyst deactivation. Fuel, 2022, 312, 122910.	3.4	22
76	Development of a dual conical spouted bed system for heat integration purposes. Powder Technology, 2014, 268, 261-268.	2.1	9
77	Waste Plastics Valorization by Fast Pyrolysis and in Line Catalytic Steam Reforming for Hydrogen Production. , 2020, , .		4
78	Bio-oil production. , 2018, , 173-202.		3