Gartzen Lopez

List of Publications by Year
in descending order

137 papers	10,754 citations	17405 63 h-index	33814 99 g-index
139 all docs	139 docs citations	139 times ranked	5403 citing authors

#	Article	IF	Citations
1	Role of temperature in the biomass steam pyrolysis in a conical spouted bed reactor. Energy, 2022, 238, 122053.	4.5	33
2	The pyrolysis study of polybutadiene rubber under different structural and process parameters: comparison with polyvinyl chloride degradation. Journal of Thermal Analysis and Calorimetry, 2022, 147, 1237-1249.	2.0	1
3	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
4	Conditioning the volatile stream from biomass fast pyrolysis for the attenuation of steam reforming catalyst deactivation. Fuel, 2022, 312, 122910.	3.4	22
5	Activity and stability of different Fe loaded primary catalysts for tar elimination. Fuel, 2022, 317, 123457.	3.4	12
6	Hydrogen generation from biomass by pyrolysis. Nature Reviews Methods Primers, 2022, 2, .	11.8	55
7	An analysis of hydrogen production potential through the in-line oxidative steam reforming of different pyrolysis volatiles. Journal of Analytical and Applied Pyrolysis, 2022, 163, 105482.	2.6	8
8	Plasma-Catalytic Reforming of Naphthalene and Toluene as Biomass Tar over Honeycomb Catalysts in a Gliding Arc Reactor. ACS Sustainable Chemistry and Engineering, 2022, 10, 8958-8969.	3.2	13
9	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
10	Influence of temperature on products from fluidized bed pyrolysis of wood and solid recovered fuel. Fuel, 2021, 283, 118922.	3.4	27
11	Selective production of light olefins and hydrogen from waste plastics by pyrolysis and in-line transformation. , 2021, , 265-289.		0
12	Pyrolysis of plastic wastes in a fountain confined conical spouted bed reactor: Determination of stable operating conditions. Energy Conversion and Management, 2021, 229, 113768.	4.4	63
13	CFD modeling and experimental validation of biomass fast pyrolysis in a conical spouted bed reactor. Journal of Analytical and Applied Pyrolysis, 2021, 154, 105011.	2.6	20
14	Conversion of HDPE into Value Products by Fast Pyrolysis Using FCC Spent Catalysts in a Fountain Confined Conical Spouted Bed Reactor. ChemSusChem, 2021, 14, 4291-4300.	3.6	22
15	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
16	In line upgrading of biomass fast pyrolysis products using low-cost catalysts. Fuel, 2021, 296, 120682.	3.4	26
17	Progress on Catalyst Development for the Steam Reforming of Biomass and Waste Plastics Pyrolysis Volatiles: A Review. Energy & Fuels, 2021, 35, 17051-17084.	2.5	106
18	Sorption enhanced ethanol steam reforming on a bifunctional Ni/CaO catalyst for H2 production. Journal of Environmental Chemical Engineering, 2021, 9, 106725.	3.3	26

#	ARTICLE	IF	CITATIONS
19	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
20	Investigation of hot char catalytic role in the pyrolysis of waste tires in a two-step process. Journal of Analytical and Applied Pyrolysis, 2020, 146, 104770.	2.6	43
21	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
22	Microwaving plastic into hydrogen and carbons. Nature Catalysis, 2020, 3, 861-862.	16.1	8
23	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
24	CeO₂ and La₂O₃ Promoters in the Steam Reforming of Polyolefinic Waste Plastic Pyrolysis Volatiles on Ni-Based Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 17307-17321.	3.2	33
25	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
26	Waste tyre valorization by catalytic pyrolysis â€“ A review. Renewable and Sustainable Energy Reviews, 2020, 129, 109932.	8.2	169
27	Thermodynamic assessment of the oxidative steam reforming of biomass fast pyrolysis volatiles. Energy Conversion and Management, 2020, 214, 112889.	4.4	27
28	Editorial Catalysts: Special Issue on Catalytic Pyrolysis. Catalysts, 2020, 10, 487.	1.6	0
29	Experimental study and modeling of biomass char gasification kinetics in a novel thermogravimetric flow reactor. Chemical Engineering Journal, 2020, 396, 125200.	6.6	31
30	Waste Plastics Valorization by Fast Pyrolysis and in Line Catalytic Steam Reforming for Hydrogen Production. , 2020, , .		4
31	Influence of reactor and condensation system design on tyre pyrolysis products yields. Journal of Analytical and Applied Pyrolysis, 2019, 143, 104683.	2.6	27
32	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
33	Implementation of a borescopic technique in a conical spouted bed for tracking spherical and irregular particles. Chemical Engineering Journal, 2019, 374, 39-48.	6.6	13
34	Behaviour of primary catalysts in the biomass steam gasification in a fountain confined spouted bed. Fuel, 2019, 253, 1446-1456.	3.4	73
35	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
36	Catalyst Performance in the HDPE Pyrolysis-Reforming under Reaction-Regeneration Cycles. Catalysts, 2019, 9, 414.	1.6	17

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37	Co-pyrolysis of binary and ternary mixtures of microalgae, wood and waste tires through TGA. Renewable Energy, 2019, 142, 264-271.	4.3	35
38	Coupling gas flow pattern and kinetics for tyre pyrolysis modelling. Chemical Engineering Science, 2019, 201, 362-372.	1.9	12
39	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
40	Improving bio-oil properties through the fast co-pyrolysis of lignocellulosic biomass and waste tyres. Waste Management, 2019, 85, 385-395.	3.7	99
41	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
42	Advantages of confining the fountain in a conical spouted bed reactor for biomass steam gasification. Energy, 2018, 153, 455-463.	4.5	51
43	Evaluation of thermochemical routes for hydrogen production from biomass: A review. Energy Conversion and Management, 2018, 165, 696-719.	4.4	341
44	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
45	Influence of the conditions for reforming HDPE pyrolysis volatiles on the catalyst deactivation by coke. Fuel Processing Technology, 2018, 171, 100-109.	3.7	24
46	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
47	Valorization of citrus wastes by fast pyrolysis in a conical spouted bed reactor. Fuel, 2018, 224, 111-120.	3.4	103
48	Recent advances in the gasification of waste plastics. A critical overview. Renewable and Sustainable Energy Reviews, 2018, 82, 576-596.	8.2	506
49	Valorisation of different waste plastics by pyrolysis and in-line catalytic steam reforming for hydrogen production. Energy Conversion and Management, 2018, 156, 575-584.	4.4	136
50	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
51	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
52	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
53	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
54	Bio-oil production. , 2018, , 173-202.		3

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55	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
56	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
57	Fountain confined conical spouted beds. Powder Technology, 2017, 312, 334-346.	2.1	47
58	Evaluation of the properties of tyre pyrolysis oils obtained in a conical spouted bed reactor. Energy, 2017, 128, 463-474.	4.5	94
59	Assessment of a conical spouted with an enhanced fountain bed for biomass gasification. Fuel, 2017, 203, 825-831.	3.4	59
60	Waste truck-tyre processing by flash pyrolysis in a conical spouted bed reactor. Energy Conversion and Management, 2017, 142, 523-532.	4.4	141
61	Kinetic Modeling of the Catalytic Steam Reforming of High-Density Polyethylene Pyrolysis Volatiles. Energy & Fuels, 2017, 31, 12645-12653.	2.5	14
62	Olefina arinen ekoizpena hondakin plastikoetatik. Ekaia (journal), 2017, , .	0.0	0
63	Preparation of adsorbents from sewage sludge pyrolytic char by carbon dioxide activation. Chemical Engineering Research and Design, 2016, 103, 76-86.	2.7	51
64	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
65	Steam reforming of plastic pyrolysis model hydrocarbons and catalyst deactivation. Applied Catalysis A: General, 2016, 527, 152-160.	2.2	42
66	Pyrolysis and in-line catalytic steam reforming of polystyrene through a two-step reaction system. Journal of Analytical and Applied Pyrolysis, 2016, 122, 502-510.	2.6	68
67	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
68	A sequential process for hydrogen production based on continuous HDPE fast pyrolysis and in-line steam reforming. Chemical Engineering Journal, 2016, 296, 191-198.	6.6	115
69	Hydrogen production from biomass by continuous fast pyrolysis and in-line steam reforming. RSC Advances, 2016, 6, 25975-25985.	1.7	114
70	Fast co-pyrolysis of sewage sludge and lignocellulosic biomass in a conical spouted bed reactor. Fuel, 2015, 159, 810-818.	3.4	188
71	Styrene recovery from polystyrene by flash pyrolysis in a conical spouted bed reactor. Waste Management, 2015, 45, 126-133.	3.7	147
72	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

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73	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
74	Fast pyrolysis of eucalyptus waste in a conical spouted bed reactor. Bioresource Technology, 2015, 194, 225-232.	4.8	69
75	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
76	Sewage sludge valorization by flash pyrolysis in a conical spouted bed reactor. Chemical Engineering Journal, 2015, 273, 173-183.	6.6	161
77	Kinetic Study of Carbon Dioxide Gasification of Rice Husk Fast Pyrolysis Char. Energy & Fuels, 2015, 29, 3198-3207.	2.5	40
78	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
79	Hydrogen Production by High Density Polyethylene Steam Gasification and In-Line Volatile Reforming. Industrial & Engineering Chemistry Research, 2015, 54, 9536-9544.	1.8	64
80	Identification of the coke deposited on an HZSM-5 zeolite catalyst during the sequenced pyrolysisâ€“cracking of HDPE. Applied Catalysis B: Environmental, 2014, 148-149, 436-445.	10.8	88
81	Bio-oil production from rice husk fast pyrolysis in a conical spouted bed reactor. Fuel, 2014, 128, 162-169.	3.4	263
82	Principal component analysis for kinetic scheme proposal in the thermal and catalytic pyrolysis of waste tyres. Chemical Engineering Science, 2014, 106, 9-17.	1.9	28
83	Development of a dual conical spouted bed system for heat integration purposes. Powder Technology, 2014, 268, 261-268.	2.1	9
84	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
85	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
86	Operating and Peak Pressure Drops in Conical Spouted Beds Equipped with Draft Tubes of Different Configuration. Industrial & Engineering Chemistry Research, 2014, 53, 415-427.	1.8	35
87	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
88	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
89	Syngas from steam gasification of polyethylene in a conical spouted bed reactor. Fuel, 2013, 109, 461-469.	3.4	146
90	Reply to â€œA correction on one-dimensional modelling of conical spouted bedsâ€; published in Chem. Eng. Process. 48 (2009) 1264â€“1269. Chemical Engineering and Processing: Process Intensification, 2013, 70, 292.	1.8	0

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91	Pyrolysis kinetics of forestry residues from the Portuguese Central Inland Region. Chemical Engineering Research and Design, 2013, 91, 2682-2690.	2.7	34
92	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
93	Minimum Spouting Velocity of Conical Spouted Beds Equipped with Draft Tubes of Different Configuration. Industrial & Engineering Chemistry Research, 2013, 52, 2995-3006.	1.8	71
94	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
95	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
96	Particle Cycle Times and Solid Circulation Rates in Conical Spouted Beds with Draft Tubes of Different Configuration. Industrial & Engineering Chemistry Research, 2013, 52, 15959-15967.	1.8	38
97	Effect of draft tube geometry on pressure drop in draft tube conical spouted beds. Canadian Journal of Chemical Engineering, 2013, 91, 1865-1870.	0.9	16
98	Pilot scale conical spouted bed pyrolysis reactor: Draft tube selection and hydrodynamic performance. Powder Technology, 2012, 219, 49-58.	2.1	67
99	Biomass Oxidative Flash Pyrolysis: Autothermal Operation, Yields and Product Properties. Energy & Fuels, 2012, 26, 1353-1362.	2.5	125
100	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
101	Sand attrition in conical spouted beds. Particuology, 2012, 10, 592-599.	2.0	14
102	Light olefins from HDPE cracking in a two-step thermal and catalytic process. Chemical Engineering Journal, 2012, 207-208, 27-34.	6.6	128
103	Drying of Biomass in a Conical Spouted Bed with Different Types of Internal Devices. Drying Technology, 2012, 30, 207-216.	1.7	42
104	Kinetic study of lignocellulosic biomass oxidative pyrolysis. Fuel, 2012, 95, 305-311.	3.4	207
105	Characterization of the waxes obtained by the pyrolysis of polyolefin plastics in a conical spouted bed reactor. Journal of Analytical and Applied Pyrolysis, 2012, 94, 230-237.	2.6	196
106	Influence of temperature on biomass pyrolysis in a conical spouted bed reactor. Resources, Conservation and Recycling, 2012, 59, 23-31.	5.3	281
107	Effect of Vacuum on Lignocellulosic Biomass Flash Pyrolysis in a Conical Spouted Bed Reactor. Energy & Fuels, 2011, 25, 3950-3960.	2.5	79
108	Product Yields and Compositions in the Continuous Pyrolysis of High-Density Polyethylene in a Conical Spouted Bed Reactor. Industrial & Engineering Chemistry Research, 2011, 50, 6650-6659.	1.8	147

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109	Continuous Polyolefin Cracking on an HZSM-5 Zeolite Catalyst in a Conical Spouted Bed Reactor. Industrial & Engineering Chemistry Research, 2011, 50, 6061-6070.	1.8	87
110	Modelling batch drying of sand in a draft-tube conical spouted bed. Chemical Engineering Research and Design, 2011, 89, 2054-2062.	2.7	24
111	Effect of Temperature on Fine Particle Drying in a Draftâ€Tube Conical Spouted Bed. Chemical Engineering and Technology, 2011, 34, 1130-1135.	0.9	17
112	Investigations on heat transfer and hydrodynamics under pyrolysis conditions of a pilot-plant draft tube conical spouted bed reactor. Chemical Engineering and Processing: Process Intensification, 2011, 50, 790-798.	1.8	109
113	Role of pore structure in the deactivation of zeolites (HZSM-5, HÎ² and HY) by coke in the pyrolysis of polyethylene in a conical spouted bed reactor. Applied Catalysis B: Environmental, 2011, 102, 224-231.	10.8	161
114	Continuous pyrolysis of waste tyres in a conical spouted bed reactor. Fuel, 2010, 89, 1946-1952.	3.4	174
115	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
116	Efecto del uso de Catalizadores Ãcidos Sobre la DistribuciÃ³n de Productos en la PirÃ³lisis de NeumÃ¡ticos. Informacion Tecnologica (discontinued), 2010, 21, .	0.1	1
117	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
118	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
119	Hydrodynamics of Conical Spouted Beds Using Different Types of Internal Devices. Chemical Engineering and Technology, 2009, 32, 463-469.	0.9	65
120	Minimum spouting velocity under vacuum and high temperature in conical spouted beds. Canadian Journal of Chemical Engineering, 2009, 87, 541-546.	0.9	25
121	Steam activation of pyrolytic tyre char at different temperatures. Journal of Analytical and Applied Pyrolysis, 2009, 85, 539-543.	2.6	80
122	Kinetics of scrap tyre pyrolysis under vacuum conditions. Waste Management, 2009, 29, 2649-2655.	3.7	83
123	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
124	Influence of FCC catalyst steaming on HDPE pyrolysis product distribution. Journal of Analytical and Applied Pyrolysis, 2009, 85, 359-365.	2.6	105
125	One-dimensional modelling of conical spouted beds. Chemical Engineering and Processing: Process Intensification, 2009, 48, 1264-1269.	1.8	22
126	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

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127	Effect of acid catalysts on scrap tyre pyrolysis under fast heating conditions. Journal of Analytical and Applied Pyrolysis, 2008, 82, 199-204.	2.6	45
128	Kinetic modelling of tyre pyrolysis in a conical spouted bed reactor. Journal of Analytical and Applied Pyrolysis, 2008, 81, 127-132.	2.6	55
129	HZSM-5 and HY Zeolite Catalyst Performance in the Pyrolysis of Tires in a Conical Spouted Bed Reactor. Industrial & Engineering Chemistry Research, 2008, 47, 7600-7609.	1.8	66
130	Catalyst Effect on the Composition of Tire Pyrolysis Products. Energy & Fuels, 2008, 22, 2909-2916.	2.5	99
131	A Draft-Tube Conical Spouted Bed for Drying Fine Particles. Drying Technology, 2008, 26, 308-314.	1.7	77
132	Catalytic Pyrolysis of High Density Polyethylene on a HZSM-5 Zeolite Catalyst in a Conical Spouted Bed Reactor. International Journal of Chemical Reactor Engineering, 2007, 5, .	0.6	12
133	Characterization of the Liquid Obtained in Tyre Pyrolysis in a Conical Spouted Bed Reactor. International Journal of Chemical Reactor Engineering, 2007, 5, .	0.6	3
134	Product distribution modelling in the thermal pyrolysis of high density polyethylene. Journal of Hazardous Materials, 2007, 144, 708-714.	6.5	43
135	Catalytic pyrolysis of high density polyethylene in a conical spouted bed reactor. Journal of Analytical and Applied Pyrolysis, 2007, 79, 450-455.	2.6	79
136	Product distribution obtained in the pyrolysis of tyres in a conical spouted bed reactor. Chemical Engineering Science, 2007, 62, 5271-5275.	1.9	107
137	Development of the Conical Spouted Bed Technology for Biomass and Waste Plastic Gasification. , 0, , .		0