Martin Olazar

List of Publications by Year
in descending order

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348 papers	20,460 citations	4942 84 h-index	17055 122 g-index
354 all docs	354 docs citations	354 times ranked	9050 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	Transformation of Oxygenate Components of Biomass Pyrolysis Oil on a HZSM-5 Zeolite. II. Aldehydes, Ketones, and Acids. Industrial & Engineering Chemistry Research, 2004, 43, 2619-2626.	1.8	363
4	Evaluation of thermochemical routes for hydrogen production from biomass: A review. Energy Conversion and Management, 2018, 165, 696-719.	4.4	341
5	Influence of temperature on biomass pyrolysis in a conical spouted bed reactor. Resources, Conservation and Recycling, 2012, 59, 23-31.	5.3	281
6	Bio-oil production from rice husk fast pyrolysis in a conical spouted bed reactor. Fuel, 2014, 128, 162-169.	3.4	263
7	Stable operation conditions for gas-solid contact regimes in conical spouted beds. Industrial & Engineering Chemistry Research, 1992, 31, 1784-1792.	1.8	223
8	Hydrogen production from biomass and plastic mixtures by pyrolysis-gasification. International Journal of Hydrogen Energy, 2014, 39, 10883-10891.	3.8	210
9	Kinetic study of lignocellulosic biomass oxidative pyrolysis. Fuel, 2012, 95, 305-311.	3.4	207
10	Insights into the coke deposited on HZSM-5, Hî² and HY zeolites during the cracking of polyethylene. Applied Catalysis B: Environmental, 2011, 104, 91-100.	10.8	206
11	Opportunities and barriers for producing high quality fuels from the pyrolysis of scrap tires. Renewable and Sustainable Energy Reviews, 2016, 56, 745-759.	8.2	197
12	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
13	Pyrolysis of sawdust in a conical spouted-bed reactor with a HZSM-5 catalyst. AICHE Journal, 2000, 46, 1025-1033.	1.8	189
14	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
15	Fast co-pyrolysis of sewage sludge and lignocellulosic biomass in a conical spouted bed reactor. Fuel, 2015, 159, 810-818.	3.4	188
16	Pyrolysis of Sawdust in a Conical Spouted Bed Reactor. Yields and Product Composition. Industrial & Engineering Chemistry Research, 2000, 39, 1925-1933.	1.8	175
17	Deactivating species in the transformation of crude bio-oil with methanol into hydrocarbons on a HZSM-5 catalyst. Journal of Catalysis, 2012, 285, 304-314.	3.1	175
18	Continuous pyrolysis of waste tyres in a conical spouted bed reactor. Fuel, 2010, 89, 1946-1952.	3.4	174

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19	Fast characterization of biomass fuels by thermogravimetric analysis (TGA). Fuel, 2015, 140, 744-751.	3.4	173
20	Waste tyre valorization by catalytic pyrolysis â€“ A review. Renewable and Sustainable Energy Reviews, 2020, 129, 109932.	8.2	169
21	Role of acidity and microporous structure in alternative catalysts for the transformation of methanol into olefins. Applied Catalysis A: General, 2005, 283, 197-207.	2.2	164
22	Selective Production of Aromatics by Crude Bio-oil Valorization with a Nickel-Modified HZSM-5 Zeolite Catalyst. Energy & Fuels, 2010, 24, 2060-2070.	2.5	164
23	Kinetic Modeling of Dimethyl Ether Synthesis in a Single Step on a CuOâ^'ZnOâ^'Al₂O₃Î³-Al₂O₃ Catalyst. Industrial & Engineering Chemistry Research, 2007, 46, 5522-5530.	1.8	162
24	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
25	Sewage sludge valorization by flash pyrolysis in a conical spouted bed reactor. Chemical Engineering Journal, 2015, 273, 173-183.	6.6	161
26	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
27	Deactivation and regeneration of hybrid catalysts in the single-step synthesis of dimethyl ether from syngas and CO2. Catalysis Today, 2005, 106, 265-270.	2.2	153
28	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
29	Adsorption of Amido Black 10B from aqueous solution using polyaniline/SiO2 nanocomposite: Experimental investigation and artificial neural network modeling. Journal of Colloid and Interface Science, 2018, 510, 246-261.	5.0	148
30	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
31	Styrene recovery from polystyrene by flash pyrolysis in a conical spouted bed reactor. Waste Management, 2015, 45, 126-133.	3.7	147
32	Steam reforming of different biomass tar model compounds over Ni/Al2O3 catalysts. Energy Conversion and Management, 2017, 136, 119-126.	4.4	147
33	Syngas from steam gasification of polyethylene in a conical spouted bed reactor. Fuel, 2013, 109, 461-469.	3.4	146
34	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
35	Waste truck-tyre processing by flash pyrolysis in a conical spouted bed reactor. Energy Conversion and Management, 2017, 142, 523-532.	4.4	141
36	Artificial neural network optimization for methyl orange adsorption onto polyaniline nano-adsorbent: Kinetic, isotherm and thermodynamic studies. Journal of Molecular Liquids, 2017, 244, 189-200.	2.3	141

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37	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
38	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
39	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
40	Wax Formation in the Pyrolysis of Polyolefins in a Conical Spouted Bed Reactor. Energy & Fuels, 2002, 16, 1429-1437.	2.5	130
41	Light olefins from HDPE cracking in a two-step thermal and catalytic process. Chemical Engineering Journal, 2012, 207-208, 27-34.	6.6	128
42	Biomass Oxidative Flash Pyrolysis: Autothermal Operation, Yields and Product Properties. Energy & Fuels, 2012, 26, 1353-1362.	2.5	125
43	Catalyst Deactivation by Coke in the Transformation of Aqueous Ethanol into Hydrocarbons. Kinetic Modeling and Acidity Deterioration of the Catalyst. Industrial & Engineering Chemistry Research, 2002, 41, 4216-4224.	1.8	123
44	Kinetic Description of the Catalytic Pyrolysis of Biomass in a Conical Spouted Bed Reactor. Energy & Fuels, 2005, 19, 765-774.	2.5	122
45	Steam reforming of phenol as biomass tar model compound over Ni/Al2O3 catalyst. Fuel, 2016, 184, 629-636.	3.4	122
46	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
47	Olefin Production by Catalytic Transformation of Crude Bio-Oil in a Two-Step Process. Industrial & Engineering Chemistry Research, 2010, 49, 123-131.	1.8	119
48	Waste Refinery: The Valorization of Waste Plastics and End-of-Life Tires in Refinery Units. A Review. Energy & Fuels, 2021, 35, 3529-3557.	2.5	116
49	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
50	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
51	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
52	Hydrogen production from biomass by continuous fast pyrolysis and in-line steam reforming. RSC Advances, 2016, 6, 25975-25985.	1.7	114
53	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
54	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

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55	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
56	Kinetics of the irreversible deactivation of the HZSM-5 catalyst in the MTO process. Chemical Engineering Science, 2003, 58, 5239-5249.	1.9	108
57	Product distribution obtained in the pyrolysis of tyres in a conical spouted bed reactor. Chemical Engineering Science, 2007, 62, 5271-5275.	1.9	107
58	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
59	Influence of FCC catalyst steaming on HDPE pyrolysis product distribution. Journal of Analytical and Applied Pyrolysis, 2009, 85, 359-365.	2.6	105
60	Deposition and Characteristics of Coke over a H-ZSM5 Zeolite-Based Catalyst in the MTG Process. Industrial & Engineering Chemistry Research, 1996, 35, 3991-3998.	1.8	103
61	Valorization of citrus wastes by fast pyrolysis in a conical spouted bed reactor. Fuel, 2018, 224, 111-120.	3.4	103
62	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
63	Kinetic modelling of dimethyl ether synthesis from (H2+CO2) by considering catalyst deactivation. Chemical Engineering Journal, 2011, 174, 660-667.	6.6	101
64	Novel Niâ€“Mgâ€“Alâ€“Ca catalyst for enhanced hydrogen production for the pyrolysisâ€“gasification of a biomass/plastic mixture. Journal of Analytical and Applied Pyrolysis, 2015, 113, 15-21.	2.6	101
65	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
66	Transformation of Several Plastic Wastes into Fuels by Catalytic Cracking. Industrial & Engineering Chemistry Research, 1997, 36, 4523-4529.	1.8	100
67	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
68	Catalyst Effect on the Composition of Tire Pyrolysis Products. Energy & Fuels, 2008, 22, 2909-2916.	2.5	99
69	Improving bio-oil properties through the fast co-pyrolysis of lignocellulosic biomass and waste tyres. Waste Management, 2019, 85, 385-395.	3.7	99
70	Kinetic Study of Polyolefin Pyrolysis in a Conical Spouted Bed Reactor. Industrial & Engineering Chemistry Research, 2002, 41, 4559-4566.	1.8	98
71	Defluidization modelling of pyrolysis of plastics in a conical spouted bed reactor. Chemical Engineering and Processing: Process Intensification, 2005, 44, 231-235.	1.8	97
72	Deactivation of a CuOâ^'ZnOâ^'Al₂O₃/Î³-Al₂O₃ Catalyst in the Synthesis of Dimethyl Ether. Industrial & Engineering Chemistry Research, 2008, 47, 2238-2247.	1.8	97

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73	Hydrothermal stability of HZSM-5 catalysts modified with Ni for the transformation of bioethanol into hydrocarbons. Fuel, 2010, 89, 3365-3372.	3.4	96
74	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
75	Stability and hydrodynamics of conical spouted beds with binary mixtures. Industrial & Engineering Chemistry Research, 1993, 32, 2826-2834.	1.8	95
76	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
77	Evaluation of the properties of tyre pyrolysis oils obtained in a conical spouted bed reactor. Energy, 2017, 128, 463-474.	4.5	94
78	Deactivation dynamics of a Ni supported catalyst during the steam reforming of volatiles from waste polyethylene pyrolysis. Applied Catalysis B: Environmental, 2017, 209, 554-565.	10.8	93
79	Modified HZSM-5 zeolites for intensifying propylene production in the transformation of 1-butene. Chemical Engineering Journal, 2014, 251, 80-91.	6.6	89
80	Steam reforming of raw bio-oil over Ni/La2O3-Î±Al2O3: Influence of temperature on product yields and catalyst deactivation. Fuel, 2018, 216, 463-474.	3.4	89
81	Segregation in Conical Spouted Beds with Binary and Ternary Mixtures of Equidensity Spherical Particles. Industrial & Engineering Chemistry Research, 1994, 33, 1838-1844.	1.8	88
82	Attenuation of Catalyst Deactivation by Cofeeding Methanol for Enhancing the Valorisation of Crude Bio-oil. Energy & Fuels, 2009, 23, 4129-4136.	2.5	88
83	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
84	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
85	Effect of Si/Al Ratio and of Acidity of H-ZSM5 Zeolites on the Primary Products of Methanol to Gasoline Conversion. Journal of Chemical Technology and Biotechnology, 1996, 66, 183-191.	1.6	87
86	Role of water in the kinetic modeling of catalyst deactivation in the MTG process. AICHE Journal, 2002, 48, 1561-1571.	1.8	87
87	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
88	Kinetics of scrap tyre pyrolysis under vacuum conditions. Waste Management, 2009, 29, 2649-2655.	3.7	83
89	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
90	Design factors of conical spouted beds and jet spouted beds. Industrial & Engineering Chemistry Research, 1993, 32, 1245-1250.	1.8	82

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91	Pressure drop in conical spouted beds. The Chemical Engineering Journal, 1993, 51, 53-60.	0.4	80
92	Steam activation of pyrolytic tyre char at different temperatures. Journal of Analytical and Applied Pyrolysis, 2009, 85, 539-543.	2.6	80
93	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
94	Solid cross-flow into the spout and particle trajectories in conical spouted beds. Chemical Engineering Science, 1998, 53, 3561-3570.	1.9	79
95	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
96	Effect of Vacuum on Lignocellulosic Biomass Flash Pyrolysis in a Conical Spouted Bed Reactor. Energy & Fuels, 2011, 25, 3950-3960.	2.5	79
97	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
98	Relationship between surface acidity and activity of catalysts in the transformation of methanol into hydrocarbons. Journal of Chemical Technology and Biotechnology, 1996, 65, 186-192.	1.6	75
99	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
100	Hydrodynamics of Sawdust and Mixtures of Wood Residues in Conical Spouted Beds. Industrial & Engineering Chemistry Research, 1994, 33, 993-1000.	1.8	73
101	Kinetic modelling for the transformation of bioethanol into olefins on a hydrothermally stable Niâ€“HZSM-5 catalyst considering the deactivation by coke. Chemical Engineering Journal, 2011, 167, 262-277.	6.6	73
102	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
103	Behaviour of primary catalysts in the biomass steam gasification in a fountain confined spouted bed. Fuel, 2019, 253, 1446-1456.	3.4	73
104	Effect of operating conditions on solid velocity in the spout, annulus and fountain of spouted beds. Chemical Engineering Science, 2001, 56, 3585-3594.	1.9	72
105	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
106	Catalyst deactivation by coking in the MTG process in fixed and fluidized bed reactors. Catalysis Today, 1997, 37, 239-248.	2.2	69
107	Measurement of Particle Velocities in Conical Spouted Beds Using an Optical Fiber Probe. Industrial & Engineering Chemistry Research, 1998, 37, 4520-4527.	1.8	69
108	Effect of the acidity of the HZSM-5 zeolite catalyst on the cracking of high density polyethylene in a conical spouted bed reactor. Applied Catalysis A: General, 2012, 415-416, 89-95.	2.2	69

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109	Fast pyrolysis of eucalyptus waste in a conical spouted bed reactor. Bioresource Technology, 2015, 194, 225-232.	4.8	69
110	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
111	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
112	Kinetic Modelling of the Transformation of Aqueous Ethanol into Hydrocarbons on a HZSM-5 Zeolite. Industrial & Engineering Chemistry Research, 2001, 40, 3467-3474.	1.8	67
113	Effect of Cofeeding Butane with Methanol on the Deactivation by Coke of a HZSM-5 Zeolite Catalyst. Industrial & Engineering Chemistry Research, 2011, 50, 9980-9988.	1.8	67
114	Pilot scale conical spouted bed pyrolysis reactor: Draft tube selection and hydrodynamic performance. Powder Technology, 2012, 219, 49-58.	2.1	67
115	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
116	Design of Conical Spouted Beds for the Handling of Low-Density Solids. Industrial & Engineering Chemistry Research, 2004, 43, 655-661.	1.8	64
117	Upgrading model compounds and Scrap Tires Pyrolysis Oil (STPO) on hydrotreating NiMo catalysts with tailored supports. Fuel, 2015, 145, 158-169.	3.4	64
118	Hydrogen Production by High Density Polyethylene Steam Gasification and In-Line Volatile Reforming. Industrial & Engineering Chemistry Research, 2015, 54, 9536-9544.	1.8	64
119	Polyethylene Cracking on a Spent FCC Catalyst in a Conical Spouted Bed. Industrial & Engineering Chemistry Research, 2012, 51, 14008-14017.	1.8	63
120	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
121	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
122	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
123	Correlation for calculation of the gas dispersion coefficient in conical spouted beds. Chemical Engineering Science, 1995, 50, 2161-2172.	1.9	60
124	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
125	Improving the DME steam reforming catalyst by alkaline treatment of the HZSM-5 zeolite. Applied Catalysis B: Environmental, 2013, 130-131, 73-83.	10.8	59
126	Assessment of a conical spouted with an enhanced fountain bed for biomass gasification. Fuel, 2017, 203, 825-831.	3.4	59

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127	Design and Operation of a Catalytic Polymerization Reactor in a Dilute Spouted Bed Regime. Industrial & Engineering Chemistry Research, 1997, 36, 1637-1643.	1.8	58
128	Kinetics of scrap tyre pyrolysis under fast heating conditions. Journal of Analytical and Applied Pyrolysis, 2005, 73, 290-298.	2.6	58
129	Fitting performance of artificial neural networks and empirical correlations to estimate higher heating values of biomass. Fuel, 2016, 180, 377-383.	3.4	58
130	Solute transport modelling in karst conduits with slow zones during different hydrologic conditions. Journal of Hydrology, 2010, 390, 182-189.	2.3	56
131	Preliminary studies on fuel production through LCO hydrocracking on noble-metal supported catalysts. Fuel, 2012, 94, 504-515.	3.4	56
132	Design and operation of a jet spouted bed reactor with continuous catalyst feed in the benzyl alcohol polymerization. Industrial & Engineering Chemistry Research, 1987, 26, 1297-1304.	1.8	55
133	Kinetic modelling of tyre pyrolysis in a conical spouted bed reactor. Journal of Analytical and Applied Pyrolysis, 2008, 81, 127-132.	2.6	55
134	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
135	Preparation of adsorbents from sewage sludge pyrolytic char by carbon dioxide activation. Chemical Engineering Research and Design, 2016, 103, 76-86.	2.7	51
136	Advantages of confining the fountain in a conical spouted bed reactor for biomass steam gasification. Energy, 2018, 153, 455-463.	4.5	51
137	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
138	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
139	Expansion of spouted beds in conical contactors. The Chemical Engineering Journal, 1993, 51, 45-52.	0.4	50
140	CFD simulation of cylindrical spouted beds by the kinetic theory of granular flow. Powder Technology, 2013, 246, 303-316.	2.1	50
141	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
142	Local Bed Voidage in Conical Spouted Beds. Industrial & Engineering Chemistry Research, 1998, 37, 2553-2558.	1.8	49
143	Catalytic Cracking of Waxes Produced by the Fast Pyrolysis of Polyolefins. Energy & Fuels, 2007, 21, 561-569.	2.5	49
144	Isotherms of chemical adsorption of bases on solid catalysts for acidity measurement. Journal of Chemical Technology and Biotechnology, 1994, 60, 141-146.	1.6	48

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145	Thermal recycling of polystyrene and polystyrene-butadiene dissolved in a light cycle oil. Journal of Analytical and Applied Pyrolysis, 2003, 70, 747-760.	2.6	47
146	Synergies in the production of olefins by combined cracking of n-butane and methanol on a HZSM-5 zeolite catalyst. Chemical Engineering Journal, 2010, 160, 760-769.	6.6	47
147	Fountain confined conical spouted beds. Powder Technology, 2017, 312, 334-346.	2.1	47
148	Kinetic study of fast pyrolysis of sawdust in a conical spouted bed reactor in the range 400-500â€‰Â°C. Journal of Chemical Technology and Biotechnology, 2001, 76, 469-476.	1.6	45
149	Predicting travel times and transport characterization in karst conduits by analyzing tracer-breakthrough curves. Journal of Hydrology, 2007, 334, 183-198.	2.3	45
150	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
151	Deactivation Kinetics for Direct Dimethyl Ether Synthesis on a CuOâ^'ZnOâ^'Al₂O₃/Î³-Al₂O₃ Catalyst. Industrial & Engineering Chemistry Research, 2010, 49, 481-489.	1.8	44
152	Causes of deactivation of bifunctional catalysts made up of CuO-ZnO-Al2O3 and desilicated HZSM-5 zeolite in DME steam reforming. Applied Catalysis A: General, 2014, 483, 76-84.	2.2	44
153	Prospects for Obtaining High Quality Fuels from the Hydrocracking of a Hydrotreated Scrap Tires Pyrolysis Oil. Energy & Fuels, 2015, 29, 5458-5466.	2.5	44
154	Product distribution modelling in the thermal pyrolysis of high density polyethylene. Journal of Hazardous Materials, 2007, 144, 708-714.	6.5	43
155	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
156	Spout and Fountain Geometry in Conical Spouted Beds Consisting of Solids of Varying Density. Industrial & Engineering Chemistry Research, 2005, 44, 193-200.	1.8	42
157	Drying of Biomass in a Conical Spouted Bed with Different Types of Internal Devices. Drying Technology, 2012, 30, 207-216.	1.7	42
158	Effect of space velocity on the hydrocracking of Light Cycle Oil over a Ptâ€“Pd/HY zeolite catalyst. Fuel Processing Technology, 2012, 95, 8-15.	3.7	42
159	Steam reforming of plastic pyrolysis model hydrocarbons and catalyst deactivation. Applied Catalysis A: General, 2016, 527, 152-160.	2.2	42
160	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
161	Regeneration of a catalyst based on a SAPO-34 used in the transformation of methanol into olefins. Journal of Chemical Technology and Biotechnology, 1999, 74, 1082-1088.	1.6	41
162	Kinetic Study of Carbon Dioxide Gasification of Rice Husk Fast Pyrolysis Char. Energy & Fuels, 2015, 29, 3198-3207.	2.5	40

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163	New operation regimes in fountain confined conical spouted beds. Chemical Engineering Science, 2020, 211, 115255.	1.9	40
164	Study of Local Properties in Conical Spouted Beds Using an Optical Fiber Probe. Industrial & Engineering Chemistry Research, 1995, 34, 4033-4039.	1.8	39
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