

Martin Olazar

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341
papers

15,532
citations

74
h-index

104
g-index

350
ext. papers

17,879
ext. citations

6
avg, IF

6.86
L-index

#	Paper	IF	Citations
341	Thermochemical routes for the valorization of waste polyolefinic plastics to produce fuels and chemicals. A review. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 73, 346-368	16.2	335
340	Transformation of Oxygenate Components of Biomass Pyrolysis Oil on a HZSM-5 Zeolite. II. Aldehydes, Ketones, and Acids. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 2619-2626	3.9	325
339	Recent advances in the gasification of waste plastics. A critical overview. <i>Renewable and Sustainable Energy Reviews</i> , 2018 , 82, 576-596	16.2	288
338	Influence of temperature on biomass pyrolysis in a conical spouted bed reactor. <i>Resources, Conservation and Recycling</i> , 2012 , 59, 23-31	11.9	226
337	Evaluation of thermochemical routes for hydrogen production from biomass: A review. <i>Energy Conversion and Management</i> , 2018 , 165, 696-719	10.6	217
336	Bio-oil production from rice husk fast pyrolysis in a conical spouted bed reactor. <i>Fuel</i> , 2014 , 128, 162-169	7.1	211
335	Stable operation conditions for gas-solid contact regimes in conical spouted beds. <i>Industrial & Engineering Chemistry Research</i> , 1992 , 31, 1784-1792	3.9	185
334	Pyrolysis of sawdust in a conical spouted-bed reactor with a HZSM-5 catalyst. <i>AICHE Journal</i> , 2000 , 46, 1025-1033	3.6	178
333	Kinetic study of lignocellulosic biomass oxidative pyrolysis. <i>Fuel</i> , 2012 , 95, 305-311	7.1	168
332	Pyrolysis of Sawdust in a Conical Spouted Bed Reactor. Yields and Product Composition. <i>Industrial & Engineering Chemistry Research</i> , 2000 , 39, 1925-1933	3.9	162
331	Insights into the coke deposited on HZSM-5, H β and HY zeolites during the cracking of polyethylene. <i>Applied Catalysis B: Environmental</i> , 2011 , 104, 91-100	21.8	160
330	Deactivating species in the transformation of crude bio-oil with methanol into hydrocarbons on a HZSM-5 catalyst. <i>Journal of Catalysis</i> , 2012 , 285, 304-314	7.3	154
329	Role of acidity and microporous structure in alternative catalysts for the transformation of methanol into olefins. <i>Applied Catalysis A: General</i> , 2005 , 283, 197-207	5.1	150
328	Selective Production of Aromatics by Crude Bio-oil Valorization with a Nickel-Modified HZSM-5 Zeolite Catalyst. <i>Energy & Fuels</i> , 2010 , 24, 2060-2070	4.1	149
327	Continuous pyrolysis of waste tyres in a conical spouted bed reactor. <i>Fuel</i> , 2010 , 89, 1946-1952	7.1	148
326	Sewage sludge valorization by flash pyrolysis in a conical spouted bed reactor. <i>Chemical Engineering Journal</i> , 2015 , 273, 173-183	14.7	139
325	Kinetic Modeling of Dimethyl Ether Synthesis in a Single Step on a CuO γ -Al $_2$ O $_3$ /Al $_2$ O $_3$ Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 5522-5530	3.9	139

3 ²⁴	Deactivation and regeneration of hybrid catalysts in the single-step synthesis of dimethyl ether from syngas and CO ₂ . <i>Catalysis Today</i> , 2005 , 106, 265-270	5.3	139
3 ²³	Hydrogen production from biomass and plastic mixtures by pyrolysis-gasification. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 10883-10891	6.7	138
3 ²²	Opportunities and barriers for producing high quality fuels from the pyrolysis of scrap tires. <i>Renewable and Sustainable Energy Reviews</i> , 2016 , 56, 745-759	16.2	137
3 ²¹	Catalytic pyrolysis of HDPE in continuous mode over zeolite catalysts in a conical spouted bed reactor. <i>Journal of Analytical and Applied Pyrolysis</i> , 2009 , 85, 345-351	6	137
3 ²⁰	Fast co-pyrolysis of sewage sludge and lignocellulosic biomass in a conical spouted bed reactor. <i>Fuel</i> , 2015 , 159, 810-818	7.1	134
3 ¹⁹	Design and operation of a conical spouted bed reactor pilot plant (25kg/h) for biomass fast pyrolysis. <i>Fuel Processing Technology</i> , 2013 , 112, 48-56	7.2	129
3 ¹⁸	Influence of operating conditions on the steam gasification of biomass in a conical spouted bed reactor. <i>Chemical Engineering Journal</i> , 2014 , 237, 259-267	14.7	121
3 ¹⁷	Characterization of the waxes obtained by the pyrolysis of polyolefin plastics in a conical spouted bed reactor. <i>Journal of Analytical and Applied Pyrolysis</i> , 2012 , 94, 230-237	6	121
3 ¹⁶	Fast characterization of biomass fuels by thermogravimetric analysis (TGA). <i>Fuel</i> , 2015 , 140, 744-751	7.1	120
3 ¹⁵	Role of pore structure in the deactivation of zeolites (HZSM-5, H β and HY) by coke in the pyrolysis of polyethylene in a conical spouted bed reactor. <i>Applied Catalysis B: Environmental</i> , 2011 , 102, 224-231	21.8	119
3 ¹⁴	Wax Formation in the Pyrolysis of Polyolefins in a Conical Spouted Bed Reactor. <i>Energy & Fuels</i> , 2002 , 16, 1429-1437	4.1	112
3 ¹³	Steam reforming of different biomass tar model compounds over Ni/Al ₂ O ₃ catalysts. <i>Energy Conversion and Management</i> , 2017 , 136, 119-126	10.6	111
3 ¹²	Olefin Production by Catalytic Transformation of Crude Bio-Oil in a Two-Step Process. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 123-131	3.9	111
3 ¹¹	Kinetic Description of the Catalytic Pyrolysis of Biomass in a Conical Spouted Bed Reactor. <i>Energy & Fuels</i> , 2005 , 19, 765-774	4.1	110
3 ¹⁰	Upgrading the rice husk char obtained by flash pyrolysis for the production of amorphous silica and high quality activated carbon. <i>Bioresource Technology</i> , 2014 , 170, 132-137	11	108
3 ⁰⁹	Catalyst Deactivation by Coke in the Transformation of Aqueous Ethanol into Hydrocarbons. Kinetic Modeling and Acidity Deterioration of the Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 4216-4224	3.9	107
3 ⁰⁸	Biomass Oxidative Flash Pyrolysis: Autothermal Operation, Yields and Product Properties. <i>Energy & Fuels</i> , 2012 , 26, 1353-1362	4.1	105
3 ⁰⁷	Light olefins from HDPE cracking in a two-step thermal and catalytic process. <i>Chemical Engineering Journal</i> , 2012 , 207-208, 27-34	14.7	105

306	Adsorption of Amido Black 10B from aqueous solution using polyaniline/SiO nanocomposite: Experimental investigation and artificial neural network modeling. <i>Journal of Colloid and Interface Science</i> , 2018 , 510, 246-261	9.3	104
305	Syngas from steam gasification of polyethylene in a conical spouted bed reactor. <i>Fuel</i> , 2013 , 109, 461-469	7.1	103
304	Cracking of High Density Polyethylene Pyrolysis Waxes on HZSM-5 Catalysts of Different Acidity. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 10637-10645	3.9	103
303	Product Yields and Compositions in the Continuous Pyrolysis of High-Density Polyethylene in a Conical Spouted Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 6650-6659	3.9	100
302	Kinetics of the irreversible deactivation of the HZSM-5 catalyst in the MTO process. <i>Chemical Engineering Science</i> , 2003 , 58, 5239-5249	4.4	100
301	Waste truck-tyre processing by flash pyrolysis in a conical spouted bed reactor. <i>Energy Conversion and Management</i> , 2017 , 142, 523-532	10.6	99
300	Steam reforming of phenol as biomass tar model compound over Ni/Al ₂ O ₃ catalyst. <i>Fuel</i> , 2016 , 184, 629-636	7.1	99
299	Product distribution obtained in the pyrolysis of tyres in a conical spouted bed reactor. <i>Chemical Engineering Science</i> , 2007 , 62, 5271-5275	4.4	97
298	Artificial neural network optimization for methyl orange adsorption onto polyaniline nano-adsorbent: Kinetic, isotherm and thermodynamic studies. <i>Journal of Molecular Liquids</i> , 2017 , 244, 189-200	6	94
297	Styrene recovery from polystyrene by flash pyrolysis in a conical spouted bed reactor. <i>Waste Management</i> , 2015 , 45, 126-33	8.6	93
296	Coking and sintering progress of a Ni supported catalyst in the steam reforming of biomass pyrolysis volatiles. <i>Applied Catalysis B: Environmental</i> , 2018 , 233, 289-300	21.8	93
295	Influence of Tire Formulation on the Products of Continuous Pyrolysis in a Conical Spouted Bed Reactor. <i>Energy & Fuels</i> , 2009 , 23, 5423-5431	4.1	92
294	Deposition and Characteristics of Coke over a H-ZSM5 Zeolite-Based Catalyst in the MTG Process. <i>Industrial & Engineering Chemistry Research</i> , 1996 , 35, 3991-3998	3.9	92
293	Operating Conditions for the Pyrolysis of Poly-(ethylene terephthalate) in a Conical Spouted-Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 2064-2069	3.9	90
292	Transformation of Several Plastic Wastes into Fuels by Catalytic Cracking. <i>Industrial & Engineering Chemistry Research</i> , 1997 , 36, 4523-4529	3.9	90
291	Deactivation of a CuO/nO ₂ /Al ₂ O ₃ /Al ₂ O ₃ Catalyst in the Synthesis of Dimethyl Ether. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 2238-2247	3.9	89
290	Characterization of the bio-oil obtained by fast pyrolysis of sewage sludge in a conical spouted bed reactor. <i>Fuel Processing Technology</i> , 2016 , 149, 169-175	7.2	87
289	Kinetic modelling of dimethyl ether synthesis from (H ₂ + CO ₂) by considering catalyst deactivation. <i>Chemical Engineering Journal</i> , 2011 , 174, 660-667	14.7	86

288	Investigations on heat transfer and hydrodynamics under pyrolysis conditions of a pilot-plant draft tube conical spouted bed reactor. <i>Chemical Engineering and Processing: Process Intensification</i> , 2011 , 50, 790-798	3.7	86
287	Hydrothermal stability of HZSM-5 catalysts modified with Ni for the transformation of bioethanol into hydrocarbons. <i>Fuel</i> , 2010 , 89, 3365-3372	7.1	86
286	Waste tyre valorization by catalytic pyrolysis A review. <i>Renewable and Sustainable Energy Reviews</i> , 2020 , 129, 109932	16.2	85
285	Defluidization modelling of pyrolysis of plastics in a conical spouted bed reactor. <i>Chemical Engineering and Processing: Process Intensification</i> , 2005 , 44, 231-235	3.7	85
284	Valorisation of different waste plastics by pyrolysis and in-line catalytic steam reforming for hydrogen production. <i>Energy Conversion and Management</i> , 2018 , 156, 575-584	10.6	85
283	Hydrogen production from biomass by continuous fast pyrolysis and in-line steam reforming. <i>RSC Advances</i> , 2016 , 6, 25975-25985	3.7	84
282	Stability and hydrodynamics of conical spouted beds with binary mixtures. <i>Industrial & Engineering Chemistry Research</i> , 1993 , 32, 2826-2834	3.9	83
281	Effect of polyethylene co-feeding in the steam gasification of biomass in a conical spouted bed reactor. <i>Fuel</i> , 2015 , 153, 393-401	7.1	82
280	Steam gasification of biomass in a conical spouted bed reactor with olivine and alumina as primary catalysts. <i>Fuel Processing Technology</i> , 2013 , 116, 292-299	7.2	82
279	Role of water in the kinetic modeling of catalyst deactivation in the MTG process. <i>AIChE Journal</i> , 2002 , 48, 1561-1571	3.6	82
278	Modified HZSM-5 zeolites for intensifying propylene production in the transformation of 1-butene. <i>Chemical Engineering Journal</i> , 2014 , 251, 80-91	14.7	80
277	Attenuation of Catalyst Deactivation by Cofeeding Methanol for Enhancing the Valorisation of Crude Bio-oil. <i>Energy & Fuels</i> , 2009 , 23, 4129-4136	4.1	80
276	Production of Light Olefins from Polyethylene in a Two-Step Process: Pyrolysis in a Conical Spouted Bed and Downstream High-Temperature Thermal Cracking. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 13915-13923	3.9	79
275	Kinetic Study of Polyolefin Pyrolysis in a Conical Spouted Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 4559-4566	3.9	79
274	A sequential process for hydrogen production based on continuous HDPE fast pyrolysis and in-line steam reforming. <i>Chemical Engineering Journal</i> , 2016 , 296, 191-198	14.7	78
273	Vacuum Pyrolysis of Waste Tires by Continuously Feeding into a Conical Spouted Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 8990-8997	3.9	78
272	Hydrogen-rich gas production by continuous pyrolysis and in-line catalytic reforming of pine wood waste and HDPE mixtures. <i>Energy Conversion and Management</i> , 2017 , 136, 192-201	10.6	77
271	Influence of FCC catalyst steaming on HDPE pyrolysis product distribution. <i>Journal of Analytical and Applied Pyrolysis</i> , 2009 , 85, 359-365	6	77

270	Effect of Si/Al ratio and of acidity of H-ZSM5 zeolites on the primary products of methanol to gasoline conversion. <i>Journal of Chemical Technology and Biotechnology</i> , 1996 , 66, 183-191	3.5	77
269	Segregation in Conical Spouted Beds with Binary and Ternary Mixtures of Equidensity Spherical Particles. <i>Industrial & Engineering Chemistry Research</i> , 1994 , 33, 1838-1844	3.9	75
268	Pressure drop in conical spouted beds. <i>The Chemical Engineering Journal</i> , 1993 , 51, 53-60		75
267	Steam reforming of raw bio-oil over Ni/La ₂ O ₃ -Al ₂ O ₃ : Influence of temperature on product yields and catalyst deactivation. <i>Fuel</i> , 2018 , 216, 463-474	7.1	73
266	Novel Ni/Mg/Al/Ca catalyst for enhanced hydrogen production for the pyrolysis/gasification of a biomass/plastic mixture. <i>Journal of Analytical and Applied Pyrolysis</i> , 2015 , 113, 15-21	6	73
265	Solid cross-flow into the spout and particle trajectories in conical spouted beds. <i>Chemical Engineering Science</i> , 1998 , 53, 3561-3570	4.4	73
264	Catalyst Effect on the Composition of Tire Pyrolysis Products. <i>Energy & Fuels</i> , 2008 , 22, 2909-2916	4.1	73
263	Valorization of citrus wastes by fast pyrolysis in a conical spouted bed reactor. <i>Fuel</i> , 2018 , 224, 111-120	7.1	72
262	Design factors of conical spouted beds and jet spouted beds. <i>Industrial & Engineering Chemistry Research</i> , 1993 , 32, 1245-1250	3.9	72
261	Physical Activation of Rice Husk Pyrolysis Char for the Production of High Surface Area Activated Carbons. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 7241-7250	3.9	71
260	Effect of Vacuum on Lignocellulosic Biomass Flash Pyrolysis in a Conical Spouted Bed Reactor. <i>Energy & Fuels</i> , 2011 , 25, 3950-3960	4.1	71
259	Kinetics of scrap tyre pyrolysis under vacuum conditions. <i>Waste Management</i> , 2009 , 29, 2649-55	8.6	70
258	Evaluation of the properties of tyre pyrolysis oils obtained in a conical spouted bed reactor. <i>Energy</i> , 2017 , 128, 463-474	7.9	69
257	Continuous Polyolefin Cracking on an HZSM-5 Zeolite Catalyst in a Conical Spouted Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 6061-6070	3.9	69
256	Effect of operating conditions on solid velocity in the spout, annulus and fountain of spouted beds. <i>Chemical Engineering Science</i> , 2001 , 56, 3585-3594	4.4	69
255	Stability of different Ni supported catalysts in the in-line steam reforming of biomass fast pyrolysis volatiles. <i>Applied Catalysis B: Environmental</i> , 2019 , 242, 109-120	21.8	69
254	Identification of the coke deposited on an HZSM-5 zeolite catalyst during the sequenced pyrolysis/cracking of HDPE. <i>Applied Catalysis B: Environmental</i> , 2014 , 148-149, 436-445	21.8	68
253	Steam activation of pyrolytic tyre char at different temperatures. <i>Journal of Analytical and Applied Pyrolysis</i> , 2009 , 85, 539-543	6	68

252	Improving bio-oil properties through the fast co-pyrolysis of lignocellulosic biomass and waste tyres. <i>Waste Management</i> , 2019 , 85, 385-395	8.6	67
251	Relationship between surface acidity and activity of catalysts in the transformation of methanol into hydrocarbons. <i>Journal of Chemical Technology and Biotechnology</i> , 1996 , 65, 186-192	3.5	66
250	Performance of a conical spouted bed pilot plant for bio-oil production by poplar flash pyrolysis. <i>Fuel Processing Technology</i> , 2015 , 137, 283-289	7.2	65
249	Hydrodynamics of Sawdust and Mixtures of Wood Residues in Conical Spouted Beds. <i>Industrial & Engineering Chemistry Research</i> , 1994 , 33, 993-1000	3.9	65
248	Deactivation dynamics of a Ni supported catalyst during the steam reforming of volatiles from waste polyethylene pyrolysis. <i>Applied Catalysis B: Environmental</i> , 2017 , 209, 554-565	21.8	64
247	Kinetic modelling for the transformation of bioethanol into olefins on a hydrothermally stable Ni/HZSM-5 catalyst considering the deactivation by coke. <i>Chemical Engineering Journal</i> , 2011 , 167, 262-277	14.7	64
246	Catalyst deactivation by coking in the MTG process in fixed and fluidized bed reactors. <i>Catalysis Today</i> , 1997 , 37, 239-248	5.3	63
245	Measurement of Particle Velocities in Conical Spouted Beds Using an Optical Fiber Probe. <i>Industrial & Engineering Chemistry Research</i> , 1998 , 37, 4520-4527	3.9	63
244	Influence of the support on Ni catalysts performance in the in-line steam reforming of biomass fast pyrolysis derived volatiles. <i>Applied Catalysis B: Environmental</i> , 2018 , 229, 105-113	21.8	62
243	Design of Conical Spouted Beds for the Handling of Low-Density Solids. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 655-661	3.9	62
242	Catalytic pyrolysis of high density polyethylene in a conical spouted bed reactor. <i>Journal of Analytical and Applied Pyrolysis</i> , 2007 , 79, 450-455	6	61
241	HDPE pyrolysis-steam reforming in a tandem spouted bed-fixed bed reactor for H ₂ production. <i>Journal of Analytical and Applied Pyrolysis</i> , 2015 , 116, 34-41	6	60
240	Effect of Cofeeding Butane with Methanol on the Deactivation by Coke of a HZSM-5 Zeolite Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 9980-9988	3.9	60
239	Recycling poly-(methyl methacrylate) by pyrolysis in a conical spouted bed reactor. <i>Chemical Engineering and Processing: Process Intensification</i> , 2010 , 49, 1089-1094	3.7	60
238	Minimum Spouting Velocity of Conical Spouted Beds Equipped with Draft Tubes of Different Configuration. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 2995-3006	3.9	58
237	HZSM-5 and HY Zeolite Catalyst Performance in the Pyrolysis of Tires in a Conical Spouted Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 7600-7609	3.9	57
236	Kinetic Modelling of the Transformation of Aqueous Ethanol into Hydrocarbons on a HZSM-5 Zeolite. <i>Industrial & Engineering Chemistry Research</i> , 2001 , 40, 3467-3474	3.9	57
235	Pilot scale conical spouted bed pyrolysis reactor: Draft tube selection and hydrodynamic performance. <i>Powder Technology</i> , 2012 , 219, 49-58	5.2	55

234	Design and Operation of a Catalytic Polymerization Reactor in a Dilute Spouted Bed Regime. <i>Industrial & Engineering Chemistry Research</i> , 1997 , 36, 1637-1643	3.9	55
233	Fast pyrolysis of eucalyptus waste in a conical spouted bed reactor. <i>Bioresource Technology</i> , 2015 , 194, 225-32	11	54
232	Correlation for calculation of the gas dispersion coefficient in conical spouted beds. <i>Chemical Engineering Science</i> , 1995 , 50, 2161-2172	4.4	54
231	Assessment of steam gasification kinetics of the char from lignocellulosic biomass in a conical spouted bed reactor. <i>Energy</i> , 2016 , 107, 493-501	7.9	53
230	Improving the DME steam reforming catalyst by alkaline treatment of the HZSM-5 zeolite. <i>Applied Catalysis B: Environmental</i> , 2013 , 130-131, 73-83	21.8	52
229	Upgrading model compounds and Scrap Tires Pyrolysis Oil (STPO) on hydrotreating NiMo catalysts with tailored supports. <i>Fuel</i> , 2015 , 145, 158-169	7.1	52
228	Kinetics of scrap tyre pyrolysis under fast heating conditions. <i>Journal of Analytical and Applied Pyrolysis</i> , 2005 , 73, 290-298	6	52
227	Design and operation of a jet spouted bed reactor with continuous catalyst feed in the benzyl alcohol polymerization. <i>Industrial & Engineering Chemistry Research</i> , 1987 , 26, 1297-1304	3.9	52
226	Flash pyrolysis of forestry residues from the Portuguese Central Inland Region within the framework of the BioREFINA-Ter project. <i>Bioresource Technology</i> , 2013 , 129, 512-8	11	51
225	Pyrolysis and in-line catalytic steam reforming of polystyrene through a two-step reaction system. <i>Journal of Analytical and Applied Pyrolysis</i> , 2016 , 122, 502-510	6	50
224	Role of operating conditions in the catalyst deactivation in the in-line steam reforming of volatiles from biomass fast pyrolysis. <i>Fuel</i> , 2018 , 216, 233-244	7.1	49
223	Effect of the acidity of the HZSM-5 zeolite catalyst on the cracking of high density polyethylene in a conical spouted bed reactor. <i>Applied Catalysis A: General</i> , 2012 , 415-416, 89-95	5.1	49
222	Local Bed Voidage in Conical Spouted Beds. <i>Industrial & Engineering Chemistry Research</i> , 1998 , 37, 2553-2558	3.9	48
221	Role of temperature on gasification performance and tar composition in a fountain enhanced conical spouted bed reactor. <i>Energy Conversion and Management</i> , 2018 , 171, 1589-1597	10.6	47
220	Catalytic Cracking of Waxes Produced by the Fast Pyrolysis of Polyolefins. <i>Energy & Fuels</i> , 2007 , 21, 561-569	4.1	45
219	Preliminary studies on fuel production through LCO hydrocracking on noble-metal supported catalysts. <i>Fuel</i> , 2012 , 94, 504-515	7.1	44
218	Kinetic modelling of tyre pyrolysis in a conical spouted bed reactor. <i>Journal of Analytical and Applied Pyrolysis</i> , 2008 , 81, 127-132	6	44
217	Expansion of spouted beds in conical contactors. <i>The Chemical Engineering Journal</i> , 1993 , 51, 45-52		44

216	Preparation of adsorbents from sewage sludge pyrolytic char by carbon dioxide activation. <i>Chemical Engineering Research and Design</i> , 2016 , 103, 76-86	5.5	43
215	Fitting performance of artificial neural networks and empirical correlations to estimate higher heating values of biomass. <i>Fuel</i> , 2016 , 180, 377-383	7.1	43
214	CFD simulation of cylindrical spouted beds by the kinetic theory of granular flow. <i>Powder Technology</i> , 2013 , 246, 303-316	5.2	42
213	Kinetic study of fast pyrolysis of sawdust in a conical spouted bed reactor in the range 400-500 °C. <i>Journal of Chemical Technology and Biotechnology</i> , 2001 , 76, 469-476	3.5	42
212	Behaviour of primary catalysts in the biomass steam gasification in a fountain confined spouted bed. <i>Fuel</i> , 2019 , 253, 1446-1456	7.1	41
211	Solute transport modelling in karst conduits with slow zones during different hydrologic conditions. <i>Journal of Hydrology</i> , 2010 , 390, 182-189	6	41
210	Synergies in the production of olefins by combined cracking of n-butane and methanol on a HZSM-5 zeolite catalyst. <i>Chemical Engineering Journal</i> , 2010 , 160, 760-769	14.7	40
209	Predicting travel times and transport characterization in karst conduits by analyzing tracer-breakthrough curves. <i>Journal of Hydrology</i> , 2007 , 334, 183-198	6	40
208	Isotherms of chemical adsorption of bases on solid catalysts for acidity measurement. <i>Journal of Chemical Technology and Biotechnology</i> , 1994 , 60, 141-146	3.5	40
207	Assessment of a conical spouted with an enhanced fountain bed for biomass gasification. <i>Fuel</i> , 2017 , 203, 825-831	7.1	39
206	Polyethylene Cracking on a Spent FCC Catalyst in a Conical Spouted Bed. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 14008-14017	3.9	39
205	Effect of acid catalysts on scrap tyre pyrolysis under fast heating conditions. <i>Journal of Analytical and Applied Pyrolysis</i> , 2008 , 82, 199-204	6	39
204	Spout and Fountain Geometry in Conical Spouted Beds Consisting of Solids of Varying Density. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 193-200	3.9	39
203	Thermal recycling of polystyrene and polystyrene-butadiene dissolved in a light cycle oil. <i>Journal of Analytical and Applied Pyrolysis</i> , 2003 , 70, 747-760	6	39
202	Effect of CeO ₂ and MgO promoters on the performance of a Ni/Al ₂ O ₃ catalyst in the steam reforming of biomass pyrolysis volatiles. <i>Fuel Processing Technology</i> , 2020 , 198, 106223	7.2	39
201	Drying of Biomass in a Conical Spouted Bed with Different Types of Internal Devices. <i>Drying Technology</i> , 2012 , 30, 207-216	2.6	38
200	Olefin production by cofeeding methanol and n-butane: Kinetic modeling considering the deactivation of HZSM-5 zeolite. <i>AIChE Journal</i> , 2011 , 57, 2841-2853	3.6	38
199	Deactivation Kinetics for Direct Dimethyl Ether Synthesis on a CuO/ZnO/Al ₂ O ₃ /Al ₂ O ₃ Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 481-489	3.9	38

198	Study of Local Properties in Conical Spouted Beds Using an Optical Fiber Probe. <i>Industrial & Engineering Chemistry Research</i> , 1995 , 34, 4033-4039	3.9	38
197	Regeneration of a catalyst based on a SAPO-34 used in the transformation of methanol into olefins. <i>Journal of Chemical Technology and Biotechnology</i> , 1999 , 74, 1082-1088	3.5	37
196	Evolution of biomass char features and their role in the reactivity during steam gasification in a conical spouted bed reactor. <i>Energy Conversion and Management</i> , 2019 , 181, 214-222	10.6	36
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