MarÃ-a V Navarro

List of Publications by Year
in descending order

66 papers	3,961 citations	147726 31 h-index	118793 62 g-index
67 all docs	67 docs citations	67 times ranked	3655 citing authors

#	Article	IF	Citations
1	Waste tyre pyrolysis â€“ A review. Renewable and Sustainable Energy Reviews, 2013, 23, 179-213.	8.2	623
2	Co-pyrolysis of biomass with waste tyres: Upgrading of liquid bio-fuel. Fuel Processing Technology, 2014, 119, 263-271.	3.7	260
3	Catalytic pyrolysis of wood biomass in an auger reactor using calcium-based catalysts. Bioresource Technology, 2014, 162, 250-258.	4.8	185
4	The application of thermal processes to valorise waste tyre. Fuel Processing Technology, 2006, 87, 143-147.	3.7	182
5	Experimental and Modeling Study of C5H10O2Ethyl and Methyl Estersâ€. Journal of Physical Chemistry A, 2007, 111, 4001-4014.	1.1	157
6	Enthalpies of Formation, Bond Dissociation Energies and Reaction Paths for the Decomposition of Model Biofuels:Â Ethyl Propanoate and Methyl Butanoateâ€. Journal of Physical Chemistry A, 2007, 111, 3727-3739.	1.1	145
7	Comparison of receptor models for source apportionment of the PM10 in Zaragoza (Spain). Chemosphere, 2009, 76, 1120-1129.	4.2	141
8	Valorisation of waste tyre by pyrolysis in a moving bed reactor. Waste Management, 2010, 30, 1220-1224.	3.7	134
9	Pyrolysis kinetics of biomass wastes using isoconversional methods and the distributed activation energy model. Bioresource Technology, 2019, 288, 121485.	4.8	125
10	Levels of selected metals in ambient air PM10 in an urban site of Zaragoza (Spain). Environmental Research, 2005, 99, 58-67.	3.7	114
11	Spatial and temporal PAH concentrations in Zaragoza, Spain. Science of the Total Environment, 2003, 307, 111-124.	3.9	99
12	Waste Tire Pyrolysis: Comparison between Fixed Bed Reactor and Moving Bed Reactor. Industrial & Engineering Chemistry Research, 2008, 47, 4029-4033.	1.8	98
13	Valorisation of forestry waste by pyrolysis in an auger reactor. Waste Management, 2011, 31, 1339-1349.	3.7	96
14	Kinetic study for the co-pyrolysis of lignocellulosic biomass and plastics using the distributed activation energy model. Energy, 2018, 165, 731-742.	4.5	82
15	Catalytic co-pyrolysis of grape seeds and waste tyres for the production of drop-in biofuels. Energy Conversion and Management, 2018, 171, 1202-1212.	4.4	76
16	Some inferences on the mechanism of atmospheric gas/particle partitioning of polycyclic aromatic hydrocarbons (PAH) at Zaragoza (Spain). Chemosphere, 2008, 73, 1357-1365.	4.2	72
17	Adsorption of phenanthrene on activated carbons: Breakthrough curve modeling. Carbon, 2004, 42, 2009-2017.	5.4	67
18	Assessment of tire devolatilization kinetics. Journal of Analytical and Applied Pyrolysis, 2005, 74, 259-264.	2.6	66

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19	Removal of Naphthalene, Phenanthrene, and Pyrene by Sorbents from Hot Gas. Environmental Science & Technology, 2001, 35, 2395-2400.	4.6	61
20	Activation of pyrolytic tire char with CO2: kinetic study. Journal of Analytical and Applied Pyrolysis, 2004, 71, 945-957.	2.6	57
21	Drop-in biofuels from the co-pyrolysis of grape seeds and polystyrene. Chemical Engineering Journal, 2019, 377, 120246.	6.6	57
22	Bifunctional Cu/H-ZSM-5 zeolite with hierarchical porosity for hydrocarbon abatement under cold-start conditions. Applied Catalysis B: Environmental, 2014, 154-155, 161-170.	10.8	54
23	Screening of different zeolites and silicoaluminophosphates for the retention of propene under cold start conditions. Microporous and Mesoporous Materials, 2010, 130, 239-247.	2.2	53
24	Thermochemistry of Acetonyl and Related Radicals. Journal of Physical Chemistry A, 2006, 110, 13618-13623.	1.1	52
25	Production and Application of Activated Carbons Made from Waste Tire. Industrial & Engineering Chemistry Research, 2005, 44, 7228-7233.	1.8	48
26	Critical review on atmospheric PAH. Assessment of reported data in the Mediterranean basin. Fuel Processing Technology, 2003, 80, 183-193.	3.7	47
27	Long-Range Atmospheric Transport and Local Pollution Sources on PAH Concentrations in a South European Urban Area. Fulfilling of the European Directive. Water, Air, and Soil Pollution, 2008, 190, 271-285.	1.1	43
28	Measurements of Polycyclic Aromatic Hydrocarbon Adsorption on Activated Carbons at Very Low Concentrations. Industrial & Engineering Chemistry Research, 2003, 42, 155-161.	1.8	36
29	Application of the distributed activation energy model to biomass and biomass constituents devolatilization. AIChE Journal, 2009, 55, 2700-2715.	1.8	36
30	Kinetic Model Comparison for Waste Tire Char Reaction with CO2. Industrial & Engineering Chemistry Research, 2004, 43, 7768-7773.	1.8	35
31	CO2 gasification of char derived from waste tire pyrolysis: Kinetic models comparison. Fuel, 2020, 273, 117745.	3.4	34
32	Three-Ring PAH Removal from Waste Hot Gas by Sorbents:Â Influence of the Sorbent Characteristics. Environmental Science & Technology, 2002, 36, 1821-1826.	4.6	32
33	Application of a particle model to pyrolysis. Comparison of different feedstock: Plastic, tyre, coal and biomass. Fuel Processing Technology, 2012, 103, 1-8.	3.7	32
34	Study of the viability of the process for hydrogen recovery from old tyre oils. Fuel Processing Technology, 2002, 75, 185-199.	3.7	31
35	Sorbent characteristics influence on the adsorption of PAC: I. PAH adsorption with the same number of rings. Fuel Processing Technology, 2002, 77-78, 373-379.	3.7	31
36	Analysis of the evolution of the pore size distribution and the pore network connectivity of a porous carbon during activation. Carbon, 2006, 44, 2281-2288.	5.4	30

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37	CuH-ZSM-5 as Hydrocarbon Trap under Cold Start Conditions. Environmental Science & Technology, 2013, 47, 5851-5857.	4.6	29
38	Validation of the H2 production stage via SER under relevant conditions for the Ca/Cu reforming process practical application. Chemical Engineering Journal, 2017, 324, 266-278.	6.6	28
39	Moisture Effects on the Phenanthrene Adsorption Capacity by Carbonaceous Materials. Energy & Fuels, 2002, 16, 205-210.	2.5	26
40	Improvement of liquids from coalâ€"tire co-thermolysis. Characterization of the obtained oils. Fuel Processing Technology, 2000, 64, 135-140.	3.7	23
41	Effects of Limestone on Polycyclic Aromatic Hydrocarbon Emissions during Coal Atmospheric Fluidized Bed Combustion. Energy & Fuels, 2001, 15, 1469-1474.	2.5	23
42	Waste tyre pyrolysis: Modelling of a moving bed reactor. Waste Management, 2010, 30, 2530-2536.	3.7	23
43	Optimizing the performance of catalytic traps for hydrocarbon abatement during the cold-start of a gasoline engine. Journal of Hazardous Materials, 2014, 279, 527-536.	6.5	23
44	Catalyst evaluation for high-purity H2 production by sorption-enhanced steam-methane reforming coupled to a Ca/Cu process. Journal of Power Sources, 2017, 363, 117-125.	4.0	23
45	From laboratory scale to pilot plant: Evaluation of the catalytic co-pyrolysis of grape seeds and polystyrene wastes with CaO. Catalysis Today, 2021, 379, 87-95.	2.2	22
46	Modelling the heat and mass transfers of propane onto a ZSM-5 zeolite. Separation and Purification Technology, 2012, 86, 127-136.	3.9	21
47	Abatement of hydrocarbons by acid ZSM-5 and BETA zeolites under cold-start conditions. Adsorption, 2013, 19, 357-365.	1.4	20
48	Thermochemistry and kinetics of acetonylperoxy radical isomerisation and decomposition: a quantum chemistry and CVT/SCT approach. Physical Chemistry Chemical Physics, 2008, 10, 7139.	1.3	19
49	Effect of oxidation-reduction cycles on steam-methane reforming kinetics over a nickel-based catalyst. International Journal of Hydrogen Energy, 2019, 44, 12617-12627.	3.8	18
50	Influence of sorbent characteristics on the adsorption of PAC. Fuel Processing Technology, 2002, 77-78, 365-372.	3.7	17
51	Study of the Adsorption of Polyaromatic Hydrocarbon Binary Mixtures on Carbon Materials by Gas-Phase Fluorescence Detection. Energy & Fuels, 2003, 17, 669-676.	2.5	17
52	Development of Efficient Adsorbent Materials for PAH Cleaning from AFBC Hot Gas. Energy & Fuels, 2004, 18, 202-208.	2.5	17
53	Application of the distributed activation energy model to blends devolatilisation. Chemical Engineering Journal, 2008, 142, 87-94.	6.6	17
54	Molecular simulation design of a multisite solid for the abatement of cold start emissions. Chemical Communications, 2012, 48, 6571.	2.2	15

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55	Effects of CO2 on the Phenanthrene Adsorption Capacity of Carbonaceous Materials. Energy & Fuels, 2002, 16, 510-516.	2.5	14
56	Experimental and simulated propene isotherms on porous solids. Applied Surface Science, 2010, 256, 5292-5297.	3.1	14
57	Modeling of Activated Carbon Production from Lignite. Energy & Fuels, 2006, 20, 2627-2631.	2.5	13
58	Temperature Swing Adsorption of Polycyclic Aromatic Hydrocarbons on Activated Carbons. Industrial & Engineering Chemistry Research, 2007, 46, 8193-8198.	1.8	13
59	Aromatization of oils from coalâ€"tyre cothermolysis. Fuel Processing Technology, 2000, 68, 45-55.	3.7	11
60	Modelling the Breakthrough Curves Obtained from the Adsorption of Propene onto Microporous Inorganic Solids. Adsorption Science and Technology, 2010, 28, 761-775.	1.5	7
61	Development of Synthetic Ca-based CO2 Sorbents for Sorption Enhanced Reforming Coupled to Ca/Cu Chemical Loop. Energy Procedia, 2017, 114, 230-241.	1.8	6
62	WHERE ARE THE LIMITS OF THE GAS-PHASE FLUORESCENCE ON THE POLYCYCLIC AROMATIC COMPOUND ANALYSIS?. Polycyclic Aromatic Compounds, 2004, 24, 325-332.	1.4	5
63	Assessment of the development of the pore size distribution during carbon activation: a population balance approach. Studies in Surface Science and Catalysis, 2007, 160, 551-558.	1.5	4
64	Phenanthrene Asorption on a Carbonaceous Material: Moisture and CO2 Influence. Studies in Surface Science and Catalysis, 2002, 144, 283-290.	1.5	1
65	Response to the comment on â€œThe application of thermal processes to valorise waste tyreâ€•by J.C. Jones. Fuel Processing Technology, 2006, 87, 755.	3.7	1
66	Limestone Influence on PAH Emissions from Coal AFBC. Catalytic or/and Adsorption Effect?. Studies in Surface Science and Catalysis, 2002, , 403-409.	1.5	0