# J Angel MenÃ©ndez

List of Publications by Year
in descending order



| 185 | 12,064 | 25034 | 29157 |
|---|---|---|---|
| papers | citations | 57 h-index | 104 g-index |

| 188 | 188 | 188 | 9880 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

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| 1 | Microwave heating processes involving carbon materials. Fuel Processing Technology, 2010, 91, 1-8. | 7.2 | 833 |
| 2 | On the nature of basic sites on carbon surfaces: an overview. Carbon, 2004, 42, 1219-1225. | 10.3 | 461 |
| 3 | An experimental and theoretical study of the adsorption of aromatics possessing electron-withdrawing and electron-donating functional groups by chemically modified activated carbons. Carbon, 1997, 35, 1339-1348. | 10.3 | 377 |
| 4 | Production of bio-fuels by high temperature pyrolysis of sewage sludge using conventional and microwave heating. Bioresource Technology, 2006, 97, 1185-1193. | 9.6 | 343 |
| 5 | Infrared Spectroscopy of Carbon Materials:Â A Quantum Chemical Study of Model Compounds. Journal of Physical Chemistry B, 2003, 107, 6350-6359. | 2.6 | 328 |
| 6 | On the pyrolysis of sewage sludge: the influence of pyrolysis conditions on solid, liquid and gas fractions. Journal of Analytical and Applied Pyrolysis, 2002, 63, 209-222. | 5.5 | 327 |
| 7 | On the Modification and Characterization of Chemical Surface Properties of Activated Carbon:Â In the Search of Carbons with Stable Basic Properties. Langmuir, 1996, 12, 4404-4410. | 3.5 | 319 |
| 8 | Conventional and microwave induced pyrolysis of coffee hulls for the production of a hydrogen rich fuel gas. Journal of Analytical and Applied Pyrolysis, 2007, 79, 128-135. | 5.5 | 295 |
| 9 | Microwave-induced pyrolysis of sewage sludge. Water Research, 2002, 36, 3261-3264. | 11.3 | 252 |
| 10 | Bituminous coal-based activated carbons modified with nitrogen as adsorbents of hydrogen sulfide. Carbon, 2004, 42, 469-476. | 10.3 | 252 |
| 11 | Effect of microwave and conventional regeneration on the microporous and mesoporous network and on the adsorptive capacity of activated carbons. Microporous and Mesoporous Materials, 2005, 85, 7-15. | 4.4 | 241 |
| 12 | Microwave-assisted pyrolysis of biomass feedstocks: the way forward?. Energy and Environmental Science, 2012, 5, 5481-5488. | 30.8 | 234 |
| 13 | Microwave-assisted dry reforming of methane. International Journal of Hydrogen Energy, 2008, 33, 4337-4344. | 7.1 | 201 |
| 14 | Thermal stability of oxygenated functions in activated carbons. Journal of Analytical and Applied Pyrolysis, 1997, 43, 125-138. | 5.5 | 195 |
| 15 | Effect of pyrolysis temperature on the composition of the oils obtained from sewage sludge. Biomass and Bioenergy, 2009, 33, 933-940. | 5.7 | 178 |
| 16 | Investigations into the characteristics of oils produced from microwave pyrolysis of sewage sludge. Fuel Processing Technology, 2005, 86, 1007-1020. | 7.2 | 176 |
| 17 | Evidence of Self-Gasification during the Microwave-Induced Pyrolysis of Coffee Hulls. Energy & Fuels, 2007, 21, 373-378. | 5.1 | 174 |
| 18 | Microwave pyrolysis of sewage sludge: analysis of the gas fraction. Journal of Analytical and Applied Pyrolysis, 2004, 71, 657-667. | 5.5 | 173 |

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| 19 | Microwave-induced regeneration of activated carbons polluted with phenol. A comparison with conventional thermal regeneration. Carbon, 2004, 42, 1383-1387. | 10.3 | 165 |
| 20 | Bio-syngas production with low concentrations of CO2 and CH4 from microwave-induced pyrolysis of wet and dried sewage sludge. Chemosphere, 2008, 70, 397-403. | 8.2 | 162 |
| 21 | Gas chromatographicâ€“mass spectrometric study of the oil fractions produced by microwave-assisted pyrolysis of different sewage sludges. Journal of Chromatography A, 2003, 1012, 193-206. | 3.7 | 157 |
| 22 | On the difference between the isoelectric point and the point of zero charge of carbons. Carbon, 1995, 33, 1655-1657. | 10.3 | 147 |
| 23 | Preparation and modification of activated carbon fibres by microwave heating. Carbon, 2004, 42, 1315-1320. | 10.3 | 142 |
| 24 | Ball lightning plasma and plasma arc formation during the microwave heating of carbons. Carbon, 2011, 49, 346-349. | 10.3 | 139 |
| 25 | Pyrolysis of glycerol over activated carbons for syngas production. Journal of Analytical and Applied Pyrolysis, 2009, 84, 145-150. | 5.5 | 137 |
| 26 | Microwave pyrolysis of microalgae for high syngas production. Bioresource Technology, 2013, 144, 240-246. | 9.6 | 134 |
| 27 | Basic Surface Oxides on Carbon Materials:Â A Global View. Langmuir, 2003, 19, 3505-3511. | 3.5 | 132 |
| 28 | Hydrogen rich fuel gas production from the pyrolysis of wet sewage sludge at high temperature. Journal of Analytical and Applied Pyrolysis, 2006, 77, 127-132. | 5.5 | 127 |
| 29 | Microwave-assisted catalytic decomposition of methane over activated carbon for CO2CO2-free hydrogen production. International Journal of Hydrogen Energy, 2007, 32, 4792-4799. | 7.1 | 123 |
| 30 | Influence of feed characteristics on the microwave-assisted pyrolysis used to produce syngas from biomass wastes. Journal of Analytical and Applied Pyrolysis, 2011, 91, 316-322. | 5.5 | 121 |
| 31 | Modification of the surface chemistry of active carbons by means of microwave-induced treatments. Carbon, 1999, 37, 1115-1121. | 10.3 | 117 |
| 32 | An overview of novel technologies to valorise coke oven gas surplus. Fuel Processing Technology, 2013, 110, 150-159. | 7.2 | 116 |
| 33 | Microwave-assisted regeneration of activated carbons loaded with pharmaceuticals. Water Research, 2007, 41, 3299-3306. | 11.3 | 111 |
| 34 | Dry reforming of coke oven gases over activated carbon to produce syngas for methanol synthesis. Fuel, 2010, 89, 2897-2902. | 6.4 | 102 |
| 35 | On the Modification and Characterization of Chemical Surface Properties of Activated Carbon:Â Microcalorimetric, Electrochemical, and Thermal Desorption Probes. Langmuir, 1997, 13, 3414-3421. | 3.5 | 96 |
| 36 | Thermal treatments of activated carbon fibres using a microwave furnace. Microporous and Mesoporous Materials, 2001, 47, 243-252. | 4.4 | 93 |

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| 37 | Microwave-induced drying, pyrolysis and gasification (MWDPG) of sewage sludge: Vitrification of the solid residue. Journal of Analytical and Applied Pyrolysis, 2005, 74, 406-412. | 5.5 | 93 |
| 38 | Biogas to Syngas by Microwave-Assisted Dry Reforming in the Presence of Char. Energy & Fuels, 2007, 21, 2066-2071. | 5.1 | 91 |
| 39 | CO2 reforming of coke oven gas over a Ni/Î³Al2O3 catalyst to produce syngas for methanol synthesis. Fuel, 2012, 94, 197-203. | 6.4 | 89 |
| 40 | Carbon Materials as Catalysts for Decomposition and CO2 Reforming of Methane: A Review. Chinese Journal of Catalysis, 2011, 32, 207-216. | 14.0 | 85 |
| 41 | Energy consumption estimation in the scaling-up of microwave heating processes. Chemical Engineering and Processing: Process Intensification, 2015, 95, 1-8. | 3.6 | 84 |
| 42 | Contribution of the Basal Planes to Carbon Basicity:â€‰ An Ab Initio Study of the H3O+âˆ'Ï€ Interaction in Cluster Models. Journal of Physical Chemistry B, 1998, 102, 5595-5601. | 2.6 | 77 |
| 43 | Chapter 1 Types of carbon adsorbents and their production. Interface Science and Technology, 2006, 7, 1-47. | 3.3 | 74 |
| 44 | Improving hydrogen storage in Ni-doped carbon nanospheres. International Journal of Hydrogen Energy, 2009, 34, 3070-3076. | 7.1 | 73 |
| 45 | Comparative study of conventional and microwave-assisted pyrolysis, steam and dry reforming of glycerol for syngas production, using a carbonaceous catalyst. Journal of Analytical and Applied Pyrolysis, 2010, 88, 155-159. | 5.5 | 73 |
| 46 | Optimization of microalgae oil extraction under ultrasound and microwave irradiation. Journal of Chemical Technology and Biotechnology, 2014, 89, 1779-1784. | 3.2 | 72 |
| 47 | Low-Temperature Generation of Basic Carbon Surfaces by Hydrogen Spillover. The Journal of Physical Chemistry, 1996, 100, 17243-17248. | 2.9 | 70 |
| 48 | Adsorption isotherms and kinetics of methylene blue on a low-cost adsorbent recovered from a spent catalyst of vinyl acetate synthesis. Applied Surface Science, 2010, 256, 2569-2576. | 6.1 | 70 |
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| 50 | Optimizing the electrochemical performance of aqueous symmetric supercapacitors based on an activated carbon xerogel. Journal of Power Sources, 2013, 241, 776-782. | 7.8 | 68 |
| 51 | Microwave synthesis of micro-mesoporous activated carbon xerogels for high performance supercapacitors. Microporous and Mesoporous Materials, 2013, 168, 206-212. | 4.4 | 63 |
| 52 | Fast microwave-assisted synthesis of tailored mesoporous carbon xerogels. Journal of Colloid and Interface Science, 2011, 357, 541-547. | 9.4 | 62 |
| 53 | Low temperature regeneration of activated carbons using microwaves: Revising conventional wisdom. Journal of Environmental Management, 2012, 102, 134-140. | 7.8 | 61 |
| 54 | Mixtures of carbon and Ni/Al2O3 as catalysts for the microwave-assisted CO2 reforming of CH4. Fuel Processing Technology, 2011, 92, 1531-1536. | 7.2 | 60 |

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| 55 | Carbonisation of resorcinolâ€“formaldehyde organic xerogels: Effect of temperature, particle size and heating rate on the porosity of carbon xerogels. Journal of Analytical and Applied Pyrolysis, 2013, 100, 111-116. | 5.5 | 60 |
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| 61 | Synthesis of carbon-supported nickel catalysts for the dry reforming of CH4. Fuel Processing Technology, 2010, 91, 765-769. | 7.2 | 56 |
| 62 | Contribution of Pyrone-Type Structures to Carbon Basicity:Â An ab Initio Study. Langmuir, 1999, 15, 3897-3904. | 3.5 | 54 |
| 63 | Thermal Treatment of Active Carbons: a Comparison Between Microwave and Electrical Hating. Journal of Microwave Power and Electromagnetic Energy, 1999, 34, 137-143. | 0.8 | 54 |
| 64 | New process for producing methanol from coke oven gas by means of CO2 reforming. Comparison with conventional process. Fuel Processing Technology, 2013, 115, 215-221. | 7.2 | 54 |
| 65 | Determination of metallurgical coke reactivity at INCAR: NSC and ECE-INCAR reactivity tests. Ironmaking and Steelmaking, 1999, 26, 117-121. | 2.1 | 53 |
| 66 | Exploring New Routes in the Synthesis of Carbon Xerogels for Their Application in Electric Double-Layer Capacitors. Energy & Fuels, 2010, 24, 3334-3339. | 5.1 | 52 |
| 67 | Microcalorimetric study of acid sites on ammonia- and acid-pretreated activated carbon. Carbon, 2000, 38, 691-700. | 10.3 | 51 |
| 68 | Development of microporous carbon xerogels by controlling synthesis conditions. Journal of Non-Crystalline Solids, 2008, 354, 817-825. | 3.1 | 50 |
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| 71 | Microwave-assisted pyrolysis of CH4/N2 mixtures over activated carbon. Journal of Analytical and Applied Pyrolysis, 2008, 82, 158-162. | 5.5 | 48 |
| 72 | Synergetic effect of a mixture of activated carbon+Ni/Al2O3 used as catalysts for the CO2 reforming of CH4. Applied Catalysis A: General, 2010, 390, 78-83. | 4.3 | 48 |

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| 78 | Equilibrium prediction of CO2 reforming of coke oven gas: Suitability for methanol production. Chemical Engineering Science, 2012, 82, 95-103. | 3.8 | 42 |
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| 84 | A visual validation of the combined effect of pH and dilution on the porosity of carbon xerogels. Microporous and Mesoporous Materials, 2016, 223, 89-93. | 4.4 | 40 |
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| 89 | Comparing the composition of the synthesis-gas obtained from the pyrolysis of different organic residues for a potential use in the synthesis of bioplastics. Journal of Analytical and Applied Pyrolysis, 2015, 111, 55-63. | 5.5 | 35 |
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| 123 | The role of conductive additives on the performance of hybrid carbon xerogels as electrodes in aqueous supercapacitors. Electrochimica Acta, 2019, 295, 693-702. | 5.2 | 18 |
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| 136 | Multiphase graphitisation of carbon xerogels and its dependence on their pore size. Carbon, 2019, 152, 704-714. | 10.3 | 14 |
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| 138 | Mixtures of Steel-Making Slag and Carbons as Catalyst for Microwave-Assisted Dry Reforming of CH4. Chinese Journal of Catalysis, 2012, 33, 1115-1118. | 14.0 | 13 |
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