# Chun-Zhu Li

## List of Publications by Citations



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| 287 papers | 15,775 citations | 71 h-index | 109 g-index |
| 299 ext. papers | 17,177 ext. citations | 6.3 avg, IF | 6.84 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 287 | FT-Raman spectroscopic study of the evolution of char structure during the pyrolysis of a Victorian brown coal. *Fuel*, **2006**, 85, 1700-1707 | 7.1 | 592 |
| 286 | Some recent advances in the understanding of the pyrolysis and gasification behaviour of Victorian brown coal. *Fuel*, **2007**, 86, 1664-1683 | 7.1 | 395 |
| 285 | Fates and roles of alkali and alkaline earth metals during the pyrolysis of a Victorian brown coal. *Fuel*, **2000**, 79, 427-438 | 7.1 | 334 |
| 284 | Fast Pyrolysis of Oil Mallee Woody Biomass:  Effect of Temperature on the Yield and Quality of Pyrolysis Products. *Industrial & Engineering Chemistry Research*, **2008**, 47, 1846-1854 | 3.9 | 278 |
| 283 | Effects of particle size on the fast pyrolysis of oil mallee woody biomass. *Fuel*, **2009**, 88, 1810-1817 | 7.1 | 254 |
| 282 | Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part I. Volatilisation of Na and Cl from a set of NaCl-loaded samples. *Fuel*, **2002**, 81, 143-149 | 7.1 | 244 |
| 281 | Mallee wood fast pyrolysis: Effects of alkali and alkaline earth metallic species on the yield and composition of bio-oil. *Fuel*, **2011**, 90, 2915-2922 | 7.1 | 242 |
| 280 | Importance of volatile–char interactions during the pyrolysis and gasification of low-rank fuels—A review. *Fuel*, **2013**, 112, 609-623 | 7.1 | 212 |
| 279 | Effects of Temperature on the Formation of Lignin-Derived Oligomers during the Fast Pyrolysis of Mallee Woody Biomass. *Energy & Fuels*, **2008**, 22, 2022-2032 | 4.1 | 190 |
| 278 | Levulinic esters from the acid-catalysed reactions of sugars and alcohols as part of a bio-refinery. *Green Chemistry*, **2011**, 13, 1676 | 10 | 186 |
| 277 | Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part IV. Catalytic effects of NaCl and ion-exchangeable Na in coal on char reactivity?. *Fuel*, **2003**, 82, 587-593 | 7.1 | 185 |
| 276 | Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part VII. Raman spectroscopic study on the changes in char structure during the catalytic gasification in air. *Fuel*, **2006**, 85, 1509-1517 | 7.1 | 182 |
| 275 | Catalytic reforming of tar during gasification. Part II. Char as a catalyst or as a catalyst support for tar reforming. *Fuel*, **2011**, 90, 2545-2552 | 7.1 | 178 |
| 274 | Separation, hydrolysis and fermentation of pyrolytic sugars to produce ethanol and lipids. *Bioresource Technology*, **2010**, 101, 9688-99 | 11 | 169 |
| 273 | Effects of biomass char structure on its gasification reactivity. *Bioresource Technology*, **2010**, 101, 7935-43 | 11 | 167 |
| 272 | Effects of Heating Rate and Ion-Exchangeable Cations on the Pyrolysis Yields from a Victorian Brown Coal. *Energy & Fuels*, **1999**, 13, 748-755 | 4.1 | 167 |
| 271 | Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part III. The importance of the interactions between volatiles and char at high temperature. *Fuel*, **2002**, 81, 1033-1039 | 7.1 | 165 |

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| 270 | Primary Release of Alkali and Alkaline Earth Metallic Species during the Pyrolysis of Pulverized Biomass. *Energy & Fuels*, **2005**, 19, 2164-2171 | 4.1 | 164 |
| 269 | Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part II. Effects of chemical form and valence. *Fuel*, **2002**, 81, 151-158 | 7.1 | 159 |
| 268 | Formation of NOx and SOx precursors during the pyrolysis of coal and biomass. Part III. Further discussion on the formation of HCN and NH3 during pyrolysis. *Fuel*, **2000**, 79, 1899-1906 | 7.1 | 152 |
| 267 | Catalytic reforming of tar during gasification. Part I. Steam reforming of biomass tar using ilmenite as a catalyst. *Fuel*, **2011**, 90, 1847-1854 | 7.1 | 143 |
| 266 | Effects of gasifying agent on the evolution of char structure during the gasification of Victorian brown coal. *Fuel*, **2013**, 103, 22-28 | 7.1 | 137 |
| 265 | Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part VIII. Catalysis and changes in char structure during gasification in steam. *Fuel*, **2006**, 85, 1518-1525 | 7.1 | 137 |
| 264 | Volatilisation of alkali and alkaline earth metallic species during the pyrolysis of biomass: differences between sugar cane bagasse and cane trash. *Bioresource Technology*, **2005**, 96, 1570-7 | 11 | 136 |
| 263 | Characterization of tars from variable heating rate pyrolysis of maceral concentrates. *Fuel*, **1993**, 72, 3-11 | 7.1 | 132 |
| 262 | Polymerization on heating up of bio-oil: A model compound study. *AICHE Journal*, **2013**, 59, 888-900 | 3.6 | 130 |
| 261 | Acid-Catalyzed Conversion of Xylose in 20 Solvents: Insight into Interactions of the Solvents with Xylose, Furfural, and the Acid Catalyst. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 2562-2575 | 8.3 | 129 |
| 260 | Pyrolysis of a Victorian brown coal and gasification of nascent char in CO2 atmosphere in a wire-mesh reactor. *Fuel*, **2004**, 83, 833-843 | 7.1 | 128 |
| 259 | UV-Fluorescence Spectroscopy of Coal Pyrolysis Tars. *Energy & Fuels*, **1994**, 8, 1039-1048 | 4.1 | 127 |
| 258 | Effects of volatile–char interactions on the evolution of char structure during the gasification of Victorian brown coal in steam. *Fuel*, **2011**, 90, 1529-1535 | 7.1 | 124 |
| 257 | Reaction pathways of glucose during esterification: effects of reaction parameters on the formation of humin type polymers. *Bioresource Technology*, **2011**, 102, 10104-13 | 11 | 120 |
| 256 | Mechanism of decomposition of aromatics over charcoal and necessary condition for maintaining its activity. *Fuel*, **2008**, 87, 2914-2922 | 7.1 | 118 |
| 255 | Formation of Aromatic Structures during the Pyrolysis of Bio-oil. *Energy & Fuels*, **2012**, 26, 241-247 | 4.1 | 115 |
| 254 | Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part V. Combined effects of Na concentration and char structure on char reactivity. *Fuel*, **2004**, 83, 23-30 | 7.1 | 115 |
| 253 | Removal and Recycling of Inherent Inorganic Nutrient Species in Mallee Biomass and Derived Biochars by Water Leaching. *Industrial & Engineering Chemistry Research*, **2011**, 50, 12143-12151 | 3.9 | 113 |

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| 252 | Drastic changes in biomass char structure and reactivity upon contact with steam. *Fuel*, **2008**, 87, 1127-1132 | 7.1 | 113 |
| 251 | An FT-IR spectroscopic study of carbonyl functionalities in bio-oils. *Fuel*, **2011**, 90, 3417-3423 | 7.1 | 108 |
| 250 | Catalytic and Noncatalytic Mechanisms in Steam Gasification of Char from the Pyrolysis of Biomass *Energy & Fuels*, **2010**, 24, 108-116 | 4.1 | 106 |
| 249 | Formation of NOx and SOx precursors during the pyrolysis of coal and biomass. Part I. Effects of reactor configuration on the determined yields of HCN and NH3 during pyrolysis. *Fuel*, **2000**, 79, 1883-1889 | 7.1 | 106 |
| 248 | Conversion of Fuel-N into HCN and NH3During the Pyrolysis and Gasification in Steam:A Comparative Study of Coal and Biomass *Energy & Fuels*, **2007**, 21, 517-521 | 4.1 | 105 |
| 247 | Formation of NOx precursors during the pyrolysis of coal and biomass. Part V. Pyrolysis of a sewage sludge. *Fuel*, **2002**, 81, 2203-2208 | 7.1 | 105 |
| 246 | Roles of inherent metallic species in secondary reactions of tar and char during rapid pyrolysis of brown coals in a drop-tube reactor. *Fuel*, **2002**, 81, 1977-1987 | 7.1 | 103 |
| 245 | Evolution of Char Structure during the Steam Gasification of Biochars Produced from the Pyrolysis of Various Mallee Biomass Components. *Industrial & Engineering Chemistry Research*, **2009**, 48, 10431-10438 | 3.9 | 99 |
| 244 | Inhibition of steam gasification of char by volatiles in a fluidized bed under continuous feeding of a brown coal. *Fuel*, **2006**, 85, 340-349 | 7.1 | 99 |
| 243 | Effects of gasification atmosphere and temperature on char structural evolution during the gasification of Collie sub-bituminous coal. *Fuel*, **2014**, 117, 1190-1195 | 7.1 | 97 |
| 242 | In situ diagnostics of Victorian brown coal combustion in O2/N2 and O2/CO2 mixtures in drop-tube furnace. *Fuel*, **2010**, 89, 2703-2712 | 7.1 | 95 |
| 241 | Hydrotreatment of pyrolysis bio-oil: A review. *Fuel Processing Technology*, **2019**, 195, 106140 | 7.2 | 93 |
| 240 | An advanced biomass gasification technology with integrated catalytic hot gas cleaning. Part II: Tar reforming using char as a catalyst or as a catalyst support. *Fuel*, **2013**, 112, 646-653 | 7.1 | 93 |
| 239 | Evaluation of structural features of chars from pyrolysis of biomass of different particle sizes. *Fuel Processing Technology*, **2010**, 91, 877-881 | 7.2 | 93 |
| 238 | One-Pot Synthesis of Levulinic Acid/Ester from C5 Carbohydrates in a Methanol Medium. *ACS Sustainable Chemistry and Engineering*, **2013**, 1, 1593-1599 | 8.3 | 92 |
| 237 | Production and fuel properties of fast pyrolysis oil/bio-diesel blends. *Fuel Processing Technology*, **2010**, 91, 296-305 | 7.2 | 92 |
| 236 | Effects of volatile–char interactions on the volatilisation of alkali and alkaline earth metallic species during the pyrolysis of biomass. *Fuel*, **2008**, 87, 1187-1194 | 7.1 | 91 |
| 235 | Upgrading biomass-derived furans via acid-catalysis/hydrogenation: the remarkable difference between water and methanol as the solvent. *Green Chemistry*, **2015**, 17, 219-224 | 10 | 86 |

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| 234 | Effect of pyrolysis temperature on the yield and properties of bio-oils obtained from the auger pyrolysis of Douglas Fir wood. *Journal of Analytical and Applied Pyrolysis*, **2012**, 93, 52-62 | 6 | 86 |
| 233 | Effect of iron on the gasification of Victorian brown coal with steam:enhancement of hydrogen production. *Fuel*, **2006**, 85, 127-133 | 7.1 | 86 |
| 232 | Changes in Char Structure during the Gasification of a Victorian Brown Coal in Steam and Oxygen at 800 °C. *Energy & Fuels*, **2008**, 22, 4034-4038 | 4.1 | 85 |
| 231 | Characterization of the Structural Features of Char from the Pyrolysis of Cane Trash Using Fourier Transform Raman Spectroscopy. *Energy & Fuels*, **2007**, 21, 1816-1821 | 4.1 | 85 |
| 230 | Formation of NOx and SOx precursors during the pyrolysis of coal and biomass. Part II. Effects of experimental conditions on the yields of NOx and SOx precursors from the pyrolysis of a Victorian brown coal. *Fuel*, **2000**, 79, 1891-1897 | 7.1 | 84 |
| 229 | Vacuum pyrolysis of maceral concentrates in a wire-mesh reactor. *Fuel*, **1993**, 72, 1459-1468 | 7.1 | 84 |
| 228 | Simultaneous catalytic esterification of carboxylic acids and acetalisation of aldehydes in a fast pyrolysis bio-oil from mallee biomass. *Fuel*, **2011**, 90, 2530-2537 | 7.1 | 83 |
| 227 | Changes in char reactivity and structure during the gasification of a Victorian brown coal: Comparison between gasification in O2 and CO2. *Fuel Processing Technology*, **2010**, 91, 800-804 | 7.2 | 83 |
| 226 | Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part VI. Further investigation into the effects of volatile-char interactions. *Fuel*, **2004**, 83, 1273-1279 | 7.1 | 81 |
| 225 | An investigation of the causes of the difference in coal particle ignition temperature between combustion in air and in O2/CO2. *Fuel*, **2010**, 89, 3381-3387 | 7.1 | 80 |
| 224 | Formation of NOx precursors during the pyrolysis of coal and biomass. Part VI. Effects of gas atmosphere on the formation of NH3 and HCN?. *Fuel*, **2003**, 82, 1159-1166 | 7.1 | 79 |
| 223 | Acid-catalyzed conversion of xylose in methanol-rich medium as part of biorefinery. *ChemSusChem*, **2012**, 5, 1427-34 | 8.3 | 77 |
| 222 | Release of HCN, NH3, and HNCO from the Thermal Gas-Phase Cracking of Coal Pyrolysis Tars. *Energy & Fuels*, **1998**, 12, 536-541 | 4.1 | 77 |
| 221 | Evolution of biomass char structure during oxidation in O2 as revealed with FT-Raman spectroscopy. *Fuel Processing Technology*, **2008**, 89, 1429-1435 | 7.2 | 76 |
| 220 | Effects of volatile–char interactions on in situ destruction of nascent tar during the pyrolysis and gasification of biomass. Part I. Roles of nascent char. *Fuel*, **2014**, 122, 60-66 | 7.1 | 75 |
| 219 | Upgrading of bio-oil via acid-catalyzed reactions in alcohols – A mini review. *Fuel Processing Technology*, **2017**, 155, 2-19 | 7.2 | 74 |
| 218 | Novel CO2-tolerant ion-transporting ceramic membranes with an external short circuit for oxygen separation at intermediate temperatures. *Energy and Environmental Science*, **2012**, 5, 5257-5264 | 35.4 | 73 |
| 217 | Formation of coke during the pyrolysis of bio-oil. *Fuel*, **2013**, 108, 439-444 | 7.1 | 73 |

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| 216 | High yields of solid carbonaceous materials from biomass. *Green Chemistry*, **2019**, 21, 1128-1140 | 10 | 70 |
| 215 | Effects of volatile–char interactions on the reactivity of chars from NaCl-loaded Loy Yang brown coal. *Fuel*, **2005**, 84, 1221-1228 | 7.1 | 70 |
| 214 | One-pot conversion of biomass-derived xylose and furfural into levulinate esters via acid catalysis. *Chemical Communications*, **2017**, 53, 2938-2941 | 5.8 | 69 |
| 213 | Mediating acid-catalyzed conversion of levoglucosan into platform chemicals with various solvents. *Green Chemistry*, **2012**, 14, 3087 | 10 | 68 |
| 212 | Reforming of Volatiles from the Biomass Pyrolysis over Charcoal in a Sequence of Coke Deposition and Steam Gasification of Coke. *Energy & Fuels*, **2011**, 25, 5387-5393 | 4.1 | 68 |
| 211 | In-Situ Reforming of Tar from the Rapid Pyrolysis of a Brown Coal over Char *Energy & Fuels*, **2010**, 24, 76-83 | 4.1 | 67 |
| 210 | Mallee Biomass as a Key Bioenergy Source in Western Australia: Importance of Biomass Supply Chain. *Energy & Fuels*, **2009**, 23, 3290-3299 | 4.1 | 67 |
| 209 | Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part IX. Effects of volatile-char interactions on char–H2O and char–O2 reactivities. *Fuel*, **2011**, 90, 1655-1661 | 7.1 | 67 |
| 208 | Upgrading of bio-oil into advanced biofuels and chemicals. Part I. Transformation of GC-detectable light species during the hydrotreatment of bio-oil using Pd/C catalyst. *Fuel*, **2013**, 111, 709-717 | 7.1 | 66 |
| 207 | Fate of Aromatic Ring Systems during Thermal Cracking of Tars in a Fluidized-Bed Reactor. *Energy & Fuels*, **1996**, 10, 1083-1090 | 4.1 | 66 |
| 206 | Effect of sulfuric acid concentration on the yield and properties of the bio-oils obtained from the auger and fast pyrolysis of Douglas Fir. *Fuel*, **2013**, 104, 536-546 | 7.1 | 65 |
| 205 | Formation of NOx and SOx precursors during the pyrolysis of coal and biomass. Part IV. Pyrolysis of a set of Australian and Chinese coals. *Fuel*, **2001**, 80, 2131-2138 | 7.1 | 64 |
| 204 | Effects of temperature on the hydrotreatment behaviour of pyrolysis bio-oil and coke formation in a continuous hydrotreatment reactor. *Fuel Processing Technology*, **2016**, 148, 175-183 | 7.2 | 63 |
| 203 | Effects of temperature on the yields and properties of bio-oil from the fast pyrolysis of mallee bark. *Fuel*, **2013**, 108, 400-408 | 7.1 | 62 |
| 202 | Comparison of thermal breakdown in coal pyrolysis and liquefaction. *Fuel*, **1994**, 73, 851-865 | 7.1 | 62 |
| 201 | Acid-catalysed reactions between methanol and the bio-oil from the fast pyrolysis of mallee bark. *Fuel*, **2012**, 97, 512-522 | 7.1 | 60 |
| 200 | Role of O-containing functional groups in biochar during the catalytic steam reforming of tar using the biochar as a catalyst. *Fuel*, **2019**, 253, 441-448 | 7.1 | 58 |
| 199 | Upgrading of bio-oil into advanced biofuels and chemicals. Part III. Changes in aromatic structure and coke forming propensity during the catalytic hydrotreatment of a fast pyrolysis bio-oil with Pd/C catalyst. *Fuel*, **2014**, 116, 642-649 | 7.1 | 58 |

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| 198 | Effects of volatile–char interactions on in-situ destruction of nascent tar during the pyrolysis and gasification of biomass. Part II. Roles of steam. *Fuel*, **2015**, 143, 555-562 | 7.1 | 58 |
| 197 | Char-Supported Nano Iron Catalyst for Water-Gas-Shift Reaction. *Chemical Engineering Research and Design*, **2006**, 84, 125-130 | 5.5 | 58 |
| 196 | Acid-catalyzed conversion of C6 sugar monomer/oligomers to levulinic acid in water, tetrahydrofuran and toluene: Importance of the solvent polarity. *Fuel*, **2015**, 141, 56-63 | 7.1 | 57 |
| 195 | Kinetics of steam gasification of nascent char from rapid pyrolysis of a Victorian brown coal. *Fuel*, **2005**, 84, 1612-1612 | 7.1 | 57 |
| 194 | Formation of HNCO from the Rapid Pyrolysis of Coals. *Energy & Fuels*, **1996**, 10, 264-265 | 4.1 | 57 |
| 193 | Release of alkali and alkaline earth metallic species during rapid pyrolysis of a Victorian brown coal at elevated pressures?. *Fuel*, **2003**, 82, 1491-1497 | 7.1 | 56 |
| 192 | Steam reforming of guaiacol over Ni/Al2O3 and Ni/SBA-15: Impacts of support on catalytic behaviors of nickel and properties of coke. *Fuel Processing Technology*, **2019**, 191, 138-151 | 7.2 | 55 |
| 191 | Volatilisation of alkali and alkaline earth metallic species during the gasification of a Victorian brown coal in CO2. *Fuel Processing Technology*, **2005**, 86, 1241-1251 | 7.2 | 55 |
| 190 | Catalytic steam reforming of cellulose-derived compounds using a char-supported iron catalyst. *Fuel Processing Technology*, **2013**, 116, 234-240 | 7.2 | 54 |
| 189 | Catalytic reforming of tar during gasification. Part IV. Changes in the structure of char in the char-supported iron catalyst during reforming. *Fuel*, **2013**, 106, 858-863 | 7.1 | 54 |
| 188 | Effects of CO2 and heating rate on the characteristics of chars prepared in CO2 and N2 atmospheres. *Fuel*, **2015**, 142, 243-249 | 7.1 | 53 |
| 187 | Mechanisms and kinetic modelling of steam gasification of brown coal in the presence of volatile–char interactions. *Fuel*, **2013**, 103, 7-13 | 7.1 | 53 |
| 186 | Acid-catalyzed conversion of mono- and poly-sugars into platform chemicals: effects of molecular structure of sugar substrate. *Bioresource Technology*, **2013**, 133, 469-74 | 11 | 52 |
| 185 | A mechanistic study on kinetic compensation effect during low-temperature oxidation of coal chars. *Proceedings of the Combustion Institute*, **2011**, 33, 1755-1762 | 5.9 | 52 |
| 184 | Raman Spectroscopic Investigations into Links between Intrinsic Reactivity and Char Chemical Structure. *Energy & Fuels*, **2014**, 28, 285-290 | 4.1 | 51 |
| 183 | Bioslurry as a Fuel. 3. Fuel and Rheological Properties of Bioslurry Prepared from the Bio-oil and Biochar of Mallee Biomass Fast Pyrolysis. *Energy & Fuels*, **2010**, 24, 5669-5676 | 4.1 | 51 |
| 182 | Biochar as a Fuel: 3. Mechanistic Understanding on Biochar Thermal Annealing at Mild Temperatures and Its Effect on Biochar Reactivity. *Energy & Fuels*, **2011**, 25, 406-414 | 4.1 | 51 |
| 181 | Spontaneous Generation of Tar Decomposition Promoter in a Biomass Steam Reformer. *Chemical Engineering Research and Design*, **2005**, 83, 1093-1102 | 5.5 | 51 |

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| 180 | Characterization of successive time/temperature-resolved liquefaction extract fractions released from coal in a flowing-solvent reactor. *Fuel*, **1995**, 74, 37-45 | 7.1 | 51 |
| 179 | Effect of Cellulose Crystallinity on Solid/Liquid Phase Reactions Responsible for the Formation of Carbonaceous Residues during Pyrolysis. *Industrial & Engineering Chemistry Research*, **2014**, 53, 2940-2955 | 3.9 | 49 |
| 178 | Investigation of deactivation mechanisms of a solid acid catalyst during esterification of the bio-oils from mallee biomass. *Applied Energy*, **2013**, 111, 94-103 | 10.7 | 49 |
| 177 | Destruction of tar during volatile-char interactions at low temperature. *Fuel Processing Technology*, **2018**, 171, 215-222 | 7.2 | 49 |
| 176 | A preliminary Raman spectroscopic perspective for the roles of catalysts during char gasification. *Fuel*, **2014**, 121, 165-172 | 7.1 | 48 |
| 175 | Biomass-derived sugars and furans: Which polymerize more during their hydrolysis?. *Fuel Processing Technology*, **2015**, 137, 212-219 | 7.2 | 48 |
| 174 | An advanced biomass gasification technology with integrated catalytic hot gas cleaning: Part I. Technology and initial experimental results in a lab-scale facility. *Fuel*, **2013**, 108, 409-416 | 7.1 | 48 |
| 173 | An advanced biomass gasification technology with integrated catalytic hot gas cleaning. Part III: Effects of inorganic species in char on the reforming of tars from wood and agricultural wastes. *Fuel*, **2016**, 183, 177-184 | 7.1 | 47 |
| 172 | Production of value-added chemicals from bio-oil via acid catalysis coupled with liquid□quid extraction. *RSC Advances*, **2012**, 2, 9366 | 3.7 | 47 |
| 171 | Combined effects of pressure and ion-exchangeable metallic species on pyrolysis of Victorian lignite. *Fuel*, **2003**, 82, 343-350 | 7.1 | 47 |
| 170 | Formation of NO precursors during the pyrolysis of coal and biomass. Part VII. Pyrolysis and gasification of cane trash with steam. *Fuel*, **2005**, 84, 371-376 | 7.1 | 47 |
| 169 | Effects of temperature and molecular mass on the nitrogen functionality of tars produced under high heating rate conditions. *Fuel*, **1998**, 77, 157-164 | 7.1 | 46 |
| 168 | Effect of sulfuric acid on the pyrolysis of Douglas fir and hybrid poplar wood: Py-GC/MS and TG studies. *Journal of Analytical and Applied Pyrolysis*, **2013**, 104, 117-130 | 6 | 45 |
| 167 | Upgrading of bio-oil into advanced biofuels and chemicals. Part II. Importance of holdup of heavy species during the hydrotreatment of bio-oil in a continuous packed-bed catalytic reactor. *Fuel*, **2013**, 112, 302-310 | 7.1 | 44 |
| 166 | High-Speed Camera Observation of Coal Combustion in Air and O2/CO2 Mixtures and Measurement of Burning Coal Particle Velocity□ *Energy & Fuels*, **2010**, 24, 29-37 | 4.1 | 44 |
| 165 | Fluorescence Spectroscopic Analysis of Tars from the Pyrolysis of a Victorian Brown Coal in a Wire-Mesh Reactor. *Energy & Fuels*, **2000**, 14, 476-482 | 4.1 | 44 |
| 164 | Special Issue□asification: a Route to Clean Energy. *Chemical Engineering Research and Design*, **2006**, 84, 407-408 | 5.5 | 43 |
| 163 | Characterization of coal by matrix-assisted laser desorption mass spectrometry. II. Pyrolysis tars and liquefaction extracts from the argonne coal samples. *Rapid Communications in Mass Spectrometry*, **1994**, 8, 815-822 | 2.2 | 42 |

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| 162 | Hydrolysis and glycosidation of sugars during the esterification of fast pyrolysis bio-oil. *Fuel*, **2012**, 95, 146-151 | 7.1 | 41 |
| 161 | Synthesis and characterization of doped La9ASi6O26.5 (A□Ca, Sr, Ba) oxyapatite electrolyte by a water-based gel-casting route. *International Journal of Hydrogen Energy*, **2011**, 36, 6862-6874 | 6.7 | 41 |
| 160 | In-situ observation of the combustion of air-dried and wet Victorian brown coal. *Proceedings of the Combustion Institute*, **2011**, 33, 1739-1746 | 5.9 | 40 |
| 159 | Characterization of coal by matrix-assisted laser desorption ionization mass spectrometry. I. The argonne coal samples. *Rapid Communications in Mass Spectrometry*, **1994**, 8, 808-814 | 2.2 | 39 |
| 158 | Effects of calcination temperature of electrospun fibrous Ni/Al 2 O 3 catalysts on the dry reforming of methane. *Fuel Processing Technology*, **2017**, 155, 246-251 | 7.2 | 38 |
| 157 | Effect of sulfuric acid addition on the yield and composition of lignin derived oligomers obtained by the auger and fast pyrolysis of Douglas-fir wood. *Fuel*, **2013**, 103, 512-523 | 7.1 | 38 |
| 156 | Behavior of Inherent Metallic Species as a Crucial Factor for Kinetics of Steam Gasification of Char from Coal Pyrolysis□ *Energy & Fuels*, **2007**, 21, 387-394 | 4.1 | 38 |
| 155 | Molecular masses up to 270 000 u in coal and coal-derived products by matrix assisted laser desorption ionization mass spectrometry (MALDI-m.s.). *Fuel*, **1994**, 73, 1606-1616 | 7.1 | 38 |
| 154 | Microstructure control of oxygen permeation membranes with templated microchannels. *Journal of Materials Chemistry A*, **2014**, 2, 410-417 | 13 | 36 |
| 153 | Coke formation during the hydrotreatment of bio-oil using NiMo and CoMo catalysts. *Fuel Processing Technology*, **2017**, 155, 261-268 | 7.2 | 36 |
| 152 | Eggshell membrane-templated synthesis of highly crystalline perovskite ceramics for solid oxide fuel cells. *Journal of Materials Chemistry*, **2011**, 21, 1028-1032 | | 36 |
| 151 | Evolution of structure and activity of char-supported iron catalysts prepared for steam reforming of bio-oil. *Fuel Processing Technology*, **2017**, 158, 180-190 | 7.2 | 35 |
| 150 | Polymerization and cracking during the hydrotreatment of bio-oil and heavy fractions obtained by fractional condensation using Ru/C and NiMo/Al2O3 catalyst. *Journal of Analytical and Applied Pyrolysis*, **2016**, 118, 136-143 | 6 | 35 |
| 149 | Evolution of aromatic structures during the reforming of bio-oil: Importance of the interactions among bio-oil components. *Fuel*, **2013**, 111, 805-812 | 7.1 | 34 |
| 148 | Inhibiting and other effects of hydrogen during gasification: Further insights from FT-Raman spectroscopy. *Fuel*, **2014**, 116, 1-6 | 7.1 | 34 |
| 147 | Interparticle Desorption and Re-adsorption of Alkali and Alkaline Earth Metallic Species within a Bed of Pyrolyzing Char from Pulverized Woody Biomass. *Energy & Fuels*, **2006**, 20, 1294-1297 | 4.1 | 34 |
| 146 | Effects of Pretreatment in Steam on the Pyrolysis Behavior of Loy Yang Brown Coal. *Energy & Fuels*, **2006**, 20, 281-286 | 4.1 | 33 |
| 145 | Evidence of poly-condensed aromatic rings in a Victorian brown coal. *Fuel*, **2004**, 83, 97-107 | 7.1 | 32 |

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| 144 | Formation of NOx precursors during the pyrolysis of coal and biomass. Part VIII. Effects of pressure on the formation of NH3 and HCN during the pyrolysis and gasification of Victorian brown coal in steam. *Fuel*, **2005**, 84, 2102-2108 | 7.1 | 32 |
| 143 | Effect of reactor configuration on the yields and structures of pine-wood derived pyrolysis liquids: A comparison between ablative and wire-mesh pyrolysis. *Biomass and Bioenergy*, **1994**, 7, 155-167 | 5.3 | 32 |
| 142 | Changes in char structure during the low-temperature pyrolysis in N2 and subsequent gasification in air of Loy Yang brown coal char. *Fuel*, **2018**, 212, 187-192 | 7.1 | 32 |
| 141 | Dual bed pyrolysis gasification of coal: Process analysis and pilot test. *Fuel*, **2013**, 112, 624-634 | 7.1 | 31 |
| 140 | Importance of the aromatic structures in volatiles to the in-situ destruction of nascent tar during the volatile–char interactions. *Fuel Processing Technology*, **2015**, 132, 31-38 | 7.2 | 31 |
| 139 | Release of volatiles from the pyrolysis of a Victorian lignite at elevated pressures. *Fuel*, **2002**, 81, 1171-1178 | 7.1 | 31 |
| 138 | Characterization of Successive Extract Fractions Released from a Sample of Coal during Liquefaction in a Flowing-Solvent Reactor. *Energy & Fuels*, **1994**, 8, 1360-1369 | 4.1 | 31 |
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