

# Chunfei Wu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1418526/publications.pdf>

Version: 2024-02-01

171  
papers

10,276  
citations

26567

56  
h-index

42291

92  
g-index

174  
all docs

174  
docs citations

174  
times ranked

6915  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Review of biochar for the management of contaminated soil: Preparation, application and prospect. <i>Science of the Total Environment</i> , 2019, 659, 473-490.  | 3.9  | 310       |
| 2  | State-of-the-art on the production and application of carbon nanomaterials from biomass. <i>Green Chemistry</i> , 2018, 20, 5031-5057.   | 4.6  | 256       |
| 3  | Pyrolysis of waste materials using TGA-MS and TGA-FTIR as complementary characterisation techniques. <i>Journal of Analytical and Applied Pyrolysis</i> , 2012, 94, 99-107.  | 2.6  | 254       |
| 4  | Hydrogen production by steam gasification of polypropylene with various nickel catalysts. <i>Applied Catalysis B: Environmental</i> , 2009, 87, 152-161.   | 10.8 | 245       |
| 5  | One-Step Reforming of CO <sub>2</sub> and CH <sub>4</sub> into High-Value Liquid Chemicals and Fuels at Room Temperature by Plasma-Driven Catalysis. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13679-13683. | 7.2  | 244       |
| 6  | A Review of Non-Thermal Plasma Technology: A novel solution for CO <sub>2</sub> conversion and utilization. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 135, 109702.   | 8.2  | 234       |
| 7  | Hydrogen production from biomass gasification using biochar as a catalyst/support. <i>Bioresource Technology</i> , 2016, 216, 159-164.   | 4.8  | 215       |
| 8  | Plasma-photocatalytic conversion of CO <sub>2</sub> at low temperatures: Understanding the synergistic effect of plasma-catalysis. <i>Applied Catalysis B: Environmental</i> , 2016, 182, 525-532.                             | 10.8 | 215       |
| 9  | Hydrogen production from biomass and plastic mixtures by pyrolysis-gasification. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 10883-10891.  | 3.8  | 210       |
| 10 | Preparation, modification and development of Ni-based catalysts for catalytic reforming of tar produced from biomass gasification. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 94, 1086-1109.                      | 8.2  | 206       |
| 11 | The use of different metal catalysts for the simultaneous production of carbon nanotubes and hydrogen from pyrolysis of plastic feedstocks. <i>Applied Catalysis B: Environmental</i> , 2016, 180, 497-510.                    | 10.8 | 201       |
| 12 | Pyrolysis-gasification of plastics, mixed plastics and real-world plastic waste with and without Ni-Mg-Al catalyst. <i>Fuel</i> , 2010, 89, 3022-3032.   | 3.4  | 198       |
| 13 | Co-production of hydrogen and carbon nanotubes from catalytic pyrolysis of waste plastics on Ni-Fe bimetallic catalyst. <i>Energy Conversion and Management</i> , 2017, 148, 692-700.  | 4.4  | 180       |
| 14 | Dual functional catalytic materials of Ni over Ce-modified CaO sorbents for integrated CO <sub>2</sub> capture and conversion. <i>Applied Catalysis B: Environmental</i> , 2019, 244, 63-75.                                   | 10.8 | 180       |
| 15 | Processing Real-World Waste Plastics by Pyrolysis-Reforming for Hydrogen and High-Value Carbon Nanotubes. <i>Environmental Science &amp; Technology</i> , 2014, 48, 819-826.   | 4.6  | 176       |
| 16 | Hydrogen production from biomass gasification with Ni/MCM-41 catalysts: Influence of Ni content. <i>Applied Catalysis B: Environmental</i> , 2011, 108-109, 6-13.  | 10.8 | 168       |
| 17 | Control of steam input to the pyrolysis-gasification of waste plastics for improved production of hydrogen or carbon nanotubes. <i>Applied Catalysis B: Environmental</i> , 2014, 147, 571-584.                                | 10.8 | 152       |
| 18 | Pyrolysis/gasification of cellulose, hemicellulose and lignin for hydrogen production in the presence of various nickel-based catalysts. <i>Fuel</i> , 2013, 106, 697-706.   | 3.4  | 150       |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | H <sub>2</sub> production from co-pyrolysis/gasification of waste plastics and biomass under novel catalyst Ni-CaO-C. <i>Chemical Engineering Journal</i> , 2020, 382, 122947.  | 6.6  | 145       |
| 20 | Recent advances in integrated CO <sub>2</sub> capture and utilization: a review. <i>Sustainable Energy and Fuels</i> , 2021, 5, 4546-4559.  | 2.5  | 142       |
| 21 | Pyrolysis-gasification of post-consumer municipal solid plastic waste for hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 949-957.   | 3.8  | 135       |
| 22 | Characteristics and catalytic properties of Ni/CaAlO <sub>x</sub> catalyst for hydrogen-enriched syngas production from pyrolysis-steam reforming of biomass sawdust. <i>Applied Catalysis B: Environmental</i> , 2016, 183, 168-175. | 10.8 | 132       |
| 23 | Conventional and microwave-assisted pyrolysis of biomass under different heating rates. <i>Journal of Analytical and Applied Pyrolysis</i> , 2014, 107, 276-283.  | 2.6  | 124       |
| 24 | Polycyclic aromatic hydrocarbons (PAH) formation from the pyrolysis of different municipal solid waste fractions. <i>Waste Management</i> , 2015, 36, 136-146.  | 3.7  | 119       |
| 25 | Investigation of coke formation on Ni-Mg-Al catalyst for hydrogen production from the catalytic steam pyrolysis-gasification of polypropylene. <i>Applied Catalysis B: Environmental</i> , 2010, 96, 198-207.                         | 10.8 | 113       |
| 26 | Syngas production from pyrolysis-catalytic steam reforming of waste biomass in a continuous screw kiln reactor. <i>Journal of Analytical and Applied Pyrolysis</i> , 2012, 95, 87-94.   | 2.6  | 112       |
| 27 | Effect of growth temperature and feedstock:catalyst ratio on the production of carbon nanotubes and hydrogen from the pyrolysis of waste plastics. <i>Journal of Analytical and Applied Pyrolysis</i> , 2015, 113, 231-238.           | 2.6  | 110       |
| 28 | 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.                                       | 2.6  | 101       |
| 29 | Polycyclic Aromatic Hydrocarbon Formation from the Pyrolysis/Gasification of Lignin at Different Reaction Conditions. <i>Energy &amp; Fuels</i> , 2014, 28, 6371-6379.  | 2.5  | 100       |
| 30 | Influence of metal addition to Ni-based catalysts for the co-production of carbon nanotubes and hydrogen from the thermal processing of waste polypropylene. <i>Fuel Processing Technology</i> , 2015, 130, 46-53.                    | 3.7  | 98        |
| 31 | Roles of alkali/alkaline earth metals in steam reforming of biomass tar for hydrogen production over perovskite supported Ni catalysts. <i>Fuel</i> , 2019, 257, 116032.  | 3.4  | 92        |
| 32 | Investigation of Ni-Al, Ni-Mg-Al and Ni-Cu-Al catalyst for hydrogen production from pyrolysis-gasification of polypropylene. <i>Applied Catalysis B: Environmental</i> , 2009, 90, 147-156.   | 10.8 | 91        |
| 33 | Continuous Pyrolysis of Sewage Sludge in a Screw-Feeding Reactor: Products Characterization and Ecological Risk Assessment of Heavy Metals. <i>Energy &amp; Fuels</i> , 2017, 31, 5063-5072.  | 2.5  | 84        |
| 34 | Production and application of carbon nanotubes, as a co-product of hydrogen from the pyrolysis-catalytic reforming of waste plastic. <i>Chemical Engineering Research and Design</i> , 2016, 103, 107-114.                            | 2.7  | 83        |
| 35 | Promoting hydrogen production and minimizing catalyst deactivation from the pyrolysis-catalytic steam reforming of biomass on nanosized NiZnAlO <sub>x</sub> catalysts. <i>Fuel</i> , 2017, 188, 610-620.                             | 3.4  | 83        |
| 36 | Effect of Ni Particle Location within the Mesoporous MCM-41 Support for Hydrogen Production from the Catalytic Gasification of Biomass. <i>ACS Sustainable Chemistry and Engineering</i> , 2013, 1, 1083-1091.                        | 3.2  | 82        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 37 | Hydrogen production from catalytic reforming of the aqueous fraction of pyrolysis bio-oil with modified Ni-Al catalysts. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 14642-14652.  | 3.8  | 82        |
| 38 | Hydrogen production from the pyrolysis-gasification of waste tyres with a nickel/cerium catalyst. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 6628-6637.   | 3.8  | 79        |
| 39 | Pyrolysis-Catalytic Reforming/Gasification of Waste Tires for Production of Carbon Nanotubes and Hydrogen. <i>Energy &amp; Fuels</i> , 2015, 29, 3328-3334.  | 2.5  | 77        |
| 40 | Development of Ni- and Fe- based catalysts with different metal particle sizes for the production of carbon nanotubes and hydrogen from thermo-chemical conversion of waste plastics. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017, 125, 32-39. | 2.6  | 77        |
| 41 | Direct and highly selective conversion of captured CO <sub>2</sub> into methane through integrated carbon capture and utilization over dual functional materials. <i>Journal of CO<sub>2</sub> Utilization</i> , 2020, 38, 262-272.                          | 3.3  | 77        |
| 42 | Sustainable processing of waste plastics to produce high yield hydrogen-rich synthesis gas and high quality carbon nanotubes. <i>RSC Advances</i> , 2012, 2, 4045.   | 1.7  | 75        |
| 43 | Characterization and evaluation of Ni/SiO <sub>2</sub> catalysts for hydrogen production and tar reduction from catalytic steam pyrolysis-reforming of refuse derived fuel. <i>Applied Catalysis B: Environmental</i> , 2013, 134-135, 238-250.              | 10.8 | 75        |
| 44 | Simultaneous removal of NO and Hg <sub>0</sub> using Fe and Co co-doped Mn-Ce/TiO <sub>2</sub> catalysts. <i>Fuel</i> , 2018, 224, 241-249.  | 3.4  | 72        |
| 45 | Hydrogen production from catalytic steam reforming of benzene as tar model compound of biomass gasification. <i>Fuel Processing Technology</i> , 2016, 148, 380-387.   | 3.7  | 70        |
| 46 | Carbon nanotubes (CNTs) production from catalytic pyrolysis of waste plastics: The influence of catalyst and reaction pressure. <i>Catalysis Today</i> , 2020, 351, 50-57.   | 2.2  | 70        |
| 47 | Pyrolysis characteristics and non-isothermal kinetics of waste wood biomass. <i>Energy</i> , 2021, 226, 120358.  | 4.5  | 69        |
| 48 | Integrated CO <sub>2</sub> capture and utilization with CaO-alone for high purity syngas production. <i>Carbon Capture Science &amp; Technology</i> , 2021, 1, 100001.   | 4.9  | 69        |
| 49 | State-of-the-Art on the Preparation, Modification, and Application of Biomass-Derived Carbon Quantum Dots. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 22017-22039.   | 1.8  | 67        |
| 50 | A Novel Nano-Ni/SiO <sub>2</sub> Catalyst for Hydrogen Production from Steam Reforming of Ethanol. <i>Environmental Science &amp; Technology</i> , 2010, 44, 5993-5998.  | 4.6  | 63        |
| 51 | Sustainable synthesis of bright green fluorescent carbon quantum dots from lignin for highly sensitive detection of Fe <sup>3+</sup> ions. <i>Applied Surface Science</i> , 2021, 565, 150526.   | 3.1  | 63        |
| 52 | Carbon nanotubes synthesized from gaseous products of waste polymer pyrolysis and their application. <i>Journal of Analytical and Applied Pyrolysis</i> , 2016, 120, 304-313.  | 2.6  | 62        |
| 53 | Ni/CeO <sub>2</sub> /ZSM-5 catalysts for the production of hydrogen from the pyrolysis-gasification of polypropylene. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 6242-6252.   | 3.8  | 61        |
| 54 | Investigate the interactions between biomass components during pyrolysis using in-situ DRIFTS and TGA. <i>Chemical Engineering Science</i> , 2019, 195, 767-776.   | 1.9  | 60        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 55 | Pyrolysis/reforming of rice husks with a Ni-Al <sub>2</sub> O <sub>3</sub> catalyst: Influence of process conditions on syngas and hydrogen yield. <i>Journal of the Energy Institute</i> , 2016, 89, 657-667.                     | 2.7  | 59        |
| 56 | Methanation of syngas (H <sub>2</sub> /CO) over the different Ni-based catalysts. <i>Fuel</i> , 2017, 189, 419-427.  | 3.4  | 58        |
| 57 | A novel Ni-Mg-Al-CaO catalyst with the dual functions of catalysis and CO <sub>2</sub> sorption for H <sub>2</sub> production from the pyrolysis-gasification of polypropylene. <i>Fuel</i> , 2010, 89, 1435-1441.                 | 3.4  | 57        |
| 58 | Hydrogen production from steam reforming of ethanol with nano-Ni/SiO <sub>2</sub> catalysts prepared at different Ni to citric acid ratios using a sol-gel method. <i>Applied Catalysis B: Environmental</i> , 2011, 102, 251-259. | 10.8 | 57        |
| 59 | Effect of calcium addition on Mg-AlO <sub>x</sub> supported Ni catalysts for hydrogen production from pyrolysis-gasification of biomass. <i>Catalysis Today</i> , 2018, 309, 2-10.   | 2.2  | 57        |
| 60 | Effect of interactions of PVC and biomass components on the formation of polycyclic aromatic hydrocarbons (PAH) during fast co-pyrolysis. <i>RSC Advances</i> , 2015, 5, 11371-11377.  | 1.7  | 56        |
| 61 | Catalytic Pyrolysis-Gasification of Waste Tire and Tire Elastomers for Hydrogen Production. <i>Energy &amp; Fuels</i> , 2010, 24, 3928-3935.   | 2.5  | 55        |
| 62 | Hydrogen production from cellulose catalytic gasification on CeO <sub>2</sub> /Fe <sub>2</sub> O <sub>3</sub> catalyst. <i>Energy Conversion and Management</i> , 2018, 171, 241-248.  | 4.4  | 55        |
| 63 | Hydrogen generation from biomass by pyrolysis. <i>Nature Reviews Methods Primers</i> , 2022, 2, .  | 11.8 | 55        |
| 64 | Hydrogen Production from the Pyrolysis-Gasification of Polypropylene: Influence of Steam Flow Rate, Carrier Gas Flow Rate and Gasification Temperature. <i>Energy &amp; Fuels</i> , 2009, 23, 5055-5061.                           | 2.5  | 54        |
| 65 | Novel bi-functional Ni-Mg-Al-CaO catalyst for catalytic gasification of biomass for hydrogen production with in situ CO <sub>2</sub> adsorption. <i>RSC Advances</i> , 2013, 3, 5583.  | 1.7  | 54        |
| 66 | CO <sub>2</sub> gasification of bio-char derived from conventional and microwave pyrolysis. <i>Applied Energy</i> , 2015, 157, 533-539.  | 5.1  | 54        |
| 67 | Progress in carbon-based electrocatalyst derived from biomass for the hydrogen evolution reaction. <i>Fuel</i> , 2021, 293, 120440.  | 3.4  | 53        |
| 68 | Effects of Gasification Temperature and Catalyst Ratio on Hydrogen Production from Catalytic Steam Pyrolysis-Gasification of Polypropylene. <i>Energy &amp; Fuels</i> , 2008, 22, 4125-4132.                                       | 2.5  | 51        |
| 69 | Tailored mesoporous silica supports for Ni catalysed hydrogen production from ethanol steam reforming. <i>Catalysis Communications</i> , 2017, 91, 76-79.  | 1.6  | 51        |
| 70 | Hydrogen production from pyrolysis catalytic reforming of cellulose in the presence of K alkali metal. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 10598-10607.  | 3.8  | 50        |
| 71 | Kinetics, equilibrium and thermodynamics studies on biosorption of Rhodamine B from aqueous solution by earthworm manure derived biochar. <i>International Biodeterioration and Biodegradation</i> , 2017, 120, 104-114.           | 1.9  | 50        |
| 72 | Fundamental studies of carbon capture using CaO-based materials. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9977-9987.   | 5.2  | 50        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Influence of process conditions on the formation of 2- and 4 ring polycyclic aromatic hydrocarbons from the pyrolysis of polyvinyl chloride. <i>Fuel Processing Technology</i> , 2016, 144, 299-304.                      | 3.7 | 49        |
| 74 | Waste plastics recycling for producing high-value carbon nanotubes: Investigation of the influence of Manganese content in Fe-based catalysts. <i>Journal of Hazardous Materials</i> , 2021, 402, 123726.                 | 6.5 | 49        |
| 75 | Understanding the interaction between active sites and sorbents during the integrated carbon capture and utilization process. <i>Fuel</i> , 2021, 286, 119308.  | 3.4 | 47        |
| 76 | Nickel-catalysed pyrolysis/gasification of biomass components. <i>Journal of Analytical and Applied Pyrolysis</i> , 2013, 99, 143-148.  | 2.6 | 46        |
| 77 | Pyrolysis of scrap tyres with zeolite USY. <i>Journal of Hazardous Materials</i> , 2006, 137, 1065-1073.  | 6.5 | 44        |
| 78 | Characterization of Tar from the Pyrolysis/Gasification of Refuse Derived Fuel: Influence of Process Parameters and Catalysis. <i>Energy &amp; Fuels</i> , 2012, 26, 2107-2115.   | 2.5 | 44        |
| 79 | Modelling of down-draft gasification of biomass - An integrated pyrolysis, combustion and reduction process. <i>Applied Thermal Engineering</i> , 2018, 142, 444-456.   | 3.0 | 44        |
| 80 | Thermal behavior and kinetics of co-pyrolysis of cellulose and polyethylene with the addition of transition metals. <i>Energy Conversion and Management</i> , 2018, 172, 32-38.   | 4.4 | 44        |
| 81 | Novel application of cotton stalk as a waste derived catalyst in the low temperature SCR-deNOx process. <i>Fuel</i> , 2013, 105, 585-594.   | 3.4 | 43        |
| 82 | Effect of interactions of biomass constituents on polycyclic aromatic hydrocarbons (PAH) formation during fast pyrolysis. <i>Journal of Analytical and Applied Pyrolysis</i> , 2014, 110, 264-269.                        | 2.6 | 43        |
| 83 | Nickel-based catalysts for tar reduction in biomass gasification. <i>Biofuels</i> , 2011, 2, 451-464.   | 1.4 | 42        |
| 84 | Efficient-and-stable CH <sub>4</sub> reforming with integrated CO <sub>2</sub> capture and utilization using Li <sub>4</sub> SiO <sub>4</sub> sorbent. <i>Separation and Purification Technology</i> , 2021, 277, 119476. | 3.9 | 42        |
| 85 | Hydrogen production from high temperature steam catalytic gasification of bio-char. <i>Journal of the Energy Institute</i> , 2016, 89, 222-230.   | 2.7 | 41        |
| 86 | Temperature sensitivity of the selective catalytic reduction (SCR) performance of Ce-TiO <sub>2</sub> in the presence of SO <sub>2</sub> . <i>Chemosphere</i> , 2020, 243, 125419.  | 4.2 | 39        |
| 87 | One-pot synthesis of digestate-derived biochar for carbon dioxide capture. <i>Fuel</i> , 2020, 279, 118525.   | 3.4 | 39        |
| 88 | Catalytic steam reforming of volatiles released via pyrolysis of wood sawdust for hydrogen-rich gas production on Fe-Zn/Al <sub>2</sub> O <sub>3</sub> nanocatalysts. <i>Fuel</i> , 2015, 158, 999-1005.                  | 3.4 | 37        |
| 89 | Enhanced hydrogen production from catalytic biomass gasification with in-situ CO <sub>2</sub> capture. <i>Environmental Pollution</i> , 2020, 267, 115487.  | 3.7 | 37        |
| 90 | A thermogravimetric assessment of the tri-combustion process for coal, biomass and polyethylene. <i>Fuel</i> , 2021, 287, 119355.   | 3.4 | 37        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 91  | Integrated CO <sub>2</sub> capture and methanation on Ru/CeO <sub>2</sub> -MgO combined materials: Morphology effect from CeO <sub>2</sub> support. <i>Fuel</i> , 2022, 317, 123420.                             | 3.4 | 37        |
| 92  | Promoting hydrogen-rich syngas production from catalytic reforming of biomass pyrolysis oil on nanosized nickel-ceramic catalysts. <i>Applied Thermal Engineering</i> , 2017, 125, 297-305.                      | 3.0 | 36        |
| 93  | Enhancing hydrogen production from the pyrolysis-gasification of biomass by size-confined Ni catalysts on acidic MCM-41 supports. <i>Catalysis Today</i> , 2018, 307, 154-161.                                   | 2.2 | 36        |
| 94  | Hydrogen sorption and desorption behaviors of Mg-Ni-Cu doped carbon nanotubes at high temperature. <i>Energy</i> , 2019, 167, 1097-1106.   | 4.5 | 36        |
| 95  | Catalytic conversion of hard plastics to valuable carbon nanotubes. <i>Journal of Analytical and Applied Pyrolysis</i> , 2020, 145, 104748.  | 2.6 | 36        |
| 96  | Study on non-isothermal kinetics and the influence of calcium oxide on hydrogen production during bituminous coal pyrolysis. <i>Journal of Analytical and Applied Pyrolysis</i> , 2020, 150, 104888.             | 2.6 | 36        |
| 97  | Experimental study, dynamic modelling, validation and analysis of hydrogen production from biomass pyrolysis/gasification of biomass in a two-stage fixed bed reaction system. <i>Fuel</i> , 2014, 137, 364-374. | 3.4 | 35        |
| 98  | Thermodynamic analysis of hybrid adiabatic compressed air energy storage system and biomass gasification storage (A-CAESA+ABMGS) power system. <i>Fuel</i> , 2020, 271, 117572.                                  | 3.4 | 35        |
| 99  | Study of oily sludge pyrolysis combined with fine particle removal using a ceramic membrane in a fixed-bed reactor. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 128, 276-281.    | 1.8 | 34        |
| 100 | Renewable hydrogen and carbon nanotubes from biodiesel waste glycerol. <i>Scientific Reports</i> , 2013, 3, 2742.  | 1.6 | 33        |
| 101 | Thermo-chemical conversion of carbonaceous wastes for CNT and hydrogen production: a review. <i>Sustainable Energy and Fuels</i> , 2021, 5, 4173-4208.   | 2.5 | 33        |
| 102 | Nitrogen enriched biochar used as CO <sub>2</sub> adsorbents: a brief review. <i>Carbon Capture Science &amp; Technology</i> , 2022, 2, 100018.  | 4.9 | 33        |
| 103 | Integrated carbon capture and utilization: Synergistic catalysis between highly dispersed Ni clusters and ceria oxygen vacancies. <i>Chemical Engineering Journal</i> , 2022, 437, 135394.                       | 6.6 | 33        |
| 104 | Development of Fe-Promoted Ni-Al Catalysts for Hydrogen Production from Gasification of Wood Sawdust. <i>Energy &amp; Fuels</i> , 2017, 31, 2118-2127.   | 2.5 | 31        |
| 105 | Development of Ca/KIT-6 adsorbents for high temperature CO <sub>2</sub> capture. <i>Fuel</i> , 2019, 235, 1070-1076.   | 3.4 | 31        |
| 106 | Drivers and reduction solutions of food waste in the Chinese food service business. <i>Sustainable Production and Consumption</i> , 2021, 26, 78-88.   | 5.7 | 31        |
| 107 | Investigation of Ni/SiO <sub>2</sub> catalysts prepared at different conditions for hydrogen production from ethanol steam reforming. <i>Journal of the Energy Institute</i> , 2017, 90, 276-284.                | 2.7 | 30        |
| 108 | Producing carbon nanotubes from thermochemical conversion of waste plastics using Ni/ceramic based catalyst. <i>Chemical Engineering Science</i> , 2018, 192, 882-891.   | 1.9 | 30        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 109 | Highly active and stable Ni/perovskite catalysts in steam methane reforming for hydrogen production. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1845-1856.  | 2.5 | 30        |
| 110 | Ni promoted Fe-CaO dual functional materials for calcium chemical dual looping. <i>Chemical Engineering Journal</i> , 2022, 441, 135752.  | 6.6 | 30        |
| 111 | Thermal Characteristics of Biomass Pyrolysis Oil and Potential Hydrogen Production by Catalytic Steam Reforming. <i>Energy &amp; Fuels</i> , 2018, 32, 5234-5243.   | 2.5 | 28        |
| 112 | Co-pyrolysis of lignin and polyethylene with the addition of transition metals - Part I: Thermal behavior and kinetics analysis. <i>Journal of the Energy Institute</i> , 2020, 93, 281-291.                                    | 2.7 | 28        |
| 113 | Carbon nanotubes and hydrogen production from the reforming of toluene. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 8790-8797.  | 3.8 | 27        |
| 114 | Pyrolysis-catalysis of waste plastic using a nickel-stainless-steel mesh catalyst for high-value carbon products. <i>Environmental Technology (United Kingdom)</i> , 2017, 38, 2889-2897.                                       | 1.2 | 27        |
| 115 | One-Step Reforming of CO <sub>2</sub> and CH <sub>4</sub> into High-Value Liquid Chemicals and Fuels at Room Temperature by Plasma-Driven Catalysis. <i>Angewandte Chemie</i> , 2017, 129, 13867-13871.                         | 1.6 | 27        |
| 116 | Ethanol steam reforming on Ni/CaO catalysts for coproduction of hydrogen and carbon nanotubes. <i>International Journal of Energy Research</i> , 2019, 43, 1255-1271.   | 2.2 | 27        |
| 117 | Ni/support-CaO bifunctional combined materials for integrated CO <sub>2</sub> capture and reverse water-gas shift reaction: Influence of different supports. <i>Separation and Purification Technology</i> , 2022, 298, 121604. | 3.9 | 27        |
| 118 | Autothermal CaO looping biomass gasification to increase process energy efficiency and reduce ash sintering. <i>Fuel</i> , 2020, 277, 118199.   | 3.4 | 26        |
| 119 | Sorption enhanced ethanol steam reforming on a bifunctional Ni/CaO catalyst for H <sub>2</sub> production. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106725.  | 3.3 | 26        |
| 120 | Thermal Chemical Conversion of High-Density Polyethylene for the Production of Valuable Carbon Nanotubes Using Ni/AAO Membrane Catalyst. <i>Energy &amp; Fuels</i> , 2018, 32, 4511-4520.                                       | 2.5 | 25        |
| 121 | Influence of Ni/SiO <sub>2</sub> catalyst preparation methods on hydrogen production from the pyrolysis/reforming of refuse derived fuel. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 5723-5732.                | 3.8 | 24        |
| 122 | Equilibrium, kinetics and thermodynamics of cadmium ions (Cd <sup>2+</sup> ) removal from aqueous solution using earthworm manure-derived carbon materials. <i>Journal of Molecular Liquids</i> , 2017, 241, 612-621.           | 2.3 | 24        |
| 123 | Techno-economic analysis of wind power integrated with both compressed air energy storage (CAES) and biomass gasification energy storage (BGES) for power generation. <i>RSC Advances</i> , 2018, 8, 22004-22022.               | 1.7 | 24        |
| 124 | Experimental and thermodynamic study on sorption-enhanced steam reforming of toluene for H <sub>2</sub> production using the mixture of Ni/perovskite-CaO. <i>Fuel</i> , 2021, 305, 121447.                                     | 3.4 | 23        |
| 125 | Influence of nickel-based catalysts on syngas production from carbon dioxide reforming of waste high density polyethylene. <i>Fuel Processing Technology</i> , 2015, 138, 156-163.  | 3.7 | 22        |
| 126 | Low cost earthworm manure-derived carbon material for the adsorption of Cu <sup>2+</sup> from aqueous solution: Impact of pyrolysis temperature. <i>Ecological Engineering</i> , 2017, 98, 189-195.                             | 1.6 | 22        |



| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 127 | Structured ZSM-5/SiC foam catalysts for bio-oils upgrading. Applied Catalysis A: General, 2020, 599, 117626.   | 2.2 | 22        |
| 128 | Boosting the Conversion of CO <sub>2</sub> with Biochar to Clean CO in an Atmospheric Plasmatron: A Synergy of Plasma Chemistry and Thermochemistry. ACS Sustainable Chemistry and Engineering, 2022, 10, 7712-7725.                     | 3.2 | 22        |
| 129 | Ginkgo biloba L. shells-based adsorbent for the removal of Cu <sup>2+</sup> and Cd <sup>2+</sup> from aqueous solution: Kinetics, isotherm, thermodynamics and mechanisms. Journal of Molecular Liquids, 2017, 241, 603-611.             | 2.3 | 21        |
| 130 | Autothermal CaO Looping Biomass Gasification for Renewable Syngas Production. Environmental Science & Technology, 2019, 53, 9298-9305.   | 4.6 | 21        |
| 131 | Application of Carbon Nanotubes from Waste Plastics As Filler to Epoxy Resin Composite. ACS Sustainable Chemistry and Engineering, 2022, 10, 2204-2213.  | 3.2 | 20        |
| 132 | Optimising the sustainability of crude bio-oil via reforming to hydrogen and valuable by-product carbon nanotubes. RSC Advances, 2013, 3, 19239.   | 1.7 | 19        |
| 133 | Investigation of spherical alumina supported catalyst for carbon nanotubes production from waste polyethylene. Chemical Engineering Research and Design, 2021, 146, 201-207.   | 2.7 | 19        |
| 134 | Potential photo-switching sorbents for CO <sub>2</sub> capture – A review. Renewable and Sustainable Energy Reviews, 2022, 158, 112079.  | 8.2 | 18        |
| 135 | Catalytic Steam Gasification of Biomass for a Sustainable Hydrogen Future: Influence of Catalyst Composition. Waste and Biomass Valorization, 2014, 5, 175-180.  | 1.8 | 17        |
| 136 | Utilization of NiO/porous ceramic monolithic catalyst for upgrading biomass fuel gas. Journal of the Energy Institute, 2018, 91, 331-338.  | 2.7 | 15        |
| 137 | The effect of phase change material balls on the thermal characteristics in hot water tanks: CFD research. Applied Thermal Engineering, 2020, 178, 115557.   | 3.0 | 14        |
| 138 | Catalytic Pyrolysis/Gasification of Refuse Derived Fuel for Hydrogen Production and Tar Reduction: Influence of Nickel to Citric Acid Ratio Using Ni/SiO <sub>2</sub> Catalysts. Waste and Biomass Valorization, 2014, 5, 625-636.       | 1.8 | 13        |
| 139 | High-value resource recovery products from waste tyres. Proceedings of Institution of Civil Engineers: Waste and Resource Management, 2016, 169, 137-145.  | 0.9 | 13        |
| 140 | Production of carbon nanotubes (CNTs) from thermochemical conversion of waste plastics using Ni/anodic aluminum oxide (AAO) template catalyst. Energy Procedia, 2017, 142, 525-530.  | 1.8 | 11        |
| 141 | Sulfation effect of Ce/TiO <sub>2</sub> catalyst for the selective catalytic reduction of NO <sub>x</sub> with NH <sub>3</sub> : mechanism and kinetic studies. RSC Advances, 2019, 9, 32110-32120.                                      | 1.7 | 11        |
| 142 | A steric hindrance alleviation strategy to enhance the photo-switching efficiency of azobenzene functionalized metal-organic frameworks toward tailorable carbon dioxide capture. Journal of Materials Chemistry A, 2022, 10, 8303-8308. | 5.2 | 11        |
| 143 | Low Temperature Performance of Selective Catalytic Reduction of NO with NH <sub>3</sub> under a Concentrated CO <sub>2</sub> Atmosphere. Energies, 2015, 8, 12331-12341.   | 1.6 | 10        |
| 144 | Fuels by Waste Plastics Using Activated Carbon, MCM-41, HZSM-5 and Their Mixture. MATEC Web of Conferences, 2016, 49, 05001.   | 0.1 | 10        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 145 | CO <sub>2</sub> capture using mesocellular siliceous foam (MCF)-supported CaO. Journal of the Energy Institute, 2019, 92, 1591-1598.   | 2.7 | 10        |
| 146 | Preparation of Different Nickel-iron/Titania-Alumina Catalysts for Hydrogen/Carbon Monoxide Methanation under Atmospheric Pressure. Energy Technology, 2017, 5, 1218-1227.   | 1.8 | 9         |
| 147 | Ethanol Steam Reforming for Hydrogen Production Over Hierarchical Macroporous Mesoporous SBA-15 Supported Nickel Nanoparticles. Topics in Catalysis, 2020, 63, 403-412.  | 1.3 | 9         |
| 148 | Coked Ni/Al <sub>2</sub> O <sub>3</sub> from the catalytic reforming of volatiles from co-pyrolysis of lignin and polyethylene: preparation, identification and application as a potential adsorbent. Catalysis Science and Technology, 2021, 11, 4162-4171. | 2.1 | 9         |
| 149 | Integrated gasification and non-thermal plasma-catalysis system for cleaner syngas production from cellulose. IOP SciNotes, 2020, 1, 024001.   | 0.4 | 9         |
| 150 | Removal of antimonite (Sb(III)) from aqueous solution using a magnetic iron-modified carbon nanotubes (CNTs) composite: Experimental observations and governing mechanisms. Chemosphere, 2022, 288, 132581.  | 4.2 | 9         |
| 151 | Carbon nanotubes/Al <sub>2</sub> O <sub>3</sub> composite derived from catalytic reforming of the pyrolysis volatiles of the mixture of polyethylene and lignin for highly-efficient removal of Pb(II). RSC Advances, 2021, 11, 37851-37865.                 | 1.7 | 9         |
| 152 | Feasibilities of producing high-value carbon nanotubes from waste plastics by spray pyrolysis. Journal of Analytical and Applied Pyrolysis, 2022, 166, 105613.   | 2.6 | 8         |
| 153 | High temperature pyrolysis of solid products obtained from rapid hydrothermal pre-processing of pinewood sawdust. RSC Advances, 2014, 4, 34784-34792.  | 1.7 | 7         |
| 154 | Hydrogen from waste plastics by way of pyrolysis-gasification. Proceedings of Institution of Civil Engineers: Waste and Resource Management, 2014, 167, 35-46.   | 0.9 | 7         |
| 155 | Effect of Transition Metal Additives on the Catalytic Performance of Cu-Mn/SAPO-34 for Selective Catalytic Reduction of NO with NH <sub>3</sub> at Low Temperature. Catalysts, 2019, 9, 685.   | 1.6 | 7         |
| 156 | Amine or Azo functionalized hypercrosslinked polymers for highly efficient CO <sub>2</sub> capture and selective CO <sub>2</sub> capture. Materials Today Communications, 2021, 27, 102338.  | 0.9 | 7         |
| 157 | Effective catalytic steam reforming of naphthalene over Ni-modified ZSM-5 via one-pot hydrothermal synthesis. Waste Management, 2022, 147, 1-9.  | 3.7 | 7         |
| 158 | Evaluation of carbon nanotubes produced from toluene steam reforming as catalyst support for selective catalytic reduction of NO <sub>x</sub> . Journal of the Energy Institute, 2014, 87, 367-371.  | 2.7 | 6         |
| 159 | Low Temperature Selective Catalytic Reduction Using Molding Catalysts Mn-Ce/FA and Mn-Ce/FA-30%TiO <sub>2</sub> . Energies, 2017, 10, 2084.  | 1.6 | 6         |
| 160 | Hydrogen production from autothermal CO <sub>2</sub> gasification of cellulose in a fixed-bed reactor: Influence of thermal compensation from CaO carbonation. International Journal of Hydrogen Energy, 2022, 47, 41480-41487.                              | 3.8 | 6         |
| 161 | Effect of steam addition for energy saving during CaCO <sub>3</sub> calcination of auto thermal biomass gasification. Biomass and Bioenergy, 2022, 161, 106416.  | 2.9 | 6         |
| 162 | Photoswitching metal organic frameworks development and applications on environmental related topics. Materials Today Sustainability, 2022, 18, 100149.  | 1.9 | 5         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 163 | Waste-derived activated carbons for control of nitrogen oxides. Proceedings of Institution of Civil Engineers: Waste and Resource Management, 2016, 169, 30-41.   | 0.9 | 4         |
| 164 | Catalytic oxidation of NO over MnO <sub>x</sub> –CoO <sub>x</sub> /TiO <sub>2</sub> in the presence of a low ratio of O <sub>3</sub> /NO: activity and mechanism. RSC Advances, 2020, 10, 24493-24506.  | 1.7 | 4         |
| 165 | XAS/DRIFTS/MS spectroscopy for time-resolved operando study of integrated carbon capture and utilisation process. Separation and Purification Technology, 2022, 298, 121622.  | 3.9 | 4         |
| 166 | Quick sequential procedure for speciation analysis of heavy metals in soils by supersonic extraction. Chemical Speciation and Bioavailability, 2005, 17, 137-146.   | 2.0 | 3         |
| 167 | Effect of auto thermal biomass gasification on the sintering of simulated ashes. Applications in Energy and Combustion Science, 2022, 9, 100054.  | 0.9 | 3         |
| 168 | Facile and green preparation of solid carbon nanooxions <i>via</i> catalytic co-pyrolysis of lignin and polyethylene and their adsorption capability towards Cu(II). RSC Advances, 2022, 12, 5042-5052.   | 1.7 | 3         |
| 169 | Biomass and Wastes for Bioenergy: Thermochemical Conversion and Biotechnologies. BioMed Research International, 2018, 2018, 1-2.  | 0.9 | 2         |
| 170 | Distinguishing the impact of temperature on iron catalyst during the catalytic-pyrolysis of waste polypropylene. Proceedings of the Combustion Institute, 2023, 39, 835-845.  | 2.4 | 1         |
| 171 | Experimental investigation on vapor liquid equilibrium and azeotropic behavior for the 1,1,1,2-tetrafluoroethane (R134a)+propane (R290) system at temperatures from 253.15 to 303.15 K. International Journal of Refrigeration, 2020, 120, 209-220. | 1.8 | 0         |