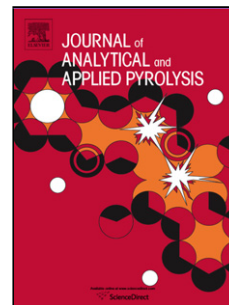


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Pyrolysis characteristic and mechanism of waste tyre: a thermogravimetry-mass spectrometry analysis

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Highlights

- Waste tyre pyrolysis characteristic was investigated by TG/MS.
- The evolved gas from tyre pyrolysis had four peaks at 150, 380, 400 and 650 °C;
- Tyre pyrolysis could be divided into four stages.

Abstract: In this study, waste tyre pyrolysis characteristic was investigated by a thermogravimetric analyzer combined with a mass spectrometer (MS). At the same time, the functional groups at the surface of residue char were also characterized by a Fourier-transform infrared (FTIR) spectrometer. The main components of the gas evolved from tyre pyrolysis process were H₂O, CO, CO₂, and hydrocarbon. According

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