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Association of chemical structure and thermal degradation of lignins from crop straw and softwood

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Highlights

- 1. Correlation between structure and degradation of WS and PW lignins was studied.
- Large differences in functional groups, compositions and linkages were detected.
- Lots of uncondensed β-O-4 linkages in PW lignin caused its weak thermal stability.
- WS lignin released more hydrocarbons, S-phenols due to enrichment of S units.

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