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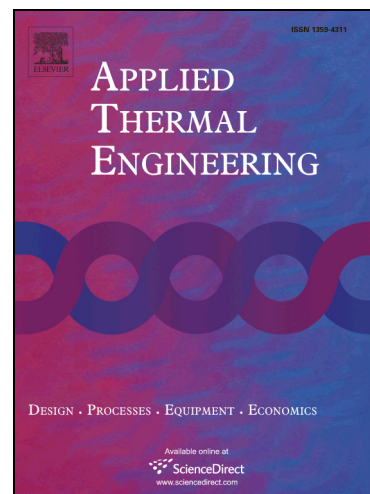
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# Experimental study on pyrolysis characteristics of the tobacco stem based on microwave heating method

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**Abstract:** In order to explore the microwave pyrolysis characteristics of tobacco stem, a pyrolysis system of the tobacco stem based on the microwave heating method is established and microwave pyrolysis experiments of the tobacco stem is carried out based on the different experimental conditions that microwave powers, microwave absorbents, and the dosages of the activated carbon and the solid residue are changed respectively. Moreover, this study analyses the influences of different microwave powers, microwave absorbents, and different dosages of the activated carbon and solid residue on the temperature-rising and three-phase product yield distribution. Finally, the conditions of the optimum microwave pyrolysis of the tobacco stem are summarised.

**Keywords:** Tobacco stem; Microwave pyrolysis; Microwave absorbent; Microwave heating

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