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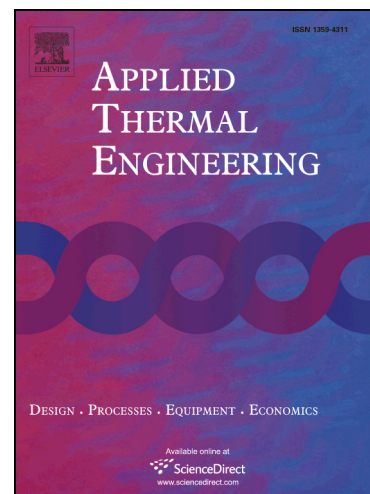
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A study on experimental characteristic of co-pyrolysis of municipal solid waste and paper mill sludge with additives

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Abstract

The thermal characteristics and kinetics of municipal solid waste (MSW) and paper mill sludge (PMS) and their blends were evaluated under pyrolysis condition with different additives, MgO and activated carbon (AC) which were the two common chemical reagents and different content (5% and 10%). The PMS was blended with MSW of 10%, 30%, 50%, 70% and 90%, which were named as 90M10P, 70M30P, 50M50P and 10M90P. The initial temperature, characteristic index, interaction and activation energy were studied in this paper. The initial temperature became higher with the increasing of PMS proportion and became lower when added the additives. The value of the comprehensive pyrolysis characteristic index of the blends indicated that 90M10P and 70M30P were the suitable ratios for co-pyrolysis. There was significant interaction between MSW and PMS in high temperature. The

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