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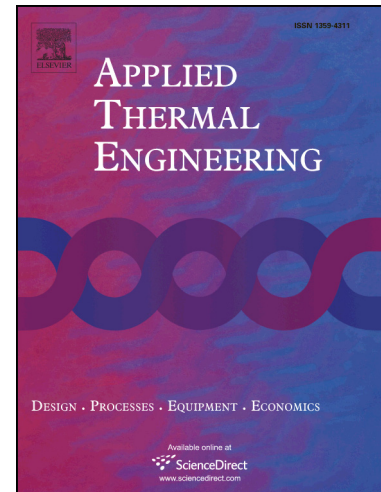
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## Solar convective drying in thin layers and modeling of municipal waste at three temperatures

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### Abstract

Sewage sludge treatment is an environmentally sensitive problem in terms of both energy and pollutants. In this context, sludge drying is often an essential step to facilitate later management such as valorization or storage. The present work aims to contribute to the optimization of solar dryer of sludge generated at the wastewater treatment plant of Marrakesh city by an experimental study in an indirect forced convection solar dryer.

The drying kinetics was studied at three temperatures (50, 70 and 90 °C) for air flow rate fixed at  $0.083 \text{ m}^3 \cdot \text{s}^{-1}$ . The drying rate is determined empirically from the characteristic drying

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