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Discrimination of Residual and Recyclable Household Waste for Automatic Waste Separation System (Conference Paper)

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Abstract

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Most of the countries in the world are confronting a gigantic issue of waste management system. Due to the rapid urbanization and increasing population, huge volume of waste is produced year by year. Improper waste management system has created a deep concern among people which lead to disturbance to the environment and human health. In this paper, a fully automated system that discriminate residual and recyclable household waste is proposed. It is shown that the prototype system are able to automatically separate waste into residual and recyclable waste by employing a moisture sensor to sort them into wet (residual) and dry (recyclable) waste. The state of the waste is determined by its resistance to current value and the percentage of water content. © 2018 IEEE.

SciVal Topic Prominence

Topic: Solid wastes | Waste management | waste bin

Prominence percentile: 81.236

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Dry waste | Moisture sensor | Recyclable waste | Residual waste | Waste separation system | Wet waste

Indexed keywords

Engineering controlled terms: Automation | Moisture control | Moisture meters | Separation

Engineering uncontrolled terms: Fully automated | Moisture sensors | Prototype system | Rapid urbanizations | Recyclable wastes | Residual wastes | Waste management systems | Waste separation

Engineering main heading: Waste management

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