

Covid-19 and Waste Management: A Critical Review and Research Agenda

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Coronavirus (COVID-19) outbreak has caused severe challenges to achieve sustainable development goals in waste management. Several countries have proposed and implemented new policies to encourage the waste-to-energy (WTE) and waste-to-material (WTM) industry, which was affected highly due to COVID-19. Although a number of studies have been published on the topic already, there has not been a critical review of studies on the impacts of COVID-19 and waste management. This study will explore the current research of COVID-19 and waste management and identify the issues and challenges faced by the waste management industry. This study systematically reviews 97 studies on COVID-19 and waste management published in ten journals up to March 2021 and identify five research clusters based on systematic content analysis: (1) COVID-19 and food waste, (2) COVID-19 and medical waste, (3) COVID-19 and waste-to-energy, (4) COVID-19 and waste-to-material and (5) COVID-19 and recycling. Besides a critical analysis of the studies in each cluster, we propose research questions to guide future research on the relationship between COVID-19 and waste management.

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