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Abstract	:	Dewatered sludge (DS) is a sewage sludge with a unique property due to extracellular polymeric substances (EPSs) and polymer flocculants. These components form a stable 3D polymer network to increase dewatering efficiency, leaving behind valuable materials such as lipids. This article explored the influences of DS particle size on lipid yield and the effects of extraction on the chemical, morphological, and thermal properties of the residual dewatered sludge (RDS). Lipid yields with unimodal distribution were observed across the particle size ranges (<0.5, 0.5–1.0, 1.0–2.0, 2.0–4.0, and 4.0 mm). The highest lipid yield of 1.95% was extracted from 1.0–2.0 mm after 4 h at 70 °C and 0.1 g/mL sludge-to-solvent ratio. Efficiency was influenced by the DS's morphology, facilitating solvent infiltration and pore diffusion. The extraction process reduced water and organic fractions, resulting in higher thermal stability. Bibliometric analysis of "extraction*" and "sewage sludge" shows increasing research interest from 1973 to 2024. Five research clusters were observed: heavy metal speciation and stabilization, sludge and its bioavailability, extraction techniques and resource recovery, contaminants remediation, as well as phosphorus recovery and agricultural applications. These clusters highlight the diverse approaches to researching DS and RDS while promoting sustainable waste management.