



印刷电路板含铜污泥中有价金属铜的回收

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Recovery of Copper from the Sludge of Printed Circuit Board Industry

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摘要

采用浸出-电沉积法,从印刷电路板(printed circuit board,PCB)产生的污泥中回收有价金属铜.考察硫酸电流密度、温度、pH值、极间距等条件对阴极铜沉积的影响.实验结果表明,硫酸铜浸出液电沉积处理的适合条件如下:浸出液中铜的浓度在40 g/L左右, pH值为1.4, 电流密度为300 A/m², 电解20 h, 极间距为5 cm, 温度为40 ℃.

关键词: [印刷电路板](#); [污泥](#); [浸出](#); [电沉积](#), [再生](#)

Abstract:

Recovery of copper from the sludge of printed circuit board (PCB) was carried out in the process of leaching and electrowinning. Influences of electric current, temperature, pH value and electrode distance on copper electrowinning were investigated. The result indicates that the proposed leaching conditions are as follows: pH value of 1.4, electric current of 300 A/m², electrode distance of 5 cm, treatment time of 20 h, and temperature of 40 ℃.

Keywords: [printed circuit board \(PCB\)](#); [sludge](#); [leaching](#); [electrowinning](#); [reutilization](#)

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