

NKOSITHANDILEB SOLAR

Solar panel derived cu



Overview

How are solar panels made?

Firstly, spent solar panels were soaked in acetone solvent and then split into three parts: glass, silicon and ethyl vinyl acetate. The wafers were dissolved in nitric acid solution to produce a leachate with 16.3, 5.9 and 1.5 g/L Cu, Al and Ag, respectively.

Can hydrometallurgy be used to recover valuable metals from solar panels?

Hydrometallurgy is often used in the separation and recovery of valuable metals from spent solar panels, and leaching has been proposed and proven effective for the recovery of valuable metals from spent solar panels at the metal extraction or purification stage.

What is the pretreatment of a spent solar panel?

2.1. Pretreatment of spent solar panel A spent solar panel with length and width of 1455 and 975 mm, respectively, was acquired from Zhongli Solar Company (Chongqing, China). The panel was firstly cut as small plates with the size of 110 × 240 mm² and then immersed in an acetone solution at 50 °C for 2 days (Fig. 1).

Can discarded solar panels be used as raw materials?

In this paper, discarded solar panels were used as raw materials. After the spent solar panel was soaked in an organic solvent, the glass cover plate and backboard were easily peeled off from the panel, along with the rest of intact polycrystalline silicon wafers.

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Abstract With the increasing installation of solar panels, the number of discarded solar panels is also gradually rising, containing valuable metals such as Cu and Ag that can be ...

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