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标题: Detection of tab wire soldering defects on silicon solar cells using terahertz time-domain spectroscopy

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摘要: Terahertz time-domain spectroscopy was applied to measure the reflectivity spectra of a silicon solar cell with tab wire soldering defects. It was demonstrated that THz phase imaging data allows a reliable estimation of height differences of bulging tab wires within 22% as tested for 0.63 and 1.07 mm loop peaks. Such measurements can be implemented for automated defect correction in future solar module production lines.

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