

# Method of Rapidly Screening Buffer Layers in Photovoltaics

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## Technology Summary

This ORNL invention offers a new method to characterize the electrical properties of a material over a large area. Current methods permit measurement of only one spot of a substrate material at a time; the new method can measure the impedance of many spots on a large substrate simultaneously. This approach is particularly useful for solar cell production, in order to quickly assess the electrical properties of materials.

The ORNL method is based on a large area electrode system. This approach does not harm the substrate and provides information on the electrical properties of the tested region. The method is especially useful for analyzing photovoltaic, superconducting, and semiconducting structures.

## Advantages

- Simultaneous measurement of multiple sites on a substrate
- Does not harm the substrate

## Potential Applications

- Photovoltaic applications
- Superconducting material
- Semiconducting structures

## Patent

Application in preparation.

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## Licensing Contact

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