

Bachelor Thesis – Analysing the evolution of cell cracks in PV-modules by long-term EL-inspections

The influence of cell cracks and fractures is of importance for the lifetime and energy yield of PV-systems. Previous lab studies indicated that the module temperature can influence the performance and the EL-image significantly.

In this Bachelor thesis, the temperature influence on cell crack changes and the changes on of the EL-signal shall be studied in detail.

TODO's:

- Long-term acquisition of EL-images and image processing of modules with broken cells
- Change detection with respect to temperature changes

Qualification:

- Student of Mechanical Engineering, Material Science, Process Engineering, Physics or comparable

- Profound technical knowledge
- Experience in a programming language is beneficial





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