

OPTEXC invited speaker series

Perovskite Solar Cells

Perovskite solar cells are the most dynamic emerging photovoltaic technology and attract the attention of thousands of researchers worldwide. Recently, many of them are targeting device stability issues—the key challenge for this technology—which has resulted in the accumulation of a significant amount of data. The best example is the "Perovskite Database Project," which also includes stability-related metrics. From this database, we use data on 1,800 perovskite solar cells where device stability is reported and use Random Forest Methods to identify and study the most important factors for cell stability. By applying the concept of learning curves, we find that the potential for improving the models' performance by adding more data of the same quality is limited.

Date: Thursday, 18th January 2024 | time: 1 pm | Raum: H16 (NWII)

