

1. General Information

Dataset title:

Imaging domain boundaries of rubrene thin crystallites by photoemission electron microscopy

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2. Description

This document serves as a guideline for the data repository of the publication.

3. Data Format

PEEM (photoemission electron microscopy) data:

- CCD data are simple TIF files, could be opened in any image editing software.
- DLD data are 1020 TIF files, each act as a frame equal to 27.4 ps. In each frame, the gray pixels represent the number of detected electrons. Using energy calibration methods, these could be calibrated to binding and kinetic energies.

AFM/KPFM data:

Simple tiff images, best to analyze with Gwyddion or Park AFM software.

4. Archive Structure

The data from each figure in the manuscript and also the supplementary information is placed in a separated folder. To handle the data, there is a Readme!.txt file.

5. System Requirements

To analyze the AFM/KPFM data, the Gwyddion software is recommended. For the PEEM data Igor pro7 is recommended.

References/Bibliography

Moha Naeimi; Katharina Engster; Waqas Pervez; Ingo Barke and Sylvia Speller, “*Imaging domain boundaries of rubrene thin crystallites by photoemission electron microscopy*”, 2025
(DOI: [10.1016/j.ultramic.2025.114239](https://doi.org/10.1016/j.ultramic.2025.114239))