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Type: **Proposal for Introduction to Software Tools**

Analyzing Large Grazing-Incidence X-Ray Scattering Datasets Using INSIGHT

Wednesday, 10 April 2024 09:00 (4 hours)

INSIGHT is a Python-based software tool for processing and analyzing grazing-incidence wide- and small-angle X-ray scattering data (GIWAXS/GISAXS) for large datasets (<https://doi.org/10.1107/S1600576723011159>). It focuses on efficient data management, customized scripting, and performant processing, and could be extended to ML approaches. The one-step software solution aims to accelerate the analysis of complex datasets of kinetic processes that shed light on the dynamic nano-assembly and structural evolution during in situ and operando studies. The introduction demonstrates basic functionalities and the general workflow in INSIGHT.

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