

EPSILON AS A TEXTURE DIFFRACTOMETER: FIRST RESULTS

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As part of the current upgrade of the EPSILON diffractometer (channel 7A1, IBR-2), the ability to measure pole figures was implemented to study crystallographic texture in polycrystalline materials. Modifications to the detector system made it possible to obtain a quasi-regular 15-degree grid on the pole figure by performing 24 sample rotations. A Jupyter Notebook script was created for data processing and analysis. Measurements performed on a highly textured aluminum alloy showed good agreement between the experimental pole figures obtained with EPSILON and the SKAT texture diffractometer (channel 7A2, IBR-2).