Powder3D: Towards Automatic Image Plate Analysis

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Large area detectors produce vast amounts of data automatically, however, filtering data by means of masking is a manual task, [1]. Alternative processing methods are required.

Powder3D has facilitated the data reduction and analysis of large numbers of powder diffraction patterns, [2]. A new module

utilizing hough transforms and fractile statistics for automated image plate analysis and filtering is presented.

[1] Hammersley A.P., Svensson S.O., Hanfland M., Fitch A.N., Hausermann D., *High Pressure Research*, 1996, **14**, 235. [2] Hinrichsen B., Dinnebier R.E., Jansen M., 2005, *to be published*.

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