

Abstract Submitted
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Reciprocal Space Mapping in Organic Electronic Materials THEO SIEGRIST, CHRISTIAN KLOC, CHARLEY CHI, Bell Laboratories — Semiconductor materials have been traditionally studied using X-ray diffraction to assess stress/strain. However, X-ray rocking curves often do not provide a good separation of the mosaic structure and stress induced shifts in the peak positions. To further study the quality of organic semiconductor materials, the mosaic structure needs to be deconvolved from stress/strain induced peak shifts and peak broadening. Reciprocal space map scans were carried out for pentacene crystals obtained from different growth procedures. Large mosaic spreads were observed, however, individual grains are well crystallized with little strain present.

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