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···to grind or not to grind? Cu/Zn disorder in $Cu_2ZnSn(S_xSe_{1-x})_4$ monograins

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Kesterite-type based thin film solar cell technologies are mainly based on polycrystalline absorber layers. A promising low cost alternative technology uses $Cu_2ZnSn(S,Se)_4$ (CZTSSe) monograins (single crystals of 50-100 µm size) fixed in a polymer matrix to form a flexible solar cell.
In this study we tackle the influence of grinding the monograins on the stoichiometry deviation, the Cu/Zn disorder as well as intrinsic point defects and optoelectronic properties of CZTSSe monograins.

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