

## **Effect of temperature on track formation by energetic heavy ions in lithium fluoride**

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Single crystals of lithium fluoride were irradiated with 790 MeV Pb ions in the temperature range between 300 and 700 K. The creation of defects along the ion trajectory was studied using optical absorption spectroscopy and small-angle X-ray scattering (SAXS). Surprisingly, the track radius is not significantly influenced by the increase of irradiation temperature, but the ion-induced change of the electron density in the track decreases substantially.