

THE POSITRON AND PHOTOLUMINESCENT
SPECTROSCOPY OF LiF MONOCRYSTAL
IRRADIATED BY POSITRONS

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S u m m a r y

The kinetics of accumulation of colour centers in LiF single crystals irradiated by positrons and γ -quanta, the optical properties of these defects, the extent of electron localization at vacancies, and their influence on the processes of atomic relaxation are investigated. It is found that F_3^+ - and M-centers are created in the surface layer of the irradiated LiF crystal. The F^- -ion radius increases by 10% with their concentration but the effective radius of electron localization in defects increases from 0.042 to 0.052 nm.