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A relatively defect-free region of the crystal α -LiIO₃ should be used for the preparation of high-quality devices. The revealing of dislocations and their observation are necessary steps in the crystals characterization. The widely accepted characterization of artificially created facet [0001] brings about lose of time and expensive processing. The characterization of prismatic facet, proposed in the present work, can be executed prior to the crystal treatment thus making more efficient the technologies for production of active optical elements.

Keywords: α -LiIO₃ crystal, dislocation density, selective dissolution

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