

Abstract

An indium phosphide crystal containing sulfur and tin, a single crystal wafer, a preparation method for the indium phosphide crystal and a device. Specifically, the present invention refers to an indium phosphide crystal, which is an N-type indium phosphide crystal, wherein the indium phosphide crystal contains 0.5-500 ppm of sulfur and 0.5-1000 ppm of tin. The present invention also refers to a method for preparing the indium phosphide crystal doped with sulfur and tin, and a device prepared by using the indium phosphide single crystal. The obtained indium phosphide crystal doped with sulfur and tin has low etch pit density, few defects and high yield.

Fig. 1