

The KDP Single Crystal Growth Studies

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Abstract: The piezoelectric crystals convert mechanical energy into electrical energy and vice versa. This property has many applications in science and technology. In this paper we report the growth of KDP single crystal out of a super-saturated KDP liquid by controlling the temperature and the pH. We studied the effect of the variation of the pH and temperature on the KDP single crystal. We found that the best pH range is 4.5 to 5.2, and also that the most appropriate temperature range is 25°C to 30°C.