

Third Laureate Applied Research

- **Research Work Title:** Achieving technology of germanium single crystal growth with large diameter
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- **Collaborating Organization:** Malek-Ashtar University of Technology
- **Collaborators:** Mahdi Ezheiyan, Hamid Salarvand, Isfahan Electro-optic Industry



Abstract:

Germanium single crystals with 99.999 percent purity and good quality for optical usage in the range of 12 – 2 micro meters successfully were grown. Analyses that performed for quality determination of grown crystals indicates that they are single crystals, surface density of dislocations is sufficient for optical applications, transmission percent for IR waves usage in the range of 12 – 2 micro meters is good and their ability of cutting and polishing is also sufficient.

