

Study of magnetization in two band superconductor FeSe single crystal

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Abstract. The magnetization anomaly of FeSe single crystal reported by Hafiez et al is examined through our Modified phenomenological Ginzberg–Landue (MPGL) theory applicable to two band superconducting systems. The present MPGL theory in the London limit calculates value of $\lambda_{ab}(0)$ as 445.696nm which is very close to the experimental value reported by Hafiez et al [22].

Keywords: Magnetization, two gap superconductor FeSe, MPGL theory, penetration depth.

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