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Hall effect measurements and surface conduction in bulk melt grown single crystal ZnO

Hall effect studies carried out on as-received, melt grown, single crystal ZnO samples show the existence of two shallow donors with energy levels (37.8 ± 0.3) meV and (54.5 ± 0.9) meV. Annealing studies performed on the hydrogen peroxide treated samples reveal the existence of a conductive channel in ZnO.

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