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- Document Title** : Application of Jahn-Teller effect for V²⁺ ION in Gap Semiconductors
Gap في أشباه الموصلات v²⁺ تطبيق لأثر جان لأيون
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- Abstract** : The object of this work to describe theoretical studies which have been carried out on the role of substitutional V²⁺ acting as a deep level impurity in GaP. Thennally detected Electron Paramagnetic Resonance (TD-EPR) measurements canied out in Clermont-Fen-and, France, are used as a basis for the modeling. A spin Hamiltonian with s = is shown to describe the V²⁺ ion. A computer software are used in a FORTRAN program to determine the values of the parameters of this Hamiltonian by minimizing the difference between the theoretical predicted energy and the experimental energy. Then the theoretical spectra obtained from these calculations are compared with their experimental counterpart. The model shows a good agreement between the theoretical and the experimental spectra
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