

**A STUDY OF USING OF CONSERVATIVE FINITE DIFFERENCE METHOD OF THE WAVE EQUATION FOR DETERMINE THE SYMMETRY OF THE POWER COEFFICIENTS OF INTERACTION BETWEEN NEIGHBORING IONS IN SOLID STATE SOLUTIONS OF A II B VI**

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The wide using of solid state solutions of A II B VI semiconductor suggests the need to determine the spectrum of ion oscillations of these solid state solutions. Earlier Finite difference method of the wave equation was used to model and matching the observed far infrared reflection of CdHgTe solid state solutions. The modeling was based on the using the average force coefficients of the interaction between ions. This report examines the possibility of determining the symmetry of the force coefficients of the interaction between the ions of the environment in solid state solutions A II B VI on the base of the use of conservative difference schemes of the wave equation for determination of the eigenvalues and eigenfunctions for one-electron Schrödinger equation for the potential with many centers of attraction