

Eser Korcük, Ramazan Koç, Hayriye Tütüncüler
Department of Engineering Physics, University of Gaziantep,
27310 Gaziantep-Türkiye ,korcuk@gantep.edu.tr

Solution of the Txt Jahn Teller Hamiltonian

Abstract

We consider the Hamiltonian that operates entirely within threefold degenerate electronic T state coupled to a five normal modes of vibration that spon on H irreducible representation. The Txt Jahn-Teller Hamiltonian has rotationally symmetry transformation of the group. In this paper, we will show how the Jahn-Teller interaction matrices are constructed for the icosehedral group using the symmetry properties. Then Txt matrix hamiltonian is used in the contex of the quasi exactly solvable spectral problems.