

Energy-Level of Some Singular Harmonic Oscillators and Parametric Amplifiers with Singular Potential Derived via IEO Method

FAN Hong-Yi and TANG Xu-Bing

Department of Material Science and Engineering, University of Science and Technology of China, Hefei 230026, China

(Received: 2005-12-5; Revised: )

Abstract: We employ the invariant eigen-operator (IEO) method to find the invariant eigen-operators of N-body singular oscillators' Hamiltonians and then derive their energy gaps. The Hamiltonians of parametric amplifiers with singular potential are also discussed in this way.

PACS: 05.45.-a

Key words: invariant eigen-operator, singular oscillator, singular degenerate parametric amplifier

[\[Full text: PDF\]](#)

Close