2007 Vol.48 No.2 pp.353-356 DOI:

Positively Charged Exciton in Double-Layer Quantum Dots

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(Received: 2006-9-1; Revised: 2006-11-16)

Abstract: The Hamiltonian equation for positively charged exciton in double-layer harmonic quantum dots is solved numerically by using the exact diagonalization techniques. We find that the correlation energy E_c of positively charged exciton increases with increasing the confinement strength and the binding energy decreases obviously for the heavy hole.

PACS: 71.35.Pq, 73.21.La, 21.45.+v
Key words: charged-exciton complexes, quantum dots

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