

BAND STRUCTURE OF A PHOTONIC CRYSTAL WITH THE CLATHRATE SI-34 CRYSTAL LATTICE

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The band structure of a photonic crystal with the clathrate Si-34 lattice comprising 34 lattice sites in the unit cell is studied. The lattice is found to have a large isotropic band gap for a wide range of permittivity. The relationship between the photonic band isotropy and the permittivity is deduced.

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