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$$E(k) = \epsilon - 2t\cos(ka)$$

$E(k)$

ϵ

t

$$\hat{H} = \sum_{i}^{\infty} \left[\epsilon_i c_i^\dagger c_i - t\left(c_i^\dagger c_{i+1} - c_i^\dagger c_{i-1} \right) \right]$$