

















\hbar

$2M\omega_{qv}$

1/2





$$dV_{SCF}$$

$$d\hat{u}_{qv}$$







d^3k

Ω_{BZ}

$$\gamma_{qv}$$

$$\pi \hbar N(e_F) \omega_{qv}^2$$

1



$2\pi N(e_F)$



γ_{qv}



$\hbar\omega_{qv}$

$$\alpha^2 F(\omega)$$

$$\omega$$



D



1

.

4

5



$$-1.04(1+\lambda)$$

$$\lambda(1-0.62\mu^*)-\mu^*$$



$\omega \log$



1.2





dw

w

