



# 矢量·量子角谱 $\bar{\bar{\epsilon}}, \bar{\bar{\chi}}$

Vector + Nonlinear + Quantum



矢量·晶体线性角谱



$$[(\nabla \times)^2 - k_{0\omega}^2 \bar{\bar{\epsilon}}_r'^{\omega} \cdot] E_z^{\omega} = 0$$

标量·非线性角谱



$$(\nabla^2 + k_{0\omega}^2) E_z^{\omega} = k_{0\omega}^2 P_z^{\text{NL}, \omega} / \epsilon_0$$

矢量·非线性角谱



$$[(\nabla \times)^2 - k_{0\omega}^2 \bar{\bar{\epsilon}}_r'^{\omega} \cdot] E_z^{\omega} = k_{0\omega}^2 P_z^{\text{NL}, \omega} / \epsilon_0$$

矢量·量子角谱



矢量·非线性角谱<sup>2</sup>