Demonstration

This effect is connected to deformation of electric dipoles within atoms and molecules and reorientation of anisotropic molecules, for polymers it may be reordered of chains.

\[ \Delta n = n_e - n_0 = \frac{E}{2} \]

Kerr effect

Explaination for Kerr effect was offered by Langmuir (1912).

介质是具有偶极矩的

\[ \mathbf{p} = \varepsilon_0 \Delta \varepsilon \mathbf{E} \]

If \( E_{\text{Ex}a} = 10^4 \text{ V/m} \)
\( d = 1 \text{ cm} \)

This will be the case, like \( \frac{1}{2} \).