t, la r a $n_{e;o;p}$ a t, t, a r a , r a , a e f r , lat, ' f a et, ' e . f r t, r r t, r r tat, a r l , t, r ss tt, ' t, t, r t, l a r r ss tt, a $\epsilon \frac{1}{4} \epsilon^{\delta 0 \flat} + \delta\epsilon$ t, $\delta\epsilon \equiv \delta n_e^2 - n_o^2 \flat$ $\delta n_0 \otimes n_\perp + n_\perp \otimes n_0 \flat$ a $n_\perp \frac{1}{4} f0; n_y; n_z g$. a t, f r ss al ss f R f . [22,37 , r l et, r t, eal a et, ' t, a r l l a t, r ss f t, l t, r r , t, f t, at, t, r et, r a t, eal f l ea eal e, lat, f ss t, f ll r t, ss f ff r t, al r at,

$$\Delta n_\perp + 2q \frac{\partial n_\perp}{\partial x} \quad n_0 \frac{1}{4} - \frac{\epsilon_0 n_o^2 \alpha}{4K} R \, \delta \frac{1}{2} E' \, n_0 \square E \flat; \qquad \delta 1 \flat$$

$$\frac{\partial E_x}{\partial z} \frac{1}{4} i \left[\sqrt{k_0^2 \epsilon_{xx}^{\delta 0 \flat} + D^{\delta 0 \flat}} + i\alpha n_z \frac{\partial}{\partial x} \right] E_x; \qquad \delta 2 \flat$$

$$E_z \frac{1}{4} \frac{1}{2} k_0^2 \epsilon_{zz}^{\delta 0 \flat} + \Delta \square^{-1} \left[\frac{\partial^2}{\partial z \partial x} - \alpha n_o^2 n_z \right] E_x; \qquad \delta 3 \flat$$

t, $\alpha \equiv \delta n_e = n_o \flat^2 - 1$, $q \equiv 2\pi = p$ t, t a r t, t, f t, e l t, e a , K t, f a la t, e e t a t, (a r - ss r t, e la t, e t,), k_0 t, va ' v ' et, ss t, a e , a $D^{\delta 0 \flat}$ a ff ae t, r at, e t a r e r r v at, ' x a y

$$\forall A; \quad D^{\delta 0 \flat} A \equiv \frac{\partial}{\partial x} \left(\frac{1}{\epsilon_{zz}^{\delta 0 \flat}} \frac{\partial}{\partial x} \frac{1}{2} \epsilon_{xx}^{\delta 0 \flat} A \square \right) + \frac{\partial^2 A}{\partial y^2}: \qquad \delta 4 \flat$$

t, t, at, . (1)–(3), r l et, t, y e ss t,

[31 . . a , P . R : 66, 036603 (2002).
[32 .P. a, . l , . a , a . lt, , P . R : 9, 021051 (201).
[33 . lt D . G . , a . . . aat, . t, . . 25, 1260 (2008).
[34 . a .R. , . t, . 64, 1424 (1 74).
[35 . t, . P a t, a G . a t, , P . R : 72, 066614 (2005).
[36 . , R. P. , a . . al , t, tt, 35, 3447 (2010).
[37 P. al a P. P a , Nematic and Cholesteric Liquid Crystals: Concepts and Physical Properties Illustrated by Experiments (R P , a Rat, , E , 2006).
[38 . P a a G .P. a al, t, tt, 32, 165 (2007).