

Associated with the bond orders $\Phi_x(\mathbf{r})$ and $\Phi_y(\mathbf{r})$, we can define the Ising-nematic order parameter $\phi(\mathbf{r}) = |\Phi_x(\mathbf{r})|^2 - |\Phi_y(\mathbf{r})|^2$. We can imagine a state with only Ising-nematic order $\langle \phi \rangle \neq 0$, but no bond order $\langle \Phi_x \rangle = \langle \Phi_y \rangle = 0$.