

$$\begin{aligned} \mathbf{TP} - \mathbf{TP}_0 = & \int_0^L \left\{ \frac{\sigma}{4} (\phi'')^2 + \frac{\lambda}{2} (\phi\phi')^2 + \frac{\delta}{2} (\phi')^2 + \right. \\ & \left. + \frac{\alpha}{2} \phi^2 + \frac{\beta}{4} \phi^4 + \frac{\gamma}{6} \phi^6 \right\} dX \end{aligned}$$

$$\Phi = \frac{\Phi_0}{L} \cdot \int_0^L \left[(\varphi'')^2 - \mathbf{g}(\varphi\varphi')^2 - \gamma(\varphi')^2 + \mathbf{q}\varphi^2 + \frac{\mathbf{p}}{2}\varphi^4 + \frac{\mathbf{h}}{3}\varphi^6 \right] dx$$

$$\mathbf{h}=\gamma=1$$

$$\varphi^{(VI)}+\mathbf{g}\Big(\varphi^2\varphi''+\varphi(\varphi')^2\Big)+\gamma\varphi''+\mathbf{q}\varphi+\mathbf{p}\varphi^3+\mathbf{h}\varphi^5=0$$

$$(\varphi')^2=\sum_{n=0}^{\infty}\mathbf{a}_n\varphi^{2n}\qquad\qquad (\varphi')^2=\sum_{n=0}^N\mathbf{a}_n\varphi^{2n}$$

$$\varphi(\mathbf{x})=\frac{\mathbf{A}\,f(\mathbf{b}\mathbf{x},\mathbf{k})}{\sqrt{\mathbf{C}-f^2(\mathbf{b}\mathbf{x},\mathbf{k})}}$$

$$\mathbf{f}(\mathbf{b}\mathbf{x},\mathbf{k})\in\left\{\mathbf{sn}(\mathbf{b}\mathbf{x},\mathbf{k}),\mathbf{cn}(\mathbf{b}\mathbf{x},\mathbf{k}),\mathbf{dn}(\mathbf{b}\mathbf{x},\mathbf{k})\right\}$$

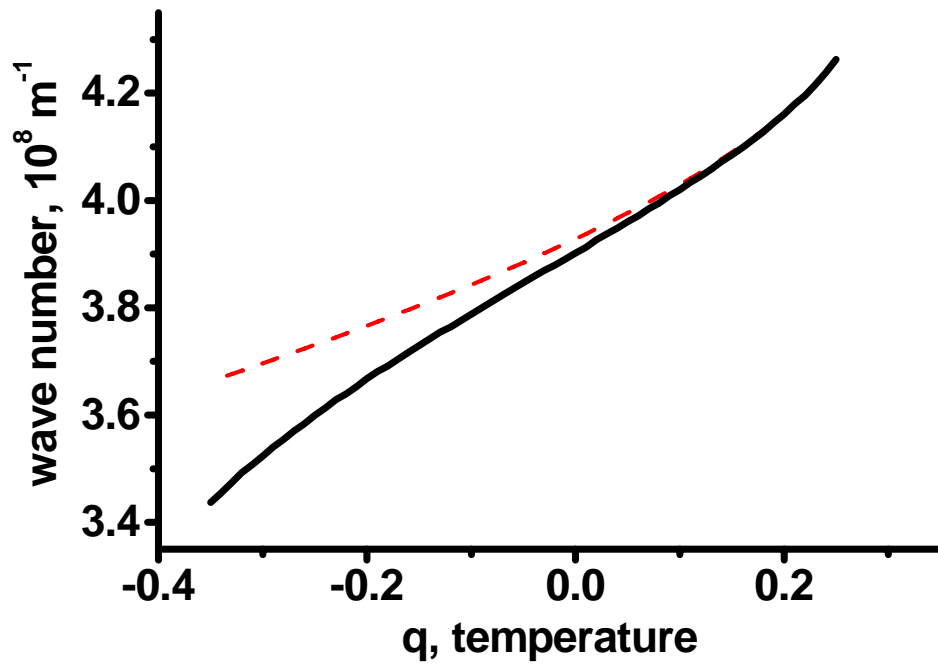
$$\varphi^2(\mathbf{x})=\mathbf{Q}\frac{1-\frac{\mathbf{cn}(\omega\mathbf{x},\mathbf{k})}{\mathbf{dn}(\omega\mathbf{x},\mathbf{k})}}{\frac{\mathbf{m}_1}{\mathbf{n}_1}-\frac{\mathbf{cn}(\omega\mathbf{x},\mathbf{k})}{\mathbf{dn}(\omega\mathbf{x},\mathbf{k})}}$$

$$\varphi(x) = a \cdot \sin(bx)$$

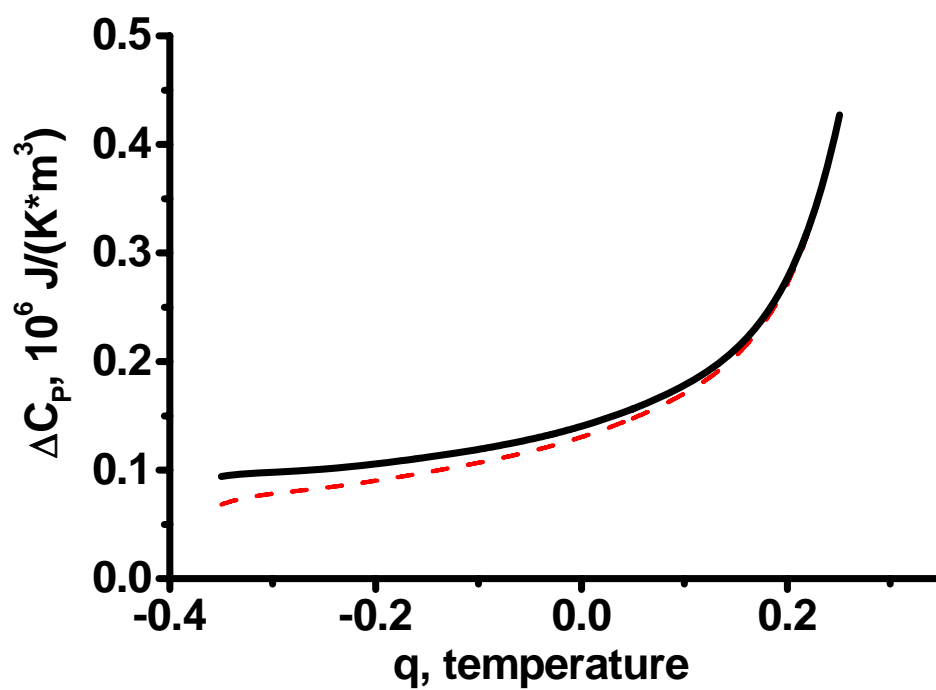
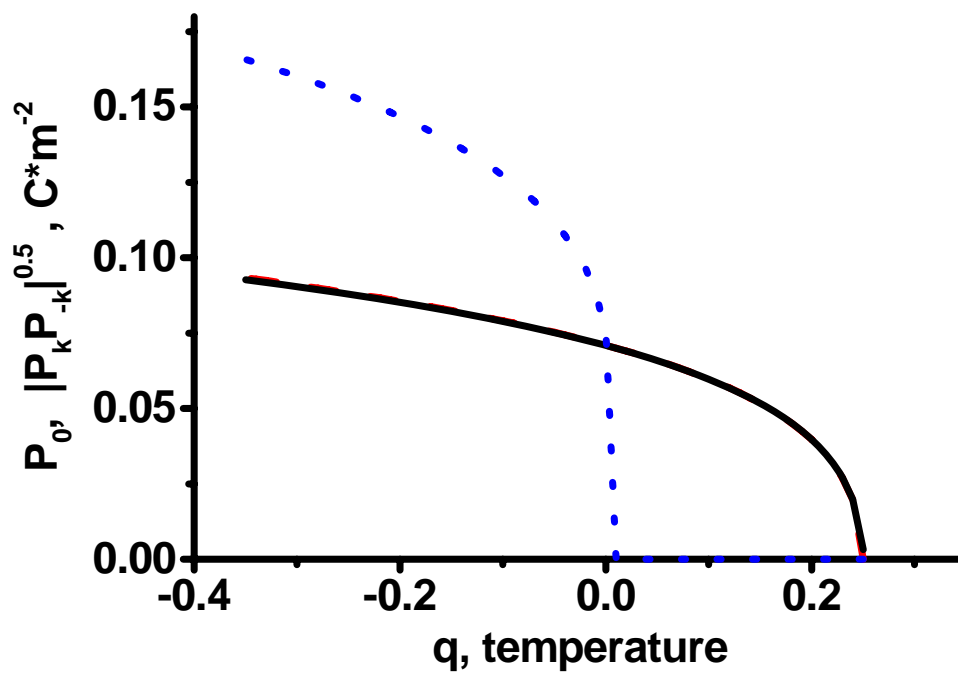
$$\varphi(x) = a \cdot \operatorname{sn}(bx, k)$$

$$\begin{aligned} TP - TP_0 = \frac{1}{L} \int_0^L \left\{ \frac{\sigma}{4} (\phi'')^2 + \frac{\lambda}{2} (\phi \phi')^2 + \frac{\delta}{2} (\phi')^2 + \right. \\ \left. + \frac{\alpha}{2} \phi^2 + \frac{\beta}{4} \phi^4 + \frac{\gamma}{6} \phi^6 + \frac{c}{2} u^2 + r \phi^2 u \right\} dX. \end{aligned}$$

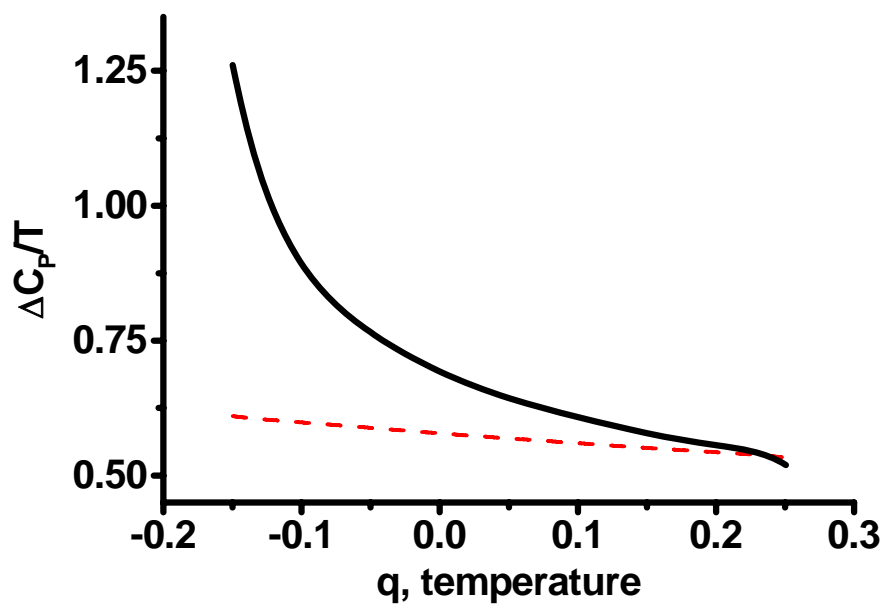
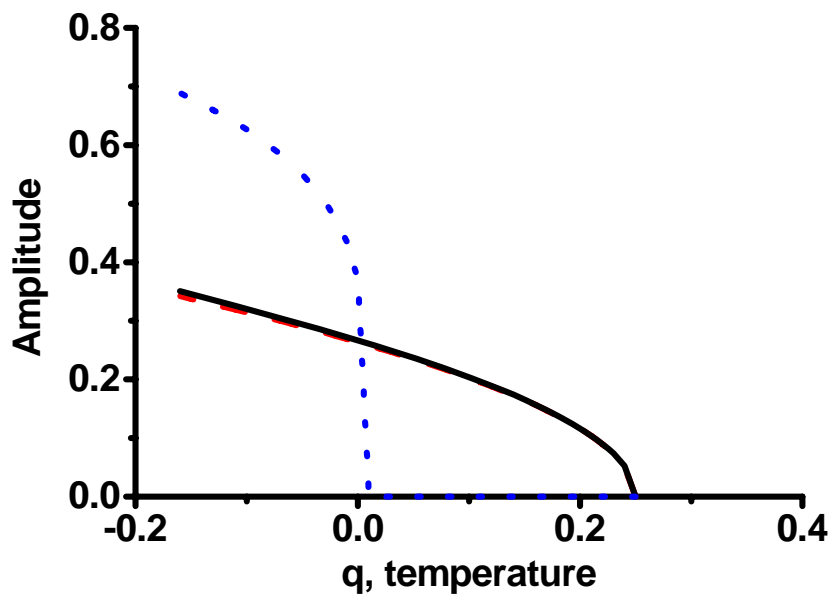
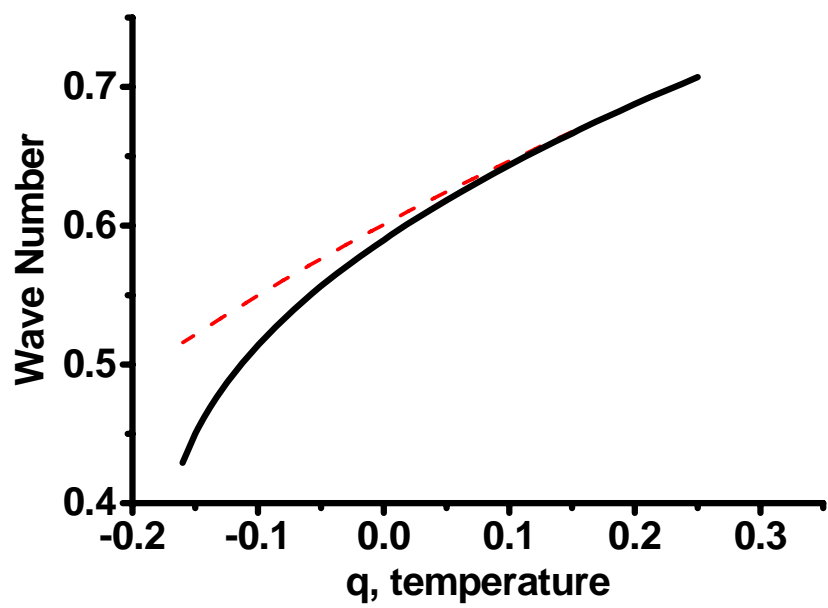
g и p - исходные



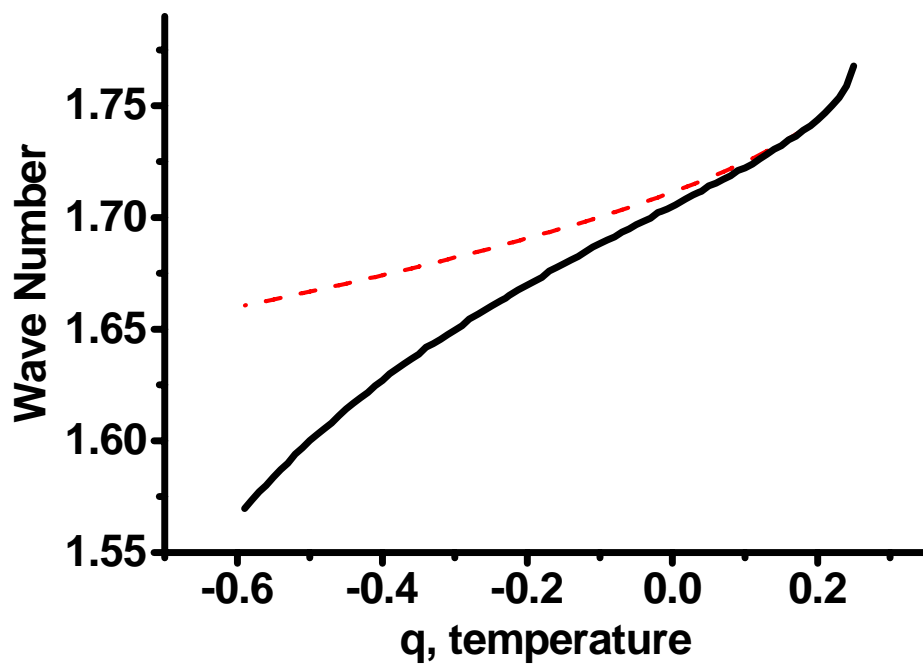
g и p - исходные



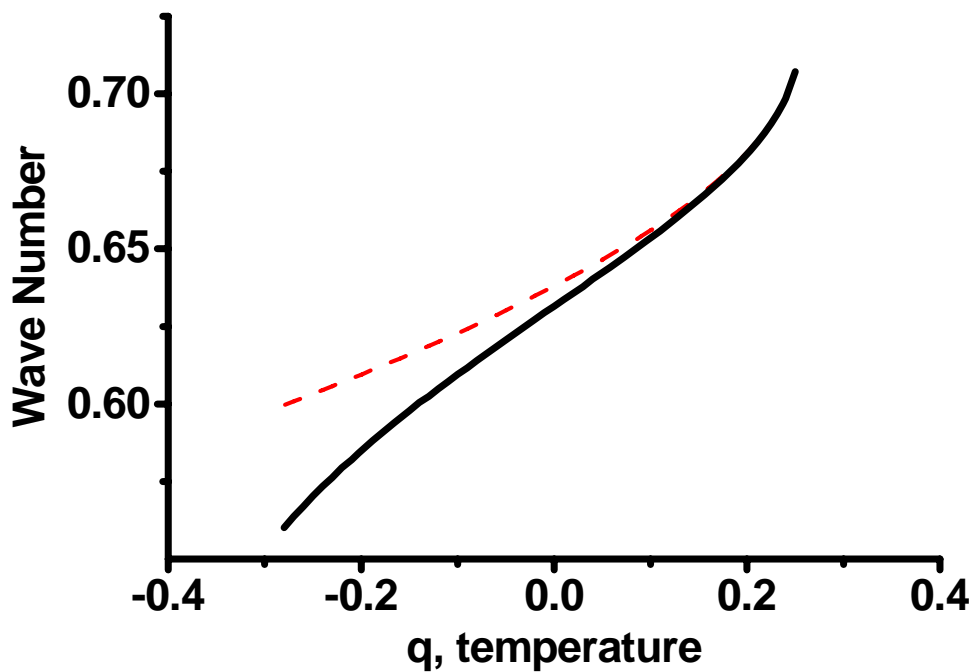
g увеличено



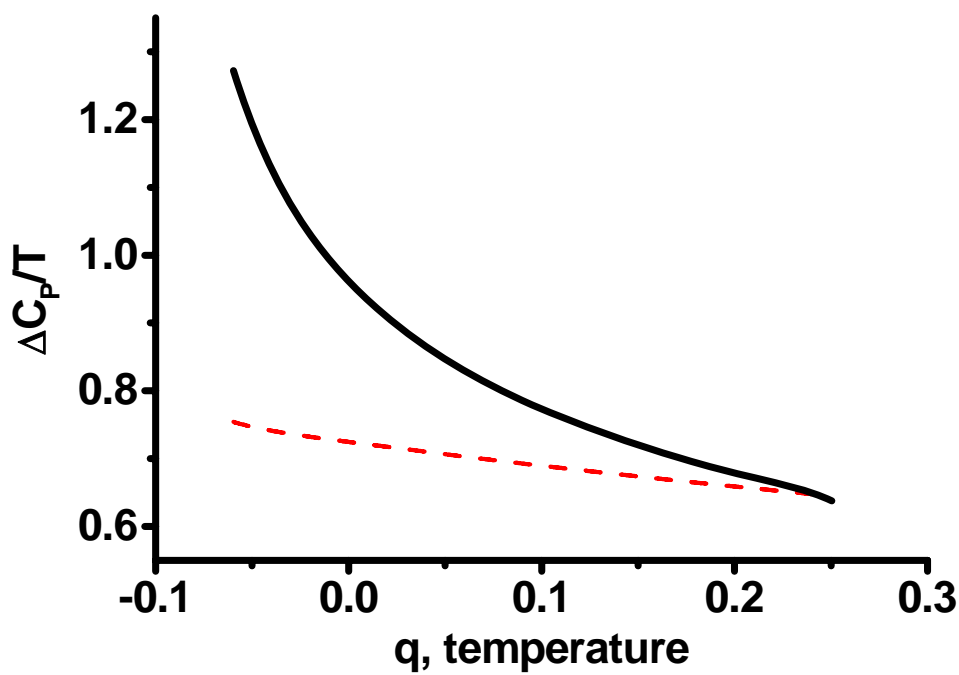
g уменьшено



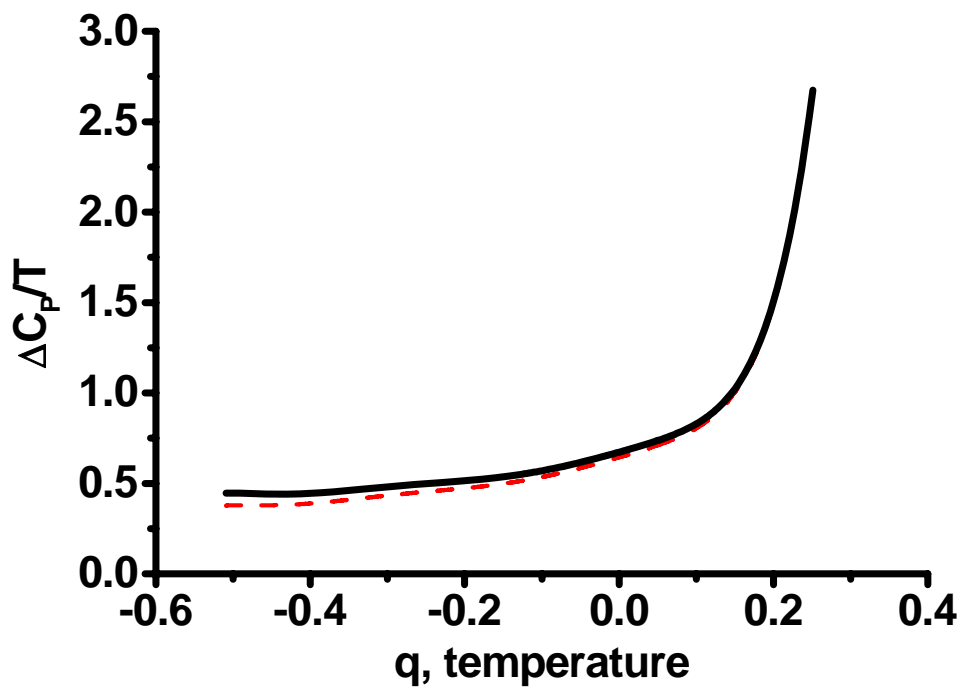
p увеличено



g увеличено, p увеличено



g уменьшено



Экспериментальные данные.

