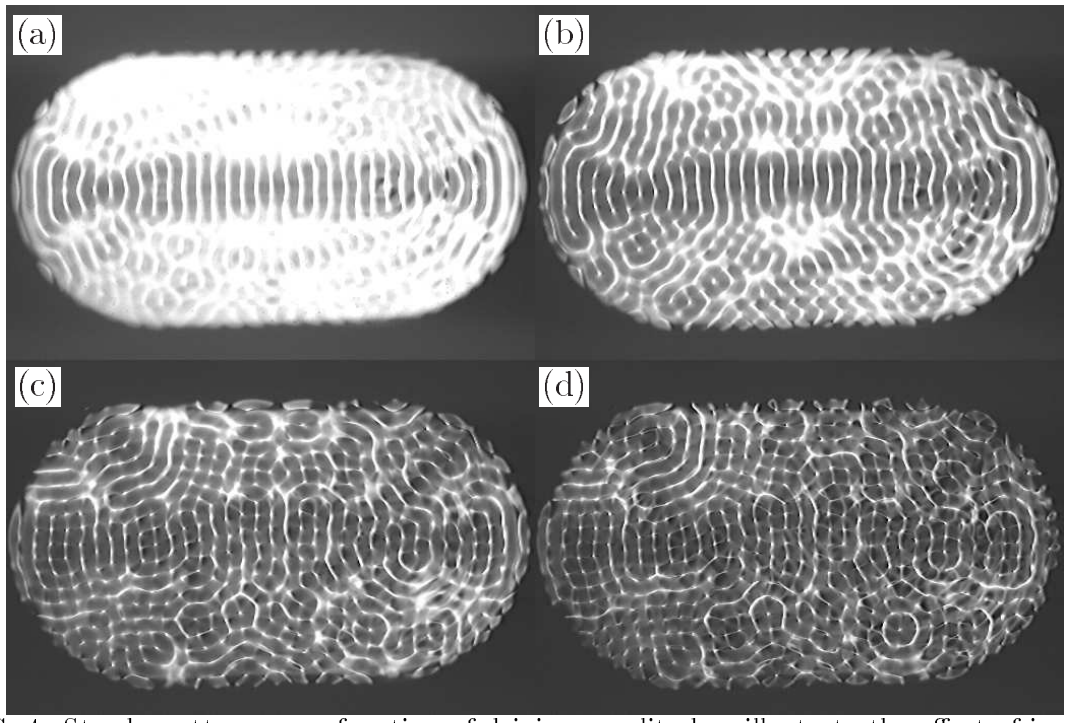

FIG. 4. Steady patterns as a function of driving amplitude ϵ illustrate the effect of increasing nonlinearity at $f = 62.8\,\mathrm{Hz}$. (a) $\epsilon = 0.01$; (b) $\epsilon = 0.025$; (c) $\epsilon = 0.125$; (d) $\epsilon = 0.249$. The influence of the scarred eigenfunction persists even in the presence of strong nonlinearity. Spatiotemporal chaos develops at higher ϵ, beyond the range shown here.