

# **Appearance and suppression of stochastic self-pulsations of coherent excitons and biexcitons in condensed matter**

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## **Abstract**

The theory of regular and chaotic self-pulsations in a CuCl crystal with the participation of coherent excitons and biexcitons is elaborated. The method of chaotic self-pulsation suppression in the system of coherent excitons and biexcitons is proposed. This method consists in action of external periodical turbulence upon a stochastic system. The range of amplitude values and frequencies of external harmonic pump were found at which the chaotic oscillation regime becomes nonlinear periodic by transformation of strange attractor into a limit cycle. The feasibility of observing the predicted effects in experiment is discussed.