عنوان مقاله:

Evaluation of parameters influencing the stability of nanoemulsions using artificial neural networks

محل انتشار:

سومین کنفرانس نانوساختارها (سال: 1388)

تعداد صفحات اصل مقاله: 4

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خلاصه مقاله:

This study aimed to identify the factors influencing the nanoemulsions stability, using artificial neural networks (ANNs). The growth in the particle size of a nanoemulsion preparation containing budesonide, polysorbate 80, ethanol, medium chain triglycerides and saline solution was investigated during a 30-days storage period as a function of budesonide, ethanol and saline concentration as well as rate and amount of applied ultrasonic energy. Data were modelled using ANNs and the developed model was used to determine the effect of different input variables on the stability of the formulation. Results show that the total amount of applied energy and concentration of ethanol are the .dominant factors controlling the particle size growth

کلمات کلیدی:

Nanoemulsion, artificial neural networks, budesonide, stability