

SYSTEM ENGINEERING

一种基于改进NLI算法的对象辨识方法及其应用

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摘要 The accurate model is the most important and basic condition for the application of advanced process control, but the conventional methods do not provide satisfactory results in the case of unstable processes. To effectively control these processes, a novel identification method (Model Parameters and Initial States Identification simultaneously in closed loop — MPIS) is proposed. The model parameters and initial states of state equation can be simultaneously identified using this method. The results of simulation and application show that this method has the advantageous of disturbance-rejection and robustness. This method proposes a novel way for the optimization and the advanced control of the process systems.

关键词 new Luus-Jankola (NLI), internal model control, proportional-integral-derivative (PID), model identification, initial states identification

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Key words new Luus-Jankola (NLI), internal model control, proportional-integral-derivative (PID), model identification, initial states identification

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