

《现代控制理论》

图书基本信息

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内容概要

本书对现代控制理论基础做了全面系统、由浅入深的阐述。主要内容包括：控制系统的概念，建立系统状态空间表达式的三种方法，以及几种组合系统的数学描述；时不变及时变线性动态系统的求解，矩阵指数的概念及求解；系统能控性与能观测性概念及判别准则；线性系统反馈控制器与状态观测器的定义及设计方法；控制系统的李雅普诺夫稳定性分析；系统的状态反馈，基于状态空间的极点配置及状态估计；最优控制的概念及求解方法；系统的最小实现等。每章后均附有习题。在本书的最后还给出了控制理论术语的中英文对照索引。本书可作为高等学校自动化专业及相关专业研究生或高年级本科生的双语课教材，也可供从事自动化工作的工程技术人员参考。

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