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<<机械系统先进滑模变结构控制>>

图书基本信息

书名：<<机械系统先进滑模变结构控制>>

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作者：刘金琨，王新华　著

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内容概要

本书从MATLAB仿真角度系统地介绍了机械系统先进滑模变结构控制的基本设计方法，是作者多年来从事控制系统教学与科研工作的结晶，同时融入了国内外同行的新近成果。

全书共分12章，包括滑模变结构控制基本设计方法、基于名义模型的滑模控制、基于线性矩阵不等式和反演的滑模控制、离散滑模控制、动态滑模控制、自适应滑模控制、终端滑模控制、基于观测器的滑模控制、模糊滑模控制、神经网络滑模控制以及针对机器人和飞行器的滑模控制。
每种控制方法都通过MATLAB仿真程序进行了仿真分析。

本书适于从事生产过程自动化、计算机应用、机械电子和电气自动化领域工作的工程技术人员阅读，也可作为大专院校相关专业学生的参考教材。

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书籍目录

1 Introduction
1.1 Parameters of Sliding Surface Design
1.2 Sliding Mode Control Based on Reaching Law
1.2.1 Classical Reaching Laws
1.2.2 Controller Design
1.3 Robust Sliding Mode Control Based on Reaching Law
1.3.1 System Description
1.3.2 Simulation Example
1.4 Sliding Mode Robust Control Based on Upper Bound
1.4.1 System Description
1.4.2 Controller Design
1.4.3 Simulation Example
1.5 Sliding Mode Control Based on Quasi-Sliding Mode
1.5.1 Quasi-Sliding Mode
1.5.2 Simulation Example
1.6 Sliding Mode Control Based on the Equivalent Control
1.6.1 System Description
1.6.2 Sliding Mode Controller Design
1.6.3 Simulation Example
1.7 Digital Simulation of Sliding Mode Control
1.7.1 Basic Theory
1.7.2 Simulation Example
References
2 Normal Sliding Mode Control
2.1 Sliding Mode Control Based on Nominal Model
2.1.1 System Description
2.1.2 The Structure of Control System
2.1.3 Design of Nominal Model
2.1.4 Sliding Mode Controller Design for Actual Plant
2.1.5 Simulation
2.2 Global Sliding Mode Control for an Uncertain System
2.2.1 System Description
2.2.2 Global Sliding Mode Design
2.2.3 Sliding Mode Controller Design
2.2.4 Simulation Example
2.3 Sliding Mode Control Based on Linearization Feedback Control
2.3.1 Linearization Feedback Control
2.3.2 Simulation Example
2.3.3 Sliding Mode Control Based on Linearization Feedback
2.3.4 Simulation Example
2.4 Input-Output Feedback Linearization Control
2.4.1 System Description
2.4.2 Controller Design
2.4.3 Simulation Example

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2.5 Sliding Mode Control Based on Input-Output Feedback Linearization
2.5.1 System Description
2.5.2 Controller Design
2.5.3 Simulation Example
2.6 Sliding Mode Control Based on Low Pass Filter
2.6.1 System Description
2.6.2 Sliding Mode Controller Design
2.6.3 Simulation Example
References
3 Advanced Sliding Mode Control
3.1 Sliding Mode Control Based on a Linear Matrix Inequality for Inverted Pendulum
3.1.l System Description
3.1.2 Equivalent Sliding Mode Control
3.1.3 Sliding Mode Control Based on Auxiliary Feedback
3.1.4 Simulation Example
3.2 Backstepping Sliding Mode Control for a Inverted Pendulum
3.2.1 The Basic Theory
3.2.2 System Description
3.2.3 Controller Design
3.2.4 Simulation Example
References
4 Discrete Sliding Mode Control
4.1 Discrete Sliding Mode Controller Design and Analysis
4.1.1 System Description
4.1.2 Controller Design and Analysis
4.1.3 Simulation Example
……
5 Dynamic Sliding Mode Control
6 Adaptive Sliding Mode control for Mechanical systema
7 Terminal Sliding Mode Control
8 Sliding Mode Control Based on Observer
9 Fuzzy Sliding Mode Control
10 Neural Network Sliding Mode Control
11 Sliding Mode Control For Robot
12 sliding Mode Control for Aircraft
Index

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章节摘录

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编辑推荐

《机械系统先进滑模变结构控制:设计、分析及MATLAB仿真》编辑推荐：Advanced Sliding Mode Control for Mechanical Systems Design, Analysis and MATLAB Simulation takes readers through the basic concepts, covering the most recent research in sliding mode control. "The book is written from the perspective of practical engineering and examines numerousclassical sliding mode controllers, including continuous time sliding modecontrol, discrete time sliding mode control, fuzzy sliding mode control,neural sliding mode control, backstepping sliding mode control, dynamicsliding mode control, sliding mode control based on observer, terminalsliding mode control, sliding mode control for robot manipulators, and sliding mode control for aircraft This book is intended for engineers and researchers working in the field of control.Dr. Jinkun Liu works at Beijing University of Aeronantics and Astronautics and Dr. Xinhua Wang works at the National University of Singapore.

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