

**Slotine, Jean-Jacques E.; Li, Weiping**

**Applied nonlinear control.** (English) [Zbl 0753.93036](#)

Prentice-Hall International Editions. Englewood Cliffs, NJ: Prentice- Hall. xv, 459 p. (1991).

This book is intended as a text book for graduate students and the readers are only assumed to have had one introductory control course. The main mathematical tools required are ordinary differential equations and elementary matrix algebra. All major concepts and results are demonstrated by examples and each new results is emphasized intuitively.

The selected materials are intended to gain solutions and real problems. The book contains both classical materials, such as Lyapunov analysis, absolute stability and more recent results obtained in nonlinear control such as feedback linearization, adaptive control and sliding control. The major motivation of this book is to detail many recent developments in nonlinear control and the authors succeeded well to accomplish the goal offering a useful background for control engineers.

Reviewer: [C.Vârsan \(București\)](#)

**MSC:**

[93C10](#) Nonlinear systems in control theory

[93-01](#) Introductory exposition (textbooks, tutorial papers, etc.) pertaining to systems and control theory

Cited in <b>1</b> Review
Cited in <b>484</b> Documents

**Keywords:**

[Lyapunov analysis](#); [absolute stability](#); [feedback linearization](#); [adaptive control](#); [sliding control](#)