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Autore	Sira-ramirez Herbett J.
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3.3.2 The Ueda Oscillator 3.3.3 Identification and Control of an Uncertain Brushless DC Motor; 3.3.4 Parameter Identification and Self-tuned Control for the Inertia Wheel Pendulum; 3.3.5 Algebraic Parameter Identification for Induction Motors; 3.3.6 A Criterion to Determine the Estimator Convergence: The Error Index; 3.4 Remarks; References; Chapter 4 Algebraic Parameter Identification in Discrete-Time Systems; 4.1 Introduction; 4.2 Algebraic Parameter Identification in Discrete-Time Systems; 4.2.1 Main Purpose of the Chapter; 4.2.2 Problem Formulation and Assumptions
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4.4.3 A DC Motor Example

Sommario/riassunto

"Presents a model-based algebraic approach to on-line parameter and state estimation in uncertain dynamic feedback control systemsAlgebraic Identification and Estimation Methods in Feedback Control Systems presents the model-based algebraic approach to on-line parameter and state estimation in uncertain dynamic feedback control systems. This approach evades the mathematical intricacies of the traditional stochastic approach, proposing a direct model-based scheme with several, easy to implement, computational advantages. This book contains many illustrative, tutorial style, developed examples of the recently introduced algebraic approach for parameter and state estimation in a variety of physical systems of continuous, and discrete, nature. The developments include some laboratory experimental results in several areas related to mechatronics systems. The reader, with an engineering level mathematical background and through the many expository examples, will be able to master the use and understand the consequences of the highly theoretical differential algebraic viewpoint in control systems theory"--
"Algebraic Identification and Estimation Methods in Feedback Control Systems presents the model-based algebraic approach to on-line parameter and state estimation in uncertain dynamic feedback control systems"--