

1. Record Nr.	UNINA9910783922303321
Autore	Sragovich Vladimir Grigorevich
Titolo	Mathematical theory of adaptive control [[electronic resource] /] / Vladimir G. Sragovich ; translator, I.A. Sinitzin ; editor, J. Spalinski ; assistant editors, L. Stettner and J. Zabczyk
Pubbl/distr/stampa	Singapore ; ; Hackensack, N.J., : World Scientific, c2006
ISBN	1-281-88119-8 9786611881191 981-270-103-6
Descrizione fisica	1 online resource (490 p.)
Collana	Interdisciplinary mathematical sciences ; ; v. 4
Disciplina	515/.642 629.836
Soggetti	Control theory - Mathematical models Adaptive control systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 459-470) and index.
Nota di contenuto	Preface; Editor's Note; CONTENTS; 1. Basic Notions and Definitions; 2. Real-Valued HPIV with Finite Number of Controls: Automaton Approach; 3. Stochastic Approximation; 4. Minimax Adaptive Control; 5. Controlled Finite Homogeneous Markov Chains; 6. Control of Partially Observable Markov Chains and Regenerative Processes; 7. Control of Markov Processes with Discrete Time and Semi-Markov Processes; 8. Control of Stationary Processes; 9. Finite-Converging Procedures for Control Problems with Inequalities; 10. Control of Linear Difference Equations; 11. Control of Ordinary Differential Equations 12. Control of Stochastic Differential EquationsComments and Supplements; General References; Special References; Additional References; Index
Sommario/riassunto	The theory of adaptive control is concerned with construction of strategies so that the controlled system behaves in a desirable way, without assuming the complete knowledge of the system. The models considered in this comprehensive book are of Markovian type. Both partial observation and partial information cases are analyzed. While the book focuses on discrete time models, continuous time ones are

considered in the final chapter. The book provides a novel perspective by summarizing results on adaptive control obtained in the Soviet Union, which are not well known in the West. Comments on the
