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Titolo	Optimal stopping rules [[electronic resource]] / A.N. Shiryaev ; translated by A.B. Aries
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Altri autori (Persone)	AriesA. B
Disciplina	519.5/4
Soggetti	Optimal stopping (Mathematical statistics) Sequential analysis
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	"Reprint of the 1978 edition with a new preface."
Nota di bibliografia	Includes bibliographical references (p. 208-213) and index.
Nota di contenuto	Random Processes: Markov Times -- Optimal Stopping of Markov Sequences -- Optimal Stopping of Markov Processes -- Some Applications to Problems of Mathematical Statistics.
Sommario/riassunto	Although three decades have passed since first publication of this book reprinted now as a result of popular demand, the content remains up-to-date and interesting for many researchers as is shown by the many references to it in current publications. The "ground floor" of Optimal Stopping Theory was constructed by A.Wald in his sequential analysis in connection with the testing of statistical hypotheses by non-traditional (sequential) methods. It was later discovered that these methods have, in idea, a close connection to the general theory of stochastic optimization for random processes. The area of application of the Optimal Stopping Theory is very broad. It is sufficient at this point to emphasise that its methods are well tailored to the study of American (-type) options (in mathematics of finance and financial engineering), where a buyer has the freedom to exercise an option at any stopping time. In this book, the general theory of the construction of optimal stopping policies is developed for the case of Markov processes in discrete and continuous time. One chapter is devoted specially to the applications that address problems of the testing of statistical

hypotheses, and quickest detection of the time of change of the probability characteristics of the observable processes. The author, A. N. Shiryaev, is one of the leading experts of the field and gives an authoritative treatment of a subject that, 30 years after original publication of this book, is proving increasingly important.
